THE

HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE,

ADVOCATES

A Higher Type of Manhood—Moral, Physical, and Intellectual.

OLD SERIES—Vols. 51, 52. NEW SERIES—Vols 17, 18

M. L. HOLBROOK, M. D., Editor.

NEW YORK:
WOOD & HOLBROOK, PUBLISHERS,
Nos. 13 & 15 LAIGHT STREET.
1871.

Digitized by Google

D. H. Parmly, Printer, 15 Laight Street, New York.

Digitized by Google

OLD SERIES—VOL. 51. NEW SERIES—VOL. 17.

THE

Journal of the Gynaecological Society

HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE,

ADVOCATES

A Higher Type of Manhood—Physical, Intellectual, and Moral.

CONTENTS FOR JANUARY, 1871.

GENERAL ARTICLES:	Page
Effects of Alcohol on Offspring—*Nathan Allen*, M. D.	1
Meddlers—*W. T. Clarke*	6
A Greeting to the New Year (A Poem)—*Mrs. D. Harry Prime*	8
Wholesome Houses—*Rev. Charles H. Brigham*	9
At Sea with the Mormons—*Mrs. E. E. Evans*	13
Baby's Bath (A Poem)—*Edgar Fawcett*	17
Woman (A Poem)	17
Theories Put in Practice, or Diary of a Physician's Wife—*Mrs. H. C. Birdsall*	18
Sorrow, and its Dangers—*Henry Ward Beecher*	21
Comparative Longevity of Man and the Lower Animals—*E. Ray Lankester*	25
Studies in Hygiene	29
Recipes for Cooking—Porridges and Gruels	32
EDITORIAL DEPARTMENT:	
A New Year's Talk—Hygiene	33
The First of January—Wine—Literary Value of Good Health	34
Weston, the Walker—Insanity in Paris—The Thraldom of Fashion	36
Stamping Out Scarlet Fever—Compensation	37
Plea Against Whiskers by an Old Man	38
HOW TO TREAT THE SICK:	
Has Scarlet Fever any Right to so Many Victims?	39
An Ulcer Cured by a Dog	41
FOOD FOR MIRTH AND THOUGHT	42
ANSWERS TO CORRESPONDENTS:	
Short-heeled Shoes and Flat Feet—To Remove Hair—Dizziness—Recruits	43
Position of Head During Sleep—How to Cure a Cold—Liver as Food, etc.	44

NEW YORK:

WOOD & HOLBROOK, PUBLISHERS, 13 & 15 LAIGHT ST.

GENERAL AGENTS—AMERIC[redacted]S CO. . . NEW YORK NEWS CO.

$2 per Annum. **Single Copy, 20 Cents.**

Digitized by Google

CATALOGUE OF BOOKS

PUBLISHED AND FOR SALE BY

WOOD & HOLBROOK, 15 Laight St., NEW

The Tree of Life; or, Human Degeneracy.—Its Nature and Remedy. By Isaac Jennings, M. D.—The author of this book was for thirty years an Allopathic physician, but becoming convinced that medicines did more harm than good, he substituted placebos of bread pills and colored water in his practice, and the record of his cases show that the latter treatment was eminently successful in removing disease. It contains the following table of contents: Man's Spiritual Degeneracy; Physical Depravity; Physiological and Psychological Reform; Remedy for Man's Spiritual Degeneracy; Man's Physical Degeneracy; Constitution of Human Physical Life; Vital Economy, or Organic Laws of Life; Source and Mode of Transmission of the Principle of Human Physical Life; Predisposition to Disease; Hereditary Diseases Mode of Renovation of Impaired and Feeble Vital Machinery; Analysis of a Few of the Most Prominent Symptoms of Disease; Law of Contagion and General Causation; Medical Delusion; Remedy for Man's Physical Degeneracy; General Directions Resumed; Specific Directions—Croup—Dysentery—Cholera; Final and Effectual Remedy for Man's Physical Degeneracy. Price, by mail, $1 50.

Sexual Physiology.—This work contains the latest and most important Discoveries in the Anatomy and Physiology of the Sexes; Explains the origin of Human Life; how and when Menstruation, Impregnation and Conception occur; giving the laws by which the number and sex of offspring are controlled, and valuable information in regard to the begetting and rearing of beautiful and healthy children. It is high-toned, and should be read by every family. With 80 fine Engravings. *Agents wanted.* Send stamp for Circular. Price, by mail, $2.

Hydropathic Encyclopedia.—Illustrated. A Complete System of Hydropathy and Hygiene, embracing Anatomy; Physiology of the Human Body; Hygienic Agencies, and the Preservation of Health; Dietetics and Cookery; Theory and Practice of Treatment; Special Pathology and Hydro-Therapeutics, including the Nature, Causes, Symptoms, and Treatment of all known Diseases, Application to Surgical Diseases and to Hydropathy, to Midwifery, and the Nursery. With 300 Engravings, and nearly 1000 Pages, including a Glossary, Table of Contents, and Index complete. Price $4 50

Physical Perfection.—Containing Chapter on Structure of the Human Body; the Perfect Man and Woman; the Temperaments; Laws of Human Configuration; Embryology; Childhood; Effects of Mental Culture; Moral and Emotional Influences; Social Conditions and Occupations; Effects of Climate and Locality; Direct Physical Culture; Practical Hygiene; Womanhood; the Secret of Longevity; the Arts of Beauty; External Indications of Figure, etc., etc. Beautifully Illustrated with 100 Engravings, and handsomely bound. Price, by mail, $1 50.

Rathe's Manual of Gymnastics.—Illustrated. For Instruction in Classes and Private Use. Dio Lewis's System Explained. By W. L. Rathe. Price 40 cents.

The True Temperance Platform; or an Exposition of the Fallacy of Alcoholic Medication. Being the substance of Addresses delivered in the Queen's Concert Rooms, London; to which is added a Discussion on the Modus Operandi of Alcoholic Medication. This excellent Temperance document should be read by every one who would understand the true arguments against the use of alcohol. Price, by mail, 50 cents.

Diptheria; Its Nature, History, Causes, Prevention, and Treatment on Hygienic principles, etc. It contains chapters on the Nosology and Technology of Diptheria, Description and Pathology of Diptheria, the False Membrane, History and Infectiousness of Diptheria, its Causes and Mortality, Complications and Sequelæ, Morbid Anatomy of Diptheria, the Drug and the Hygienic Treatments, Stimulation, etc. Price, by mail, $1 25.

The New Hygienic Cook Book. By Mrs. M. M. Jones.—This work contains several hundred recipes for cooking the most palatable and wholesome food without the use of deleterious compounds. Also directions for Washing, Ironing, removing Stains, Canning Fruit, etc. Price 30 cents.

Water Cure for the Million.—The processes of the Water Cure Explained, Popular Errors Exposed, containing Rules for Bathing, Dieting, Exercising Recipes for Cooking, directions for Home Treatment, and cases to illustrate, etc. Price, by mail, 30 cents.

The Turkish Bath; Its History and Philosophy. By Erasmus Wilson. With Notes and an Appendix by M. L. Holbrook, M. D.—This is the only book on the Turkish Bath published in this country Illustrated Price 25 cents.

New Medical Charts, so arranged as to present to the eye at a glance the Fundamental Problems of all the Medical Systems and the Distinctive Principles in the Philosophy and Practice of the Hygienic System Price $8. Sent only by Express.

Diseases of the Throat and Lungs. Giving their Cause, means of Prevention, and methods of Cure. Price, 25 cents.

The Cause of Exhausted Vitality; or, Abuse of the Sexual Function. Price, in paper, 75 cents; in muslin, $1.

Woman's Dress; with numerous Engravings showing how Woman's Clothing can be made beautiful, healthful, and comfortable. Price 30 cents.

Children; Their Management in Health and in Disease. By Dr. Joel Shew. Price $1 75.

How to Bathe.—This is a concise family guide for the use of all kinds of baths. Price 40 cents.

The Movement Cure; Its Principles and Practice. By Geo. H. Taylor, M. D. Price $2.

Is It I?—A Book for Every Man, by Dr. Storer. Price, by mail, $1.

Why Not?—A Book for Every Woman, by Dr. Storer. Price, by mail, $1.

Digitized by Google

THE HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE.

VOL. 17, No. 1.] NEW YORK, JANUARY, 1871. [NEW SERIES.

PUBLISHED MONTHLY BY WOOD & HOLBROOK, 13 & 15 LAIGHT STREET.

A NEW DISCUSSION OF TEMPERANCE PROBLEMS;

COMPRISED IN A SERIES OF TWELVE ESSAYS CONTRIBUTED BY OUR BEST THINKERS AND WRITERS.

No. III.—THE EFFECTS OF ALCOHOL ON OFFSPRING.

BY NATHAN ALLEN, M. D.

WHEN Jehovah issued his commands in the Decalogue, not only to the Israelites, but to his creatures in all coming time, saying: "I, the Lord thy God, am a jealous God, visiting the iniquity of the fathers upon the children, unto the third and fourth generations," it was intended that there should be some meaning in that visitation. When the laws of the human system are correctly and fully understood, it will be seen that this ordinance is not all a dead letter. In the execution of the above decree, whatever divine influences or agencies may be brought into operation in other respects, it is positively certain that, by the fixed laws of hereditary descent, the iniquities of the fathers are visited upon the children unto the second, third, and fourth generations. The term "iniquity," as here used, has a broad signification, including the consequences or penalties of each and every violated law, whether that law be expressed in the revealed command of God, or stamped by the same almighty power upon the human constitution.

It is proposed to consider, in the present paper, only one of the ways in which the above law of God is violated or infringed, and point out some of the consequences resulting from its violation. In this discussion it is assumed that man was endowed at his creation with certain great laws, physical and mental, which, in order to secure the highest objects of his existence, must be obeyed. As one agent having a powerful influence upon these laws, what relation, then, does alcohol sustain to the human system, and what are some of its more permanent effects?

First, then, what is alcohol? By this term it is intended to include the property in all drinks that *intoxicates*, whether found in brandy, gin, wine, whisky, or even in beer and cider; for it is the *intoxicating* property that gives these drinks their significance and makes them attractive.

Alcohol is an artificial product, obtained by fermentation, and is never found in a simple state. It is a *poison*, both in its nature and effects; is pronounced as such by the highest authorities, and proved to be such by the tests of

Digitized by Google

chemistry, as well as of physiology. Alcohol, unadulterated, is a *pure* poison, and though taken into the system in a diluted state without, at first apparently, any injurious effects, it is still a poison, and does the work of a poisonous agent.

All standard books on poisons—of which Christison's is, perhaps, the highest authority—represent alcohol as a poison. Says Christison: "It constitutes a powerful narcotic poison." Carpenter, author of the best work on Physiology extant, says that alcohol "is a dangerous poison." All standard works upon chemistry classify it among the poisons. The best writers on Materia Medica describe alcohol as a poison. Pereira, perhaps the most distinguished among these writers, calls it both "an irritant and fatal poison." The French, the British, and the American Dispensatories—high authorities everywhere in such matters—describe alcohol as a "powerful irritant poison, rapidly causing intoxication and, in large quantities, death." Medical dictionaries say the same thing; in fact, all standard writers on the subject agree in this description. But, to be more direct and practical, what are *the effects* of alcohol upon the human system? Is it a genuine poison by this test?

First, then, the use of alcohol irritates and inflames the mucous membrane of the stomach to such an extent that it gradually becomes thickened and corrugated—sometimes scirrhus and cancerated, or softened and disorganized. It vitiates the gastric juice, or destroys the glands secreting it, thereby preventing the healthy digestion of food. Thus, by changing the structure and proper action of the stomach, not only the natural appetite is supplanted or rendered morbid, but the blood itself, the great supporter of life, is impoverished, and becomes tainted or impregnated with qualities very unwholesome and injurious. As a consequence of this change in the blood, both the structure and functions of other organs in the body become changed or deranged in action. The liver is enlarged or shriveled up—is pale, fatty, scirrhus, cancerous, etc., so that the bile, its natural secretion, is changed, which prevents the proper assimilation of food, and interferes also with the healthy action of the bowels. The kidneys, at times, become affected, resulting in serious derangement or disease of these organs.

By this depravation of blood, the fibrous and muscular tissues of the whole body frequently become softened and relaxed, so that the constitution looses, in a great measure, its stamina and vitality. This is indicated by a state of general debility, by a peculiar paleness of the countenance, and by a kind of bloated appearance of the whole system.

Again, alcohol impairs the healthy action of both the heart and the lungs—first, by causing an unnatural circulation of blood through these organs; and, secondly, the strength or power of these most influential organs is more or less reduced by the poor quality of the nutrition supplied to them. Certain diseases of both the heart and the lungs have been traced repeatedly to these two sources.

But the brain, the most important part of the body, is more unfavorably affected by alcohol than any other organ, and that, too, in a variety of ways. It tends directly to produce an unnatural stimulus of the brain, as well as an abnormal state of mind, which, together with impoverished nutrition, serves to weaken or derange it. As the brain is a complex instrument, composed of a variety of parts, performing distinct functions, the effects of alcohol are very much diversified. In persons possessing a predominance of the nervous temperament it produces an unnatural excitement, a peculiar irritability, and sometimes moroseness of disposition; but where there is a deficient intellectual development, the individual is frequently silly, boisterous, and passionate, without any occasion or good reason.

In cases where the lymphatic or sanguine temperament predominates, the effects of alcohol are frequently exhibited by a grossness of manner, a sensuality of feeling, and an excessive activity of the animal propensities. There are two important considerations in the relation which this powerful agent sustains to the brain. First, on account, relatively, of the very large development of organs in the lower part of the brain, and the immediate connection of their functions with those of the body, alcohol acts more particularly upon the animal propensities, and serves to develop more and more the lowest part of man's nature. Secondly, at the same time as that portion of the brain by which it is understood the moral sentiments and the intellectual faculties are manifested, constitute, relatively, a small development, and is located farthest from the trunk of the body, these higher faculties, in the lover of intoxicating drinks, are not called into exercise so much, and therefore do not gain strength and influence in proportion to the lower faculties of his nature. Consequently, the desire and ability for seeking a higher, a nobler, and purer life, grow weaker and weaker, and the tendency *downward* stronger and stronger.

There are a few great general facts, estab-

Digitized by Google

lished by experience, observation, and actual statistics, showing the effects of alcohol upon the human system:

1. It is well known that this poison is productive of certain diseases, and that there is always much more sickness among those accustomed to its use, and that neither skillful treatment nor good nursing nor hygienic influences relieve such persons as they do the sick who are not in the habit of using it.

2. The rate of mortality has been ascertained, both in Europe and in our own country, to be greater with this class, so much so that some insurance companies will not receive applications for life insurance from such persons on as favorable terms as from other parties.

3. It is also established by statistics that about one-quarter of all the insanity existing is caused, either directly or indirectly, by alcoholic drinks.

4. More than one-half—to say the least—of all the inmates in criminal, reformatory, and pauper institutions have had their systems, physical and mental, injured more or less by this poison, and to this source, more than to any other or all others combined, may be attributed their relegation to these places of confinement, dependence, and degradation.

Now, if alcohol, as these facts indicate, has such a powerful influence over human organization and destiny, what agency does it have or perform in respect to the *preservation* and *propagation* of the species? A correct and complete answer to this inquiry is, we need not say, one of vast importance. What, then, is the law of human increase, and *how* or in *what way* does this poison violate it? This law of increase is one of the great fundamental laws or first principles incorporated into the very nature of man at his creation. When he came from the hands of his Maker, with a perfect organization—which was pronounced "very good"—he was commanded to "be fruitful and multiply, and replenish the earth." And, notwithstanding by a course of disobedience and rebellion he lost the moral image and likeness of his Creator, as well as that harmony and perfection of physical organization with which he was created, *that law of increase still remains*, and is based upon the same great physiological standard. Without attempting here to explain the nature and foundation of this law, or present the various evidences in proof of it, together with the conditions of its application, we proceed to point out one of its conditions, which is all that is really essential for our present purpose—that is the law of *heredity*.

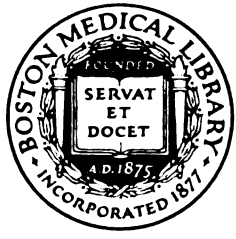
This law of hereditary descent is one of the most important laws imposed upon our race, or that has been developed in its history, though, unfortunately, it is not generally understood. The most profound physiologists in all ages have maintained that, in some sense, there was such a connection between the parent and child as to show a likeness or resemblance, and the best judgment or the good sense of the common mind has generally admitted the same fact. But the proverb that "like begets like" has a far more extended application than what has generally been conceived. It does not refer merely to the size and form of the body, the features of the countenance, the complexion of the skin, and the strength of the system, but extends to the minutest parts of all the organs and their functions, whether external or internal. Did our present limits permit, a long list of distinguished names, together with a great mass of evidence, might be adduced in proof of this statement, but the testimony of only two or three writers must suffice. Says Dr. James Copeland, one of the highest authorities in all physiological or medical matters in Great Britain: "It is generally observed that the constitution, the temperament, and diathesis of the offspring closely resemble the parent; and that whatever disposition to disorder, whether of structure or function, the latter may have possessed, it is liable to evince itself in the former." Sir Henry Holland says: "If peculiarities of external form and feature tend speedily to become hereditary, affecting, as we see on every side, not families alone, but, by intermixture and descent, whole races of mankind, we have no doubt that deviations of internal structure (whether they be of deficiency or excess or of any other nature) are similarly transmitted, and, with them, propensities to or conditions of morbid action in the parts thus organized." The writings of Owen, Huxley, and Darwin—perhaps the most distinguished of any three men in science at the present day—corroborate fully these statements.

Let us now make an application of this law of hereditary descent in cases of alcoholic poison; and, first, what is the testimony of competent witnesses upon the subject. Says Aristotle: "Drunken women bring forth children like unto themselves;" and Plutarch writes that "one drunkard begets another." Shakespeare, Burton, and others, make similar statements.

Dr. Caldwell, the most distinguished writer on physiological subjects in this country, says: "By habits of intemperance parents not only degrade and ruin themselves, but transmit the elements

Digitized by Google

BOSTON
MEDICAL LIBRARY



IN THE
Francis A. Countway
Library of Medicine
BOSTON

Digitized by Google

Digitized by Google

of like degradation and ruin to their postority." In a "Report to the Massachusetts Legislature on Idiocy," Dr. S. G. Howe says: "The habits of the parents of three hundred of the idiots were learned, and one hundred and forty five, or nearly one-half, were reported as known to be habitual drunkards."

Dr. Brown, a well-known English writer on insanity, says: "The drunkard not only enfeebles and weakens his own nervous system, but entails mental disease upon his family." The author of an elaborate article in the eighth volume of The British Psychological Journal, in describing a class of persons fond of intoxicating drinks, says: "They are the offspring of persons who have indulged in stimulants, or who have weakened the cerebral organization by vicious habits."

Mr. Darwin says: "It is remarkable that all the diseases arising from drinking spirituous or fermented liquors are liable to become hereditary, even to the third generation, increasing, if the cause be continued, till the family becomes extinct."

Dr. Elam, a London physician, in a recent work upon Physical Degeneracy, writes of the effects of alcohol as follows: "All this, fearful as it is, would be of trifling importance did the punishment descend only on the individual concerned and terminate there. Unfortunately this is not so, for there is no phase of humanity in which hereditary influence is so marked and characteristic as in this. The children unquestionably do suffer for or from the sins of the parent, even unto untold generations. And thus the evil spreads from the individual to the family, from family to community, and to the population at large, which is endangered in its highest interests by the presence and contact of a 'morbid variety' in its midst."

The history of four generations of a family, as sketched by M. Morel, a distinguished French writer, is full of instruction in this matter, which is as follows:

"*First Generation.*—The father was an habitual drunkard, and was killed in a public-house brawl.

"*Second Generation.*—The son inherited his father's habits, which gave rise to attacks of mania, terminating in paralysis and death.

"*Third Generation.*—The grandson was strictly sober, but was full of hypochondriacal and imaginary fears of persecution, etc., and had homicidal tendencies.

"*Fourth Generation.*—The fourth in descent had very limited intelligence, and had an attack of madness when sixteen years old, terminating in stupidity, nearly amounting to idiocy. With him the family probably becomes extinct. And thus we perceive the persistence of the taint in the fact that a generation of absolute temperance will not avert the fatal issue."

Examples similar to the above, if not so marked, can be found in every community by careful inquiry. As very little investigation has been made in respect to the hereditary effects of intemperance, we will here give the testimony of two individuals who have had the best possible opportunities, and have pushed their inquiries further than any others in our country.

Dr. Turner, in his "Second Annual Report of the New York State Inebriate Asylum," the largest institution of the kind in the world, states that "out of fourteen hundred and six cases of delirium tremens which had come under his observation, nine hundred and eighty had an inebriate parent or grandparent, or both." He believes that, if the history of each patient's ancestors was known, it would be found that eight out of ten of them were free users of alcoholic drinks.

O. S. Fowler, who for nearly forty years has been constantly making examinations into the organization and character of thousands and tens of thousands, and whose observations in this field of inquiry have been far more extensive than any other living man, bears positive and manifold testimony in his works upon this subject. Says Mr. Fowler: "Few children of drinking parents can be found who do not at times experience a hankering not only after strong drink, but often the very *kind* of liquor preferred by such parent, and a great majority of our inveterate drinkers will be found to have had parents who loved and drinked" the creature, "though they may have never been dead drunk." "Intemperance in parents impairs the grain or texture of the brain, and thereby deteriorates the general tone of character and cast of mind of their children. All alcoholics stimulate the selfish propensities more, relatively, than the moral sentiments and the intellect, and, by rendering parents more gross and animal, it similarly depreciates their offspring."

The change here referred to, produced in the organization and character by intoxicating drinks, is one of vast importance. Probably no two things could injure or drag down the character of a young person as a depreciated quality or texture of brain, and a relative preponderance of animal development over the intellectual and moral.

In this transmission of qualities there are other features and circumstances deserving no-

Digitized by Google

tice. It is maintained by high authority that this alcoholic poison is transmitted in the blood—that in this way it permeates the whole system, causing not only a want of vitality and strength generally, but rendering particular organs more especially liable to certain diseases.

It is maintained by some that this transmission consists, more particularly, in an increased activity and development of a certain portion of the brain as a distinct organ or as part of the organ of Alimentiveness, and many facts have been adduced in proof of this theory.

Again, it is found that this predisposition to drink does not always show itself till the person arrives at a certain period in life, and then that the craving for drink is almost irresistible. In fact, all constitutional or hereditary predispositions are always far more difficult to arrest and change than acquired habits. Thus, it has been found very hard, and in some cases almost impossible, to reform inebriates who have inherited such predisposition.

But this inherent fondness for liquor is not the only evil transmitted. The whole physical system is more or less involved. The blood itself is tainted. There is not that soundness, vitality, and strength in such an organization that there would be but for this poison. Such a constitution will not bear exposure so well, is more liable to certain diseases, will yield more readily to inflammation, and, when diseased, is not so easily relieved or cured by medical treatment. Whatever, therefore, may be the peculiar feature of this transmission, one thing is certain—the whole tendency is *downward, physically, mentally*, and *morally*, not only by injuring the constitution itself, but by increasing the power and influence of the animal propensities at the expense of the reason, the conscience, and the will.

It may be said that the sketch here given of the effects of alcohol applies only to the worst cases of drunkenness, but that *moderate* drinking is safe and leads to no such results. But who can limit or graduate safely the *effects of a poison?* A small dose may injure one person far more than a much larger quantity another individual. Then, who can tell but that the least quantity taken may expend all its force in this very direction of offspring? Besides, is *moderate drinking itself* safe? Does not all experience prove that such a habit is very liable to grow worse, and in time become ungovernable?

Connected with this law of heredity, a very important question arises: What is man's *free agency* and *accountability* in the matter? According to the theory of Malthus and some other writers on population, man is considered rather as a *passive agent*, exercising but little power or influence, physiologically, over the disposition, talent, and character of offspring. But modern science is teaching us every day that there is a most intimate, direct, and legitimate connection between the parent and the child.

It behooves every man, then, above all things to understand correctly the nature of this connection, and to take into account fully his own responsibility in the matter; for by his own nature he is created a free moral agent, and should, in the most important acts of his life, be guided certainly by the highest possible intelligence, as well as by the purest motives, since, by the laws of hereditary descent, he has, in a great measure, the character and destiny of his offspring, either for "*weal or woe*," under his control. If neither his own intelligence nor conscience will guide him, nor the moral sense of the public aid him, an enlightened posterity will yet hold him to a strict account. It could not have been the design of the Almighty that man should always remain ignorant of the most important law in the universe, as it respects human progress and welfare. And the great Temperance Reform can receive no greater aid than a more general diffusion of the knowledge of the laws and principles which it has been the object of this essay to elucidate and enforce.

SINGLE EXHIBITIONS OF VICE.—Single exhibitions of vice you can check; individual criminals are comparatively harmless. One by one, and as occasion warrants, the iron hand of the law can take them by the throat and choke the life out of them. Persons and personal indulgence can be impaled on the spear-like point of public opinion. But an organization numerous in point of numbers, and hence of political influence, rich in resources, determined and unscrupulous, as vice always is, and waging its fight against society and order from behind the ramparts of law—like the liquor traffic—is something you can not check at will nor easily overthrow. An organization, I care not of what character or name, which comes to a political aspirant in this country with a purse in one hand and an office in the other, and says to him: "Take either or both, only protect me," is sure of all the protection that trickery or party power is able to give.—*W. H. Murray.*

Digitized by Google

Meddlers.

BY W. T. CLARKE.

AMONG mischief-makers and trouble-venders the meddler is conspicuous, if not chief. His extraordinary talent for minding other people's business is equaled only by his rare faculty of finding out the weak spots in their character, and insinuating himself into any crook or cranny of their affairs. No aperture is too small for him to enter, and no path is too crooked for his elastic and serpentine personality to worm itself through. Wherever there is any thing that can be meddled he is sure to be. Never a muss but he is mixed up with it. Bolts will not bar him out. Menaces will not deter him. Proprieties interpose no barrier to his ingress. Hints make no more impression on him than rain-drops on a duck's back. Coldness affects him as little as the temperature of zero does the polar bear. He is proof against etiquette, and to snub him is about as effectual as to cut a lamp-post or to turn a cold shoulder to the north wind.

Meddlers are of both sexes, though busy people have too much work of their own to meddle much with the affairs of others; beside men are too awkward and timid for a work that requires so much tact, versatility, and boldness. Though there have been notable masculine meddlers, it may as well be confessed that in this field women have always borne away the palm. It takes one of your lithe, graceful, airy, vivacious, charming creatures, with more inquisitiveness than modesty, and more dare than duty in her composition—whose brain is a sort of hook and gimlet both in one—to achieve superlative success in this line. And *she* does it with such artistic grace and sweet felicity that her victim seldom suspects the author of his troubles; and, when he does, she usually has such a hold on his heart-strings that he feels under obligations to his fair tormenter, even while writhing under her most cruel operation. From the exquisite enjoyment she takes in every skillful feat of mischief-making, it is evident that she looks on meddling as a fine art, and the human species as so much raw material for working up. And one of the fine strokes of her genius is to stir herself so completely into every mess she makes, that she shall be taken as one of the original ingredients—a victim, when most a victor; an object of sympathy, extorting compassion, when most a criminal deserving condemnation. The mischief such a meddler does not make is either impossible or not worth the making.

It is one of the fine compensations of life that most people are too stupid to find out by their own wits how miserable they are. And it is the mission of the meddler to destroy this blissful ignorance, and, if people are not miserable already, to furnish plentiful occasion for their becoming so. The diamond you wore with so much satisfaction, as a gem of the first water, was laid aside because Meddler insisted it was paste, and mentioned the fact to members of your set. Your full-blood was tended with pride and driven with pleasure, until Meddler looked up her pedigree and discovered a fatal cross, and then you sold her at half price; by the way, Meddler don't keep a horse. You were just concluding the purchase of Brown's homestead on most advantageous terms, when Meddler upset the bargain by suggesting fever-and-ague to you, and "shakes" of another sort to Brown. You were on the point of buying half a lead mine, which proved very valuable, when Meddler confidingly insinuated that it was either bankrupt or bogus, and persuaded you to put your funds in the Unfailing Oil Well, which proved to be unfailingly dry and without bottom. The loss by this oily speculation made you sick, but you were steadily recovering when Meddler convinced you that Dr. Slowcure was trying experiments on your constitution, with an eye to your skeleton for an anatomical museum; then you had three months of Dr. Slasher, and afterward took patent medicines enough to eat the lining out of a drain-pipe, when Meddler left you for dead and you got well.

We may as well mention that just after this you fell in love with a beautiful girl, who just realized your idea of what a woman ought to be; and, when on the point of asking her to become Mrs. John Smith, Meddler smiled at your verdancy, and wondered that you had not heard how and why she was jilted by Jones; while at the same time Mrs. Meddler condoled with unsuspecting Julia upon the unfortunate circumstance that you were not worth a farthing, and no better than you ought to be, concluding with the highly original moral reflection that there are as good fish in the sea as

Digitized by Google

have ever been caught. Too agitated and depressed to stay at home, you seized your carpet-bag and rushed for the cars, but met Meddler on the way, who interposed so sympathetic inquiries and friendly suggestions, and walked so slowly—for you could no more shake him off than a sheriff or a fit of apoplexy—that you lost the train, only to fall into the hands of Mrs. Meddler and her charming niece; and somehow, between the three, you got engaged to tea, and—to be married! When you came to yourself, and cast about to see what you should do, another member of the Meddler family urged an immediate break off, which led to a suit which you are glad to compromise for a cool five thousand. And so on to the end of the chapter, which is too familiar to need further recital. This Smith family is pretty large, and for every Smith there is a Meddler.

Whenever a fortune is lost, it is quite certain that Meddler had a hand in losing it. If a friendship is broken off, very probably Meddler had something to do with the breaking of it. Henpecked husbands generally are of such easy, insensitive make that they do not dream their wife is a shrew until Meddler informs them of the fact, and that they are a laughing-stock, when, according to the prognostications of the domestic almanac, "look out for squalls about this time." Back of three-quarters of the divorces can be found traces of Meddler's facile fingers and forked tongue. The husband is confident of his wife's affection, proud of her popularity, and pleased with her friends, until Meddler whispers that courtesy is often the curtain for something worse, and tells what *he* would do in like circumstances. The wife is all patience and forbearance, making the most and best of her lot, nor dreaming of release until Meddler whispers in her ear that she is a jewel set in wood, when she should be encircled with rubies; that she was born to soar, and not to drudge; that she is the creature of a brute, while fitted for the most exalted station and brilliant companionship; that her home is a prison, while all outside of it is Paradise; and, unless she is stronger-minded than most mortals, her head whirls with a delirium of sweet sounds, happiness forsakes her heart, the voice of duty is drowned in surges of ambition, and a life of mismated misery, or six months in Indiana with its usual accompaniment, is the inevitable result.

The meddler is seldom malicious at first; means no ill; is only intent on gratifying an impulse which gains strength with exercise till beyond control; and only until the last does the mischief wrought react on the motive making that as bad as the act. Many a meddler undoubtedly imagines that he is doing good, and puts his fingers in other people's pies to give them a flavor that nothing less delicate can impart; but those who eat the pastry seasoned in this way, usually find that any such touch communicates an unsavory, if not an unwholesome taint. Even well-meant meddling usually does far more harm than good to those meddled with, and cultivates a propensity which is worse than a thorn-bush in the heart. Man is a machine of such delicate material and construction, that much handling hinders its working and mars its workmanship. He must be left to find out most of his faults, mend most of his mistakes, bear most of his burdens for himself, and to work out his own salvation by hard struggles, with many failures and much discouragement, very few knowing what his conflicts are. His individuality must be respected, and his rights recognized. The more some sinners are chased after the longer they run. Let them alone and they will come to their senses. Give a would-be suicide a rope, and his desire to make way with himself is strangled at once.

It is surprising how a little truth goes deep into the philosophy of things, as the smallest stream finds its way to the sea. The troubles of the body politic are usually but enlargements of the difficulties which afflict individuals. Most of our national trials and tribulations originate in the meddling of legislators with matters they are profoundly ignorant of, and which Nature and the laws of political economy have already settled—just as a great deal of our physical infirmity and pain come from meddling with the body when it simply wants to be let alone, and allowed to right its own wrongs, and do its own work in its own way. Much of what is called moral reform is an impertinent interference with the laws and forces of society, making a noise by tinkering the constitution of the universe. Only as a man works with Nature can he effect any thing beneficial or lasting; he alone amounts to any thing or accomplishes any thing who has the universe and the Universal at his back. The directest way of ameliorating the condition of the world is indirect. The true philanthropist shows his love for men by keeping his hands off. Wise charity lets alone. A little more of that homely, old-fashioned virtue of minding one's own business would save society, as well as individuals, from untold miseries, and reduce the number of misery-makers.

Digitized by Google

A Greeting to the New Year.

BY MRS. D. HARRY PRIME.

ROSY, joyous, dancing elf:
Laughing at Old Time himself,
Counting now thy wondrous dowers,
With bouquets of opening hours;
Then the moments, new and sweet,
Blushing, scattered at our feet.
Welcome! beauteous, *sacred* toy:
Bright young New Year, full of joy!

While the dimpling moment's pass,
As the snow on heated glass,
Reck not we of Europe's broils:
Of her bloodshed, and her spoils.
We have men to *make*, not kill
At a peevish tyrant's will;
Let her spend her venomed bile,
We will laugh and *work* the while.

What to us are Bismarck's games?
France is fooled for all her pains.
What if Papal power has fled?
Something else will reign instead.
What if Russia shows her teeth?
Trembling Turkey must be brief!
Albion, cooing here and there,
Finds herself—she knows not where!

Only Cuba—little star!—
Dimm'd by blood of cruel war,
Shall the tear of pity claim;
Hearts *must* ache to still her pain.
Then let choraled anthems swell,
Mingled with the chimes of bell;
Let the blood go bounding free,
Health must claim supremacy!

Build up man, and thrones are built;
Not a power that moves on stilt!
Build up man with iron frame,
Giving room for heart and brain;
Man, a king in his own might,
Scorning not another's right!
Failing not in honor's test,
Each New Year shall count us blest.

Digitized by Google

Wholesome Houses.

BY REV. CHARLES H. BRIGHAM.

THE houses that Christians in civilized lands live in are too often like those described by Jeremy in his rebuke: "As a cage is full of birds, so are their houses full of deceit." They cheat their owners with the show of comfort and beauty, while they lack what is indispensable to the support of healthy life. In some there is no light; in others there is no air; in others there is no room; in others there is no ease of access. Some are so constructed that nothing can be put in its place; others hold all noisome smells and all damp effluvia. In this house the cellar is a sink-hole, while in that house numberless vermin hide and multiply. The offence to the eye of grotesque forms and colours; of pilasters which project from a wall which they do not support, and of cornices always threatening to tumble; of French roofs over Byzantine arcades, and of bay-windows which only look into and hinder each other; of glass cupolas from which nothing can be seen, and of unmeaning lattice-work which only catches dust; of a cottage made to look like a castle or, perhaps, like a Grecian temple—this offence, bad as it is, is less than the injury which the homes of men bring in their disregard of sanitary needs. What are boasted in fine houses often as their "special conveniences" are really their damning sentence. One man shows you with pride his nice "double windows," so admirably contrived to keep heat in the house. Another asks you to admire his beautiful green paper (made with arsenic), which seems to bring a lawn and a grove into the chamber. Another explains to you the ingenious attachment of his conservatory to his house, so that he may get the benefit of the odour of his flowers, night and day. Another has fitted up such nice attic chambers, just under the roof, where the servants can sleep! Here the graceful air-tight coal stove, saving half the fuel, and sending such a cheerful glow through its transparent lamina, is triumphantly pointed out as a marvellous improvement; and then you are shown how nicely the stable and buildings are joined to the house; all these unquestionable conveniences!

It is easy enough to find fault with houses, and to criticise their mistakes and defects, but not so easy to remedy these mistakes and defects. The perfect house has not yet been built by any race or in any land. The simplest type lacks a good deal, and the palace that has cost a million usually leaves the wants of its owner unsatisfied. Mr. Stewart learns from his architect, so the journals tell us, that if he would have a comfortable house to live in, he must take down the pile that he has raised, and begin anew. No style of house, no shape of house, no material of house, has yet been discovered or invented, which can meet all æsthetic and sanitary needs. Stone is damp, and brick is ugly, and wood decays, and canvass is not suited to a cold climate. Sometimes—in the nuisance of all these modern improvements, which involve such outlay and vexation, in the worry of servants, in periodical repairs, and in the miseries of house-cleaning—men long for the primitive habitations, wigwams and tents and caves in the rock, so easily arranged and so cheaply cared for. But the homes of savage men will not be accepted as fit for the civilized, nor can we bring our houses of many chambers to the rule of the hermits of Egypt or the Bedouins of Arabia or the Sioux of Dacotah. The log-cabin, comfortable as it may be made, is only a transition house, from which the pioneer will free himself when he has fairly subdued the wilderness to profit. The passion for primitive houses is fitful, and always gives way when the discomforts of these have fairly been tried. Six weeks in the tent make one doubly glad of the comforts of a snug hotel; and Sam Weller found the servants' room at the White Hart Inn a good exchange for the dry arches of Waterloo Bridge—that "sitiwation" was "raythor airy." The simplicity of primitive houses, so fascinating in theory, is very deceitful when they are tried. A house for civilized men can not be a hole in the rock, or a hut upon the ground, or a cage perched on poles, like the homes of Siam. It must have rooms and walls, and roof and foundation, and shapely build. The savage and barbarian types of houses have their advantages, but they are not fit for civilized man. The most zealous Paulist or Redemptorist will not attempt in his convent to reproduce the cell of Antony of the Desert or Jerome of Bethlehem. The most earnest partisan of the "noble red man" will

Digitized by Google

not copy a Pawnee lodge in the tenements which he raises in cities by the Delaware or the Hudson. Even the defenders of the patriarchs, who find divine wisdom in the words and acts of Abraham and Isaac and Jacob, and hold to the cosmogony of the Hebrew Genesis, will not fasten their practice to the house-building of the patriarchs, or content themselves with such a dining-room for their guests as that in which the Father of the Faithful entertained the angels. In the matter of home convenience, the profane way of Greeks and Romans will be preferred to the nomad ways of the first people of the Lord.

The savage houses are not so good as the civilized, yet the savage houses have some good hints which the civilized may profit by in the way of ventilation and adaptation. The houses of civilized men might be improved by returning in some particulars to the primitive style. There are some things which give a log-cabin an advantage over a six-story house in Broadway. It has less noise, more light, and an easier communication between its rooms. It is more comfortable, on the whole, and safer, in the case of earthquake or fire, to live on the ground floor of a cabin than in the attic of a tall hotel, even if one is pulled up by an elevator. There is a deal of cheating in all city palaces, with their marble and freestone fronts; and the tired artizans and clerks, who have to climb every night to their lair, pray for the time when they may have a cosy box in the suburbs, and be saved from this daily trial of muscle and breath. The very splendour of the Fifth avenue mansions makes them a burden and a misery, from which their owners are glad to run, even to the equal misery of a summer watering-place. Long Branch and Murray Hill have in their house "apparatus" as real an exasperation as the dens of Mulberry Street, swarming with children and redolent of filth. Probably the wretched families of tenement houses complain less of their annoyance than those who dwell in costly houses, yet find that there is something wrong in the contrivance for which they have paid so much money—that the warped doors will not shut, that the narrow flues will not draw, and that they can not make the doors or the windows burglar-proof, or sleep quietly in their beds.

We will notice some of the essential points of a wholesome house, beginning with the lowest part, with that which is underground. Every house which a civilized Christian man is to live in ought to have a *cellar*. A Gothic church may be built upon the ground, with no excavation under it; but if a Gothic house is to follow that rule, then it is an abomination. No house should have the beams of its floor laid upon the damp ground. Not merely for convenience as a store-house, but for simple sanitary use, a good cellar in a house is as important as a good parlor or library. And this cellar should be at once airy, dry, and reasonably clean. It should be lighted by something more than one or two gratings. It should be cemented beneath and around so carefully that no leak from the soil can penetrate it. It should have a free circulation of air that is not mephitic. It should be swept from time to time. It should be made proof against roaches and rats, and should not be allowed to hold any offence to decency. A cellar which is dank, clammy, mouldy, cobwebbed, choked with rubbish, holding water after every rain, which forbids delicate feet from entering, and has the tone of a tomb, is not fit to be under a Christian house, even if prayers are said regularly in that house and the Bible is diligently read. Dwelling over such a miry hole, the man who reads about the "slime pits" in the vale of Siddim must feel that the Sacred Word rebukes him. The germs of acute and infectious disease are in that hiding-place. A spacious, dry, sweet cellar is the fundamental need of a house in which the sound mind is to be kept in a sound body; a cellar in which vegetables may be kept, as well as coal and cinders; in which the laundress shall not fear to ply her task, and to which a student may go for shelter from heat on a summer's day, without risk of bringing away a cough or an ague. Less expense in painted ceilings above, and more heed of the cellar wall and floor, would be good economy in house-building.

Yet we must be allowed to protest against the use of cellars as chambers, or eating rooms, or kitchens. Drinking and gambling saloons may justly burrow in the ground, and hide themselves in subterranean haunts. But a cheerful table ought to be above ground as much as a cheerful church. In times of persecution it may be lawful to make chapels in catacombs, and in bombardment it is certainly safer to eat in vaults; nevertheless, we should choose in time of peace to have our tables spread on a level at least, if not above, the surrounding landscape. A gross wrong is done to servants when they are compelled to make the cellar their home, even if it is dried by the fire of their range or the flame of their ever-burning gas jets. The lofty dome of a Church of All Souls can not compensate the outrage which sends down to such a crypt the servants of its

Digitized by Google

parsonage. The part of the house in which its work is mostly done, and in which its social life is kept, should be above ground. It is more philosophical, indeed, to have the kitchen in the attic than in the cellar—in the part of the house from which steam and odours most readily escape; and some of the larger business houses are adopting that plan. The food and drink which come down warm and fragrant from these lofty larders will be more apt to seem as nectar and ambrosia, than food which comes up from the depths.

This passage from the cellar to the attic leads us to say something of the roof of the house, and what its upper part should be. In some latitudes, where it is desirable to go up often upon the top of the house, in Egypt or in Syria or in Greece, flat roofs are well enough and have their advantages. But in our American climate, where there is much snow and more rain, flat roofs are wholly unsuitable, apart from their ugliness. Our houses need a room above to aid in their ventilation, as much as a dry room beneath their lowest floor. The Mansard roof, which is now so much in fashion, grotesque as it is when fastened upon some squat cottage, like the bill of the pelican upon his awkward body, is yet a great deal better in our winters and our summers than the flat roof that permits no garret. There should be a space above the rooms in which the family live, which may serve as a safety valve to the house. The garret is not put to good use when it is cut up into many small chambers, each with its single window, in which the children and servants of the house may be roasted or frozen at night, as the seasons change; but when its broad space is left free under the sloping roof, to be a play-room or a store-room, always accessible and easily opened. An air-tight attic shuts and seals the house in a very disastrous way. It must allow the foul air to flow out as it floats upward. All the contrivances for making the roof impervious to moisture, the sheets of pasteboard, the plaster, and the pitch, and the tin, only make openings more necessary, only make it more necessary that nothing should obstruct the movement of the air. The best economy will leave the garret free, unless it shall be turned into a billiard-room, and used for an hour or two at evening with the windows opened.

Higher even than the attic story of a house are, or ought to be, its *chimneys*. The new ways of heating houses, mischievous as they are in many respects, have not altogether abolished chimneys, though they have reduced these almost to their lowest term. The Chimney Corner, as the title of a household journal, is a joke, which the children have to go to a dictionary of obsolete phrases to find explained. Those grand chimneys, massive and broad, with their vast flues, up which the sooty urchins could climb and sing, and through which the fire of the great logs roared, are a fading tradition now in American homes. Half of the chimneys which now decorate the lines of the city and country roofs are "dummies," fastened there for symmetry, as innocent of all value as the "Quaker guns" of the Rebel Army. Nay, once in a while, we may see a house which honestly refuses to lift a lie of this kind, and shows no chimney except one small flue upon an ell in the rear, to carry the smoke of the cooking-stove and the portable furnace. Many houses there are in which the chimney has no communication with any room, and is only an escape-pipe for smoke. In some houses, where there was once the open fire-place, the opening has been filled up, and the gay paper hides the gaping chasm that broke the even wall. Not a few have studied and planned how to get rid of chimneys and flues, especially since "registers" for the walls have been invented, which are to carry off the superfluous gases. The mantel stays, awkwardly bracketed upon the wall, but the hearth is gone and belongs only to poetic legend.

The change from the former arrangement is not happy or wise. A furnace in the cellar may be good to take the chill from the house, and to heat its halls and passages, but it ought not to supersede the fire-place in parlor and chamber, at once the ventilator of the room and its centre of cheer and joy. No apparatus of ventilation has yet been devised equal to the old-fashioned chimney. Even when no fire is made in the aperture, this avenue to the open air draws its currents and keeps the atmosphere pure. Where there is no open fire-place, no free flue, there will be sense of asphyxia in those stormy nights when the windows must be fastened close. Every room in the house which is used to sit in or to sleep in ought to have a sufficient opening into the chimney, larger than the orifice of a stove-pipe. No matter if the heated air escapes by it; it is better to lose half of the heated air than to be breathing stagnant air that is already deprived of its oxygen. In the spring and autumn the fire-place, with wood on the andirons, gives all the heat that will be needed, and gives it more gracefully than the blasts from any "registers." In a house without chimneys it will be impossible to get the home-like feeling, as much as in a hall or a

Digitized by Google

barn. And the substitution of radiators for chimneys, however gilded and quaint their surface may be, is only to bring the style of a prison into the freedom of the family circle. A first care of every well-constructed house will be that its chimneys are numerous enough and large enough and tall enough to keep the circulation of air active throughout the house, and to call away its smoke and its miasma. They add to the beauty of the house more than its finical turrets and pinnacles, which have no use.

The *size* of the rooms in a house has very much to do with the health of its inmates. Love in a cottage is all very well, but it will end in dyspepsia or consumption if there is not ample space for health and motion. Other things being equal, high rooms are better than low rooms, large rooms than small rooms. Especially absurd is the mistake of reserving large rooms for occasional visitors, while the work of the house is done in its small rooms. The sleeping chambers which are most used ought to be spacious enough for a promenade in dull weather, and it is a wretched mistake to limit their dimensions to forty or fifty square feet. They are meant to hold air for a human being, and not merely to hold a bed and a pair of chairs. The library, in which the master of the house and his children study, ought to be more than a closet fitted with book-shelves and a table. To call such a cell a "sanctum" is only to repeat the old monastic libel on holy things. These cramped corners in the house may be cosy and easy to be cared for, but cosiness is poor compensation for free space. The man of whom Mr. Emerson tells in his lecture, who did "not want to swing a cat," and was contented in his nook of three feet by six, ought to be a carping and cynical critic, vexed by devils. The sitting-room, the study, the kitchen, the occupied chambers of a house, should be its largest rooms. The rooms that are opened rarely, or used only for short interviews, ought to be inferior in space, as they are in use. No absurdity can be greater than that of leaving a large chamber untenanted, in reserve for guests who rarely or never come, while the children of the house are hived in narrow alcoves which seem only fitted for a race of pigmies. A small house with large rooms is much more respectable than a large house with small rooms; the log-cabin of Iowa is a better type of a Christian habitation than the Franciscan cloisters of Italy. The excuse of the cells in a penitentiary is that the cells are all needed, and that the occupants are doomed to woe.

The *position* of a house, too, affects very much its sanitary value—how it fronts, where it stands, and what are its surroundings. If the house stands free, and is not pressed into a "block," of course one side of it will face the north, and one side will face the east. But we may say that, even when there are windows on all sides, and the light comes in from all sides, the rooms most used should be where they can receive the direct rays of the sun at all seasons. Sunshine in the rooms is just as salutary as sunshine in the fields or sunshine in the heart. Let the carpet fade, let the flies come in, but do not keep out the sunlight. A house that has no sunshine will be half of the time a hospital, and a bad hospital, too, where there is more malady than cure. A healthy house will not be placed where any thing obstructs the light. It is not commendation that one can gather his apples from his chamber-windows, or can study pine cones on the tree without leaving his chair. One would not cut down a great elm or oak because its spreading branches have reached the windows or the roof. But when the shade is sombre, and the sun refuses to pierce its canopy, the house itself ought to be moved into the light, or another built in a better place. As a general rule, we may say that no tree of any size ought to stand within fifteen feet of a house, and no shrubbery that will make any of the rooms dark or damp or dismal. There are reasons of health, not less than of beauty, why a house should not be hidden in a grove, and why a lawn with flowers is more satisfactory than clumps of pine or cedar.

A dry site for a house, too, is of the highest importance—that there should be no marsh before the windows, no stagnant pools around the doorway. The margin of a pond is not a proper site for the dwelling of a prudent man, however it may suit such a genius as Thoreau. The best landscape is not a fair equivalent for the danger of malaria. A well-drained city street is better for residence than a house which looks proudly down upon the bay and the islands, yet draws in poison from damp lawns and pastures. It is said in the Scriptures that the evil spirit walks through dry places, seeking rest and finding none. But the good spirit, the spirit of soundness and health, chooses the dry places, and finds the air there very genial and quickening.

There are more marks of a wholesome house that ought to be mentioned—plenty of closets, to hold articles which would gather dust; a good bath-room, where the members of the household can make themselves clean from head to foot; the culinary process so adjusted

Digitized by Google

that the steam and the odours will not pervade the halls and chambers; the windows so arranged that they can be dropped from above as well as raised from beneath; the out-buildings clean and commodious, and easy of access; the paint, both within and without, of a kind which plagues none of the senses; the tints harmonious and light, not suggestive of melancholy or gloom; the stair-cases easy to mount, not steep and narrow; the central hall broad and open to the passage of air—all these things are to be considered in building a comfortable house. To these things decorations and mere æsthetic appendages must always be secondary. Without these things, a palace is deceitful and a snare, and is not fit to live in. Another question, not easy to decide, is whether the healthy house ought to have a verandah around it or on one of its sides. In warm climates this is a convenience, good for day and evening. But in regions where winter rules half the year, it is doubtful if the "piazza," as it is queerly named in the popular dialect, does not harm the house, by hindering the light, as much as it brings comfort in the heats of summer. We have no room to discuss the problem here.

At Sea with the Mormons.

FROM THE NOTEBOOK OF A GENTILE TRAVELER.

BY MRS. E. E. EVANS.

THE return voyage was a unique experience for most of us, I think.

On the third day out I was able, for the first time, to leave my state-room and visit the ladies' cabin. In passing through the saloon I met a lady acquaintance, who said to me: "You will find a Mormon lady in there; about half the cabin passengers are Mormons, and there are six hundred of them in the steerage!" This was news indeed, and it was with a feeling of curiosity that I opened the cabin door. A middle-aged lady, well dressed and with a fair, frank countenance, sat by the open window sewing. She looked up as I entered, and bowed politely, with a few words of condolence upon my prolonged misery. There was a kind-hearted tone in her greeting, and with it an air of good breeding that interested me, and our intercourse became friendly at once. After a few remarks on general subjects, I said to her directly: "I have been told that you are from Salt Lake City—is it so?" She replied that it was, and I continued: "And are you also a Mormon?" She again assented, a I told her I was glad of the opportunity to talk with one who really understood the system and believed in it, and I hoped she would excuse me if I asked a great many questions. She expressed her willingness to give me all the information I desired, and from that time our conversations were frequent and earnest, and while each maintained decidedly opposite views with spirit and fervor, no offense was ever taken by either. She told me once that she was greatly pleased with my manner of addressing her at our first meeting, as strangers were apt to show their hatred of the institution by contemptuous treatment of individual members. She had suffered much rudeness from her fellow-passengers on her voyage to Europe, after they discovered that she was a Mormon, though previous to the discovery they had showed her many marks of friendship, and had appeared to enjoy themselves in her society.

She was certainly a woman deserving of respectful recognition wherever she might be. All her words and actions showed that she was intelligent, affectionate, and generous, and as "to the pure all things are pure," it was evident that Mormon ideas had exercised no corrupting influence upon her mind. I was particularly struck by her modesty and delicacy of feeling, because, in the discussion of social questions, we often entered upon topics where the line between earnestness and coarseness, though well defined, is very narrow, and she was careful never to transgress it.

There were only six lady passengers on board, and we spent much of our time together in the private cabin. The conversation was chiefly upon Mormonism, as was the case, indeed, throughout the steamer. In the steerage were several hundred old men and maidens, young men and children, who, coming from the smoky air and excessive labor of the great manufacturing towns of England, and going, as they supposed, to a life of ease and prosperity in a land flowing with milk and honey, were enthu-

Digitized by Google

siastic concerning the new way of salvation, and sang the songs of Zion with unwearied zeal, and in tones that rose above the roaring of the wind and the dashing of the waves.

In the cabin, Mormon books lay scattered about for the casual benefit of the unconverted, and Mormon brethren were ready, in season and out of season, with a word of explanation and exhortation for all who would listen. Although I made no acquaintance with these men, preferring to gather my information from the lady of their party, I saw a good deal of them and their ways, and heard many of their conversations. None of them appeared to be men of liberal education. Their language was far from choice, and their tones entirely uncultivated. Some of them showed marked defects in matters of table etiquette, and all were characterized by an awkwardness of manners which we observant Gentiles were swift to attribute to absence of the proper influence of woman in their home society. Such faults and short-comings were the more noticeable because these men were possessed of wealth and position, and were, most of them, missionaries sent out by Brigham Young as especially fitted for their task. For the rest, they were quiet and civil; they adhered to the old rule of "Early to bed and early to rise," drank wine but seldom, and then in very small quantities, and set a good example, as well as presented an agreeable contrast, to certain gay young men who killed time for themselves, and murdered it for the rest of us, by late wine suppers, with accompanying foolish jests and unmeaning songs.

One evening, after the captain had kindly aided in dispelling the *ennui* which is a sure attendant upon a sea voyage by an hour's excellent reading, in a remarkably fine voice, the Mormons, wishing, probably, to contribute their share to the entertainment, began with one consent to sing a song recently composed by a fellow-citizen, and adapted to the popular air of "Marching through Georgia." They must have been astonished at the enthusiastic cheers, and the *encore* which would not be denied, as well as at the continued popularity of their ditty; for, though after that evening they could never be induced to repeat their performance, the chorus could be heard from profane voices, at almost any hour of the day or night, for the rest of the passage. The words are significant, as will be seen by the following verses:

"Who'd ever think that Utah
Would stir the world so much,
Who'd ever think the Mormons
Were loudly known as such!
I hardly dare to sing about
Or such a subject touch—
For all are talking of Utah.

CHORUS.

"Hurrah, hurrah, the Mormons have a name;
Hurrah, hurrah, they're on the road to fame;
No matter what they style us, 'tis all about the same,
For all are talking of Utah!

"'Tis Utah and the Mormons
In Congress, pulpit, press;
'Tis Utah and the Mormons
In every place, I guess;
We must be growing greater,
We can't be growing less—
For all are talking of Utah."

Chorus.

This song is more practical—not to say belligerent—than most of their productions.

There was frequently an evening prayer-meeting in the Mormon part of the steerage, when the hymns that rose to our ears were of a devotional kind, full of praise of the earthly Paradise at Salt Lake, and of yearnings for the heavenly Zion that should be the portion of the Saints for ever. On two occasions a select company of these zealous singers gave a concert on the upper deck for the benefit of the cabin passengers, when the pieces were of a lighter character, and better suited to the general and Gentile taste. As a great privilege, I was allowed to read two or three poems by Miss Eliza Snow, held in great veneration by her sisters as an inspired poetess, and as the (solely) spiritual wife of their prophet, priest, and king, Brigham Young.

I looked into the Mormon books occasionally, but found them such a tissue of visions and rhapsodies, mingled with convenient extracts from the Scriptures and illogical homilies, that I soon became wearied with my search for the definite basis of this anomalous system.

In short, the Mormon lady was my sole dependence for information, and the following statements are a condensation of her numerous disclosures:

In the first place, her personal history was interesting. She was a native of Ireland, and was educated and married there. Her husband was formerly a Methodist minister; they had both joined the Mormons from conviction, and had now been with them seventeen years. She

Digitized by Google

had always lived happily with her husband; they had raised nine children, two of whom were now married, and a grandchild had been added to the flock during their absence. Her husband had never married another wife. But when I gave him great praise for his fidelity, she replied, significantly: "I know how much *that* is worth," and proceeded to tell us that he had twice made an offer of marriage, but had been refused in both cases. When I said that she could scarcely judge of the evil effects of the system, as she had never suffered from them personally, she replied that though she had not had the actual experience of living with other wives, she had known that her husband's affections were not settled entirely upon herself, and had consented to share her home with others.

Upon close questioning she admitted that there were often jealousies and heart-burnings on account of this legalized infidelity on the part of the husband, but said that what reconciled herself and her sisters in the faith to such a state of things was their firm belief that the command had been given by divine revelation, and that in proportion to their trials here, and the success with which they repressed their natural impulses would be their reward in the world that sets this one right. This was a rather different view from that taken by one of the brethren on board, who, in his efforts to convert some of the officers of the vessel, had described the acquisition of each new wife as "a burst of glory upon the soul," a phrase which at once became popular among passengers and crew, and was often employed in a most incongruous and ludicrous manner.

Polygamy (she declared) is preached and practiced in Utah for the prevention of two great evils—namely, prostitution and the deterioration of the race. There is no such thing as a brothel in their community. Young men are encouraged to marry early. Chastity is as precious to the Mormons as to any other people, and is far better protected among them than elsewhere, the denunciations against its violation, and the punishment prescribed for the possible commital of the crime, being the severest in their code.

There are great blessings promised, both on earth and in the future state, for the man who cherishes many wives and begets many children; but the majority of the faithful have but one wife, either their limited means or their doubts as to their ability to manage a heterogeneous household preventing many from becoming candidates for the highest prizes of saintship.

Every woman, say the Mormons, is entitled by nature to the privileges and blessings of wifehood and motherhood; but under the prevailing system of society many women fail to complete their destiny. Not only do false customs condemn a large number to a single life, but in every quarter of the globe there is an excess of female births, showing that Nature herself advises polygamy. It is true that the invasion of the home by a second wife, to say nothing of later accessions, is a violation of natural instincts in all concerned, and a fruitful source of unhappiness. But faithful Mormons will remember that they are called to a higher than the natural life, and the peculiar trials of wives, as well as the additional cares and burdens which accrue to the husband through the increase of his family, are to be regarded as a wise discipline, developing meekness and patience for this mortal state, and capacity for the highest enjoyment in the kingdom of final reward.

Now the mischief of this system is that there is a leaven of truth mingled with its mass of falsehood—a speck of wisdom, like a grain of salt, delaying the process of its corruption. And no doubt many of the Mormons, both of the leaders and the led, have accepted their theory through disgust at the vices of a world which seemed to them incapable of reformation, and have consented to exemplify it in practice from a sincere desire to build up a social order which shall be free from those special evils—namely, drunkenness and licentiousness, which have been so far the unfailing attendants and curse of large communities in every quarter of the globe, and under every form of political government and religious creed.

Their recognition of the importance of prenatal education, and the welcome given to every child born among them, are a reproach to our civilization, wherein not only culpable ignorance and selfishness concerning the natural laws of parentage are prevalent, but our principal newspapers publish advertisements of agents, both human and medicinal, for the murder of unborn children. But, on the other hand, it may be doubted whether the physical liberty granted to Mormon wives and mothers is all that is wanting to insure superior offspring. To say nothing of the necessity of physical, mental, and moral health in the father, it would seem that the feeling of degradation which must accompany the position of woman under such a system, the comparative lack of intellectual training which must be the result of the need for constant manual industry, and

Digitized by Google

of complete isolation from the educational advantages of older and less bigoted communities, and the constant chafing of the feminine spirit under the burden of outraged delicacy and unappreciated affection (for to suppose such emotions lacking is to allow that Nature in these instances has taken her revenge in the destruction of woman's holiest impulses), were a poor preparation for bestowing a beneficent impress upon the new-created soul.

Again, though the success of the Mormons in preventing licentiousness within their borders is apparently a great advance, it is not really so when we reflect that the best morality consists not only in outward decency, but in such discipline of our complex nature that the higher powers of the intellect and soul shall have dominion over the lower instincts and keep them in due subserviency. Polygamy may take away in some degree the sense of shame and guilt that troubles the secret offender against purity; it also provides for the recognition and maintenance of all offspring, but it does not strengthen the soul for victory over the flesh, and it sinks the development of the individual in the interests of the family and the State.

The absence of drinking and gambling saloons in Salt Lake City is another deceptive triumph, which has thus far depended more upon the strong will of the chief ruler, and the great distance from temptation, than upon the self-control of the people.

The industry of the Mormons is, at first sight, an admirable feature in their character. They are proud of their chosen emblem of the bee-hive, and fond of calling themselves "the Hive of Deseret." Industry is, in truth, a great virtue, but it saddens one to think of the labor expended in the beginning to redeem the desert valley of Salt Lake, and constantly demanded to prevent its relapse into aridity, when, but for their fanaticism, these people might be developing with ease the resources of a portion of our yet unoccupied fertile territory. Nor is it pleasant, in these days of machinery and associated labor, to hear of women spinning and weaving the cloth required in their households, especially when we know that it is not necessity, but policy, that keeps them absorbed in these material occupations to the sacrifice of higher pursuits.

And, indeed, with the best of opportunities, how could this strange people ever bring their ideas into sympathy with what are for us the most delightful subjects of study and contemplation? How can Mormons read history intelligently without condemnation, when history is the record of the gradual progress of the race toward liberty, while they have of their own accord returned to bondage? How can they enjoy the master-pieces of fiction, when these depend for their chief interest upon the skillful portraying of the passion of love as lavished exclusively upon one object? How can sculpture, painting, music, and poetry appeal to the ideal in their souls, when they are trying to drown the sweet voice of Nature by the harsh commands of a supposed revelation? What tender associations of home and childhood can belong to the members of these mixed families, where the father's notice and affection is too much divided to exert any salutary influence, and the sacred privacy of each group is sacrificed to the interests of the united crowd?

The statement that polygamy is indicated by the excess of females in all ages of the world, though plausible within a short range of observation, is contradicted by the sure test of statistics; and even in Utah, where Nature is constantly aided by immigration, there exists, at this early day in their history, the best of reasons why the majority of Mormons have but one wife.

In view of all that the past teaches, that the present is accomplishing, and that the future promises, it must be that Mormonism will perish of its own decay within a not very remote period. A system resting upon the authority of a recent revelation, itself the echo of a primitive social order; a system which defies the law of the land and the advanced public sentiment of this age; a system which goes back to the "one-man power," from which idea the rest of the world is escaping, and joins to political subjection the most abject consent to gross superstition; above all, a system which, in this period of the increasing development and enfranchisement of woman, is intent upon degrading her lower than she has ever been degraded before in nations nominally Christian. Surely the cause of progress has nothing to fear from such an enemy!

Complete isolation has hitherto preserved this anomaly among human institutions longer than its comparative strength would warrant: but now a highway has been opened through the desert, and we have good reason to trust that the infusion of liberal ideas, which are sure to follow in the wake of mechanical improvements, will gradually accomplish what force, though apparently more effectual, would only be able to repress for a time, since nothing but knowledge can really conquer error.

Digitized by Google

Baby's Bath.

BY EDGAR FAWCETT.

I THINK there never was so brave a baby,
In all the realms of babydom, till now.
He positively looks upon cold water
As something quite enjoyable, I vow.
The little pink-limbed atom of perfection!
Just listen! how melodiously he coos,
And reaches for the sponge mamma is holding,
As if she only meant it to amuse!

His playful hands are blithely dropp'd and lifted,
Like playful peach-blooms in some merry breeze;
And oh, it is delight to watch the dimples
That deepen if he bends his chubby knees!
Then, too, his low, soft laughter, never silent;
His eyes, more beautiful than evening stars!
Were only other babies half as docile,
What comfort for a million poor mammas!

And when his bath is ended, and I sing him,
Rocked in his cozy cradle to and fro,
All gently, like the waving of a poppy,
The sweetest of the lullabies I know,
How willingly his eyelids yield to slumber;
What peace on dewy lips and pearly brow!
I think there never was so dear a baby,
In all the realms of babydom, till now!

Woman.

SHOULD she, who shrinks from giving pain,
E'er seek her food among the slain?
Her life sustain on slaughtered brutes,
Instead of earth's delicious fruits?
First wring the kindness from her soul;
Let selfishness her heart control;
Distort her pure and gentle mind,
Then make her coarse and unrefined;
Let love to cruelty give place;
Her matchless attributes efface;
Nay—fashion her throughout afresh
Before you let her feed on flesh.—*Selected.*

Digitized by Google

THEORIES PUT IN PRACTICE;
Or, Extracts from the Diary of a Physician's Wife.

EDITED BY MRS. H. C. BIRDSALL.

MAY 29, 186—.

HERE I am at *home*, my new home, the place to be, perhaps, all my life my abiding place. I hope so, for that is a beautiful thought to me of commencing and ending our married life in one and the same place. I am going to keep a journal, which Henry and I shall read on each anniversary of our wedding. My most important reason for this is that I wish to test some fine theories which I have held for a long time. One is, that husband and wife should never have any difficulty; another, that much of the trouble with servants arises from the want of right management on the part of the mistress; another, that a physician's wife should look upon herself as directly interested in her husband's patients, and, when occasion offers, should actively do for them.

These are enough to begin upon, and a year's experience ought to go far in proving their correctness or incorrectness.

I must review the events of the past few days, for, without these, my journal would be incomplete.

We were married Wednesday afternoon, the 24th, in the little church at Burtonville. Afterward, as we stood in front of the church receiving the congratulations of our friends, we learned that there had been a great many spectators, but I knew nothing of it before.

I had resolved to think as little as possible of my surroundings, and was so far successful as to have no thought but of the beautiful promises we were making. The day had been cloudy, and, at the commencement of the service, the light in the church was quite dim; but, just as our hands were joined, there was a burst of sunshine through the west windows, which flooded the whole church. It was pleasant to think that our life might be like this, dimmed, at first, probably, by our struggles with surrounding circumstances and our own stubborn natures, but lighted up at last. It will be our fault if it is not so.

Cousin James played the organ *so* beautifully! I had asked him not to play any grand, noisy march, the fitting music for those who expect to spend their lives in the gayety of the world, but something more in harmony with the probable tenor of our lives. I knew that would understand me, and that, with his keen sensibilities and power of intuition, he could interpret my wishes, and he did so perfectly. As we entered the church, the music was joyful but solemn, full and rich; as we left, we seemed to hear in it the song of birds, the ringing of flower-bells, and something telling of home, love, and peaceful happiness.

Our congratulations were quite varied. The two most marked to my recollection were those of Mrs. Lane, our minister's wife, and Mrs. Fidder. Mrs. Lane said to us: "I hope you will have a very happy life"—the words simple but, from her, meaning a great deal. Good Mrs. Fidder's congratulation was just as earnest and well-meant, but must have been amusing to bystanders: "Well, now, ain't it nice I told Samooel that we must come to *your* wedding', even'ft did take him out o' the 'tater field and he wanted to come just 's much as I did I 'xpect you'll have a dreadful nice life of it for Henry's a surprisin' fine man for one of his age." I shquld not omit Aunt Joanna's characteristic remarks, for they could hardly be called congratulations. "So you are really married! Well, all I have to say is, don't expect perfection of your husband. It isn't likely that he is any better than other men, and the best of them are not good for much. There was nothing but joy at our wedding; for even father and mother, knowing the short distance of Lightwood from Burtonville, did not feel as if we were parting. We drove over to our new home late in the afternoon, arriving just in time to have our supper before sunset. The evening we spent in talking over our mutual plans. Henry is afraid that, in spite of his having so many warm personal friends in Lightwood, his new views of medical practice may interfere with his immediate success.

He is fortunate in having the means to live plainly without depending upon this source of income, and can therefore bide his time. Henry was at first inclined to laugh at my theory of a physician's wife having any further responsibility than any other woman, but I succeeded in partly, at least, convincing him that it was well for her to take certain duties upon herself toward some of those whom her husband should be summoned to visit as patients.

We had no help until the following day, when

Digitized by Google

one of Henry's friends kindly sent us a young colored girl, who, I fear, from my short experience, will afford us more amusement than assistance. She was brought up in a Southern family where there were a good many children, of whom she had the charge latterly. She seems to think a family incomplete without children. Emboldened by her feelings, she said to me to-day: "I wish, Mis' Sanborn, you'd 'dopt a child; I'se dreffful lonesome without my chillen." What she does she does well, but she is so perfect a Topsy that I am afraid she can never be trained to be a reliable servant.

This morning I left her to sweep and dust the parlor, while I went up stairs to arrange some closets. Hearing a noise in the lower hall which I could not account for, but thinking it must be Eliza, I opened the door softly and peeped over the balusters, just in time to see my Topsy trying some light gymnastics. She was endeavoring to balance herself upon her stomach on the large pillar of the balusters at the foot of the stairs, and was so earnest in the execution of the feat that she did not notice me. After several unavailing attempts she succeeded, and a most ludicrous object she was, with her hands and feet outstretched, and her woolly head bobbing about in her satisfaction. One bob too many threw her forward so far that she fell upon the hall floor with a great noise. She jumped up with the exclamation: "Good 'nuff for you, you lazy niggah; just g'long back to yer work!"

June 15.—We have spent our mornings for the last two weeks in arranging the rooms in our little home, and in work about the flower and vegetable garden.

There is no immediate danger of Henry's health being broken by overwork in the line of his profession. Patients come slowly.

We have received a great many calls—so many that my impressions are quite indistinct of the people who made them, with the exception of a few who were noticeable for some peculiarity of look or manner. As soon as there is a pause in the rush we shall commence returning calls, and then I shall begin to know the people better, seeing them in their own homes, a few at a time.

Henry told me last night that he had found an opening for me to put one of my theories in practice. He has an Irish family, about a mile from the village, who are nearly all sick. There are a great many around them, but they accomplish nothing but to get in the way. My Topsy has made acquaintance with a neighbor's baby, and, with my permission, has had it in the kitchen two or three times for company. Instead of distracting her attention, the baby has a subduing effect which is very curious to notice. Eliza must be a nurse by nature. She has the baby this morning, and I have, therefore, perfect confidence, in leaving her, that dinner will be punctually ready when we reach home.

Friday, June 16.—When we arrived at Patrick Donovan's yesterday we found the room full of people, Mrs. Donovan in her bed, and three children in different stages of illness—one in bed with its mother, and two in chairs. There were four Irish women in the room, doing nothing but fill up the room and exhaust the air. I felt like making a raid upon them at once, but knew that this was not the way to commence; so, after saying a few words to the sick woman and children, I entered into conversation with the women, finally making way for the remark, which I had been meditating ever since I entered the house and glanced at its construction: "Mrs. Donovan would be much more comfortable in the next room, where it is cooler and she would not see so many persons."

"Faith, an' it's the compan-ny that she wants, poor woman; it's all the comfort the poor soul has." By a little quiet talk I convinced them that she would really be better off if moved; and, with Henry's assistance, we soon had things much improved. Two hours work in just those little things that every woman ought to know how to do, made both children and mother more comfortable. It was pitiful, to me from my fresh, sweet home, to see those little children lying there with dirty faces, and bodies looking as if they had never known the use of water. After we had moved the mother, I had the direct draught shut off from the children, and then washed them, a little at a time, with soft, warm water. No clean clothes could be found for them, but the washing made them look and feel more comfortable. Henry said, as we drove away: "I am inclined to think there is something in your theory, Annie. I had been disturbed by the dirt and want of comfort at the Donovans, but I did not see how to remedy it. If I had told those women to clean up, they would have made such a disturbance as to make Mrs. Donovan, in her weak state, excited and worse; and, if I had directed them to bathe the children, they would probably have plunged the sick little creatures into

Digitized by Google

water of one or other extreme of temperature which would have given them a chill, and counteracted all the good which I might previously have done them. Then, if the children had died, the doctor would have received all the blame. If nothing very outrageous is done before my next visit, I shall expect to find all the sick ones better."

July 1.—The last three afternoons of last week we spent in making calls, and I begin to feel acquainted with our neighbors. Last Sunday, at church, I recognized them all by name and looks, quite an improvement upon my experience of the previous Sunday, when Henry had to tell me the names of so many whom I had already seen.

It struck me as curious to see so many women in some of the families, many of them elderly and unmarried, and it would seem as if the church were built specially for them. It is arranged in long pews, capable of seating eight persons. I noticed seven families of maiden sisters, of from two to six in each family, filing into these pews, and my sense of the ludicrous made me *feel* a smile, and think of the not quite appropriate nursery rhyme:

"Mary, Mary, quite contrary,
How does your garden grow?
Silver bells and cockle shells,
And pretty maids all in a row."

I also saw a number of unusually pretty young ladies. I wonder if the maidens in rows were ever as pretty.

Dr. Hutton read the service very impressively, as if his whole heart were in it, and Henry says that my impression is correct—that he is a very earnest, good man, and possessed of considerable talent. His sermon was short and simple, but just one of those that one hears without any effort, and feels. One of our calls last week was at Dr. H.'s house, but we did not see him as he was out. He greeted us very warmly after church. After speaking with me a few minutes, he laid his hand in a familiar way upon Henry's shoulder, and said: "Well, Doctor, you must bring the wife to see us very soon. Come to-morrow to tea." And so it was arranged. I looked forward to it, until the time came, with as much pleasure as a child; for I had heard that his wife, though so much of an invalid as to prevent her going out often, was a lovely and lovable person, governing and guiding her family from her sick chair better than many another mother in perfect health; and I had also heard that their house was filled with treasures of art.

There is but one service in the church on Sundays, Dr. Hutton spending a portion of the afternoon in rest, and driving over to Torrence to hold a service at 4½ P. M. The Sundays seem such restful days to me here. At Burtonville there was one continual round of sermonizing—more than *I*, at least, could digest. Last Sunday, after our plain dinner, Henry and I sat on the lawn, in the shade of our beautiful locust trees, reading until about 4 o'clock, when Henry looked up and said: "Annie, I have a patient living half way to Torrence whom I ought to see to-night; and I have just thought that we might go on to church, and stop on the way back for me to see my patient. There is no time to spare, though. Be sure to take a shawl with you, for part of the way is through a flat section of the country, which is very damp, even in the warmest nights. We reached the little church just in time. The congregation was small, mostly composed of factory hands.

I sat near an open window looking out over sloping green meadows, dotted here and there with those tall, graceful trees which, I think, are called weeping elms, and bordered at the farther side by thick, dark woods. A little stream, looking like a silver cord thrown carelessly down upon the grass, and the softened afternoon sunlight over all made a lovely, quiet Sunday picture. Dr. Hutton's remarks were few and simply worded, as fitted the capacities of his congregation; but there was a force in them which indicated decided convictions, warmth of feeling, and a sense of the influence of his beautiful natural surroundings.

Henry said that there was no occasion for the practice of my pet theory at the house at which he had to stop; so, fastening the horse near the mill stream which makes its way through this long, narrow valley, he left me in the carriage by myself. I spent the time in looking at the pretty views about me, and in thinking of the dear home friends at Burtonville, and of their probable whereabouts and occupations at that time.

Up to last Monday our life in our new home had been so pleasant that I had almost forgotten that I must not expect life to be always serene. That afternoon something occurred so very unpleasant and surprising that I was quite upset by it. But I will defer recording it until my next sitting at my journal, for Henry will soon be home, and I will not have my face clouded by thinking of any thing so disagreeable as this.

Digitized by Google

Sorrow, and Its Dangers.

BY REV. HENRY WARD BEECHER.

SORROW is a condition of suffering in any of the emotions of the mind, in view of some event, past or future. It is the complement and counterpart of joy. Every faculty is calculated to produce pleasure, and, reversely, pain.

Sorrow acts in various ways; and in each way in various degrees, and according to the circumstances of each individual person. It has a two-fold effect. It may be beneficial or injurious. It is a glorious and a dangerous medicine. And yet, as all are likely, sooner or later, to come under the administration of this agent, it is of a great importance that we look somewhat narrowly into this matter, and understand our duties and dangers and privileges respecting it.

That sorrow is injurious which is in excess, and which is, on account of excess, unregulated, not being under the control of the reason. A mere wild, ungoverned, and ungovernable impulse of pain, directed to no good purpose whatsoever, submerging the mind, and smothering the mental powers, is always bad. There may be moments when sorrow is uncontrollable, and when one is relieved by giving way to it; there are bursts of sorrow which are but the experiences of the hour or the day; and it is better to let them spend themselves, and not narrowly mark their bounds and passages; but all sorrow, beyond the first relief of agonized feelings, should be held in check. It is wrong to be sorrowful too long. Because your trouble is real and well-nigh overpowering, it does not follow that you are under no obligations and duties. Sorrow is a school in which the schoolmaster is very stern, and in which his rules are very strict and very rigid. It is often supposed that when persons are in great trouble, they are, as it were, released from the duty of self-control, and from their obligations; but at no time are persons under such obligations and such a duty of self-control as when they are under the sacred shadow of trouble.

There are those who think it is wrong to let their sorrows die out. If they find that their pain is becoming alleviated, they blow the embers again; they rake out the coals from the ashes that threaten to hide their sorrow, and they are almost alarmed at themselves when now and then some old joy breaks out. They seem to feel that there is a sacred duty of sorrow, and that midnight ought to be their symbol and signal. They study sorrow. They bring back old experiences, and tempest their minds as much as they can. And continually they wear the badge of sorrow.

Now, life is too precious to be given up to one state of mind—especially one such as sorrow persevered in leads to. Sorrow, long continued, stupefies the mind, and takes from it discretion and sweetness of disposition.

Besides, such sorrow almost always runs to unhealth. It is not possible to have any faculty long under the influence of sorrow and not become morbid. It is dangerous for physical as well as moral reasons.

Let no one, then, have any romantic notion that sorrow has a right to all of life. No sorrow ever came upon the earth that has any such right. Sorrow has an errand; and its errand should be fulfilled; and then it should be cut short.

Many receive sorrow upon their pride; and they resent it. They compare their lot with that of others, not to find some reason of alleviation, but to find some reason for rebellion. I do not undertake to say that in the wreck which sometimes takes place in suffering and extreme sorrow, there may not be transient feelings of resentment and rebelliousness; but where under such circumstances sorrow comes to be settled, it is deadly.

Sorrow that is conquered by unworthy means must needs produce great demoralization; as when men, being overcome by some great sorrow, instead of turning it to a noble use by moral thoughts, instantly fly from all seriousness into worldly occupations. Work is good; and I do not think that any one ought to stop working on account of sorrow. Blessed are the poor; for when they have sorrow they must work for their raiment and shelter and daily bread. Greatly to be pitied are those whose sorrows come to them under circumstances in which they have no need of using their time. And I do not speak of flying to necessary duty as being wrong. But where men, outside of the industries which the ordinary necessities of life require, seek to run away from sorrow, and do not seek to gain a victory over it, they do wrong. By the stoicism of excessive

Digitized by Google

work they damage the contribution of their minds.

Seeking relief from sorrow, not in activity, but in frivolous pleasures, for the sake, as it is said, of *drowning* it, is also wrong. A mind may become so stained with surrounding objects that every single thing shall have hanging on it some remembrancer which aggravates one's sorrow; and it may be best, under such circumstances, that the person should be removed from home, taken out of somber associations, and induced to live where there is some saliency to life. Gayety is sometimes medicinal. But where one runs into giddiness, yea, into the frivolities of life, in order that he may not have the sufferings of sorrow, he turns that which ought to benefit him into mischief.

Still more dangerous is it where men seek relief from sorrow in dissipation. And yet worse is it where they seek exit from life by violent means.

All these are expedients for getting rid of sorrow which can not but hurt morals, and conscience, the father of morals.

Sorrows that are used for frivolous purposes must of necessity be very deteriorating to the mind. It does not seem as if real sorrow could be made exhibitory; but it is. There are those who really feel sorrow, but who can scarcely help, such is the vanity of their nature, using it for a purpose. They are afraid of being thought less sorrowful than they ought to be; and so they make up by putting on appearances. They are afraid of being regarded as not continuing their sorrow as long as they should; and so they extend its reign. Sorrow is dramatic under such circumstances. It has lost its truthfulness and its moral value, and has become merely a part of the drama of life. Such are not strong natures. Nevertheless, according to the measure of their strength, they are seriously injured by a sorrow that is treated in a manner so unworthy.

Sorrows often make men selfish and peevish. Great forbearance is to be felt toward those who are irritated by the attrition of a sorrow that must continue. Where it falls upon nerves rendered sensitive, partly, perhaps, by constitution, and still more by sickness and trouble, we should be very lenient in our judgment. A great deal of domestic peevishness is to be palliated, though not excused, by the fact that it is but a signal of suffering which nature holds out. Sorrow springing from disease, from incessant care, from over-mastering work, often gives rise to a peevishness which is of the hour, and which ought not to be set down weightily against those who are the victims of it. But where, after such allowances have been made, sorrow tends to make a man more and more considerate of himself, and so more and more selfish, it has a deteriorating effect upon him. When sickness and bereavements and disappointments come and overturn the foundations on which we stand, and we are brought into jeopardy, we should be very watchful and careful lest we become hard, selfish, resentful, proud, rebellious.

On the other hand, there are beneficial results of sorrow such as, if they are realized in any considerable degree, should make a man thank God that he has been afflicted. Where, for instance, sorrow arouses latent strength and produces true manhood, it is a great blessing. Happy is he who uses his so as to make him better. Often sorrow is itself outgrown by the very growth which it inspires. Sometimes it develops in you things that you never could have come at independent of it. I have seen persons who seemed unfit to grapple with life taken hold of by sorrow, and inspired with a courage which prepared them to meet and bear themselves up manfully under all the exigencies of trouble to which they were liable. There have been many cases of men who, it would seem, if it had not been for sorrow, would never have been born into their better nature. And where sorrow melts or breaks down a crude and harsh nature, and softens, refines, enriches it, then it is accomplishing a most blessed work. Sorrow should be like loam, which, when the plow turns it, falls mellow from the share. Sorrows that are like clay, which when the plow turns it rolls over in lumps, and is more unmanageable after it is plowed than before, bring poor husbandry in the heart.

Dr. Spurzheim used to say that no person was fitted for domestic life who had not been educated by sorrow. Not that nobody should enter into that life who came with a smiling face unscarred with trouble; but that no person having come into that life could grow into the fullness thereof until he had been developed and disciplined in the school of suffering and sorrow.

There are many fruits which never turn sweet until the frost has lain upon them. There are many nuts that never fall from the bough of the tree of life till the frost has opened and ripened them. And there are many elements of life that never grow sweet and beautiful till sorrow touches them. Then they are like autumnal colors, and all men behold and admire

Digitized by Google

them. There is a sorrow that sweetens all acerbities, and corrects the naturalness of disposition. There is a sorrow that breaks down hard and reluctant natures. Many a man who would not yield to his fellow-men, at last yields to his own suffering and sorrow, and is all the better for it.

Sorrows are benefits to us where they lead us to broader resources of life. One of the mistakes that almost all men commit, is that of investing all their joys in one direction. It is wise for us to invest them in many directions, that we may never become bankrupt. When men invest their means, they scatter them in various directions, so that if bankruptcy should touch one sort of investment, others would be left. This is wise in money matters; and it is a great deal wiser in morals. When a man has all his means of enjoyment in one direction, if trouble comes, and his only resource is swept away, he is bankrupt indeed.

One man makes the whole engagement of his life to consist in business. He has no taste for any thing else. Reading does not please him; art does not; social comfort does not. He lives for enterprise. So long as he has health and strength to carry forward his business, he says: "I want no better life." And so long as his life is bright, and no clouds cross his sky, he may, perhaps, feel no need of any thing which he does not have. But by-and-by, when sickness and overwhelming sorrow come, and he is driven out of the refuge where he has felt secure, having made no other provision, and no new resource opening, as is usually the case late in life, he is ransacked and destroyed.

Another man makes his whole joy of life to consist in flattery and praise. He has no love of solitude. He has no communion with books; and of men, he has no communion only with those who are companions, or those who flatter and praise him. And when there comes, by any dispensation of God, a separation from these, his resources are all gone.

Another man lives wholly in his affections. So long as those whom he loves are left, he is happy; but when these are taken, life ceases to him.

Now the multiplied faculties with which we are endowed that have joy in them, are on purpose, it seems to me, to give us an intimation that we should not make our earthly enjoyments rest in any one thing. You need to have great resources of mind; and therefore you need to educate the understanding. You need, also great resources in the direction of imagination and taste. You also need great resources in affection. And you need great resources in the direction of beneficence, and in the direction of activities in other ways. You need those various resources, so that when you are driven out of one you can take refuge in another.

Sorrows that leave the mind like a house that has been ransacked and stripped bare, are deadly indeed; but sorrows that say to a man: "It is not safe to trust any single line of experience or education for the resources of your life," are blessings for which we may well be thankful. Sooner or later troubles and disappointments will overtake you; and then where will your resources be? Are there resources that you can turn your mind to, in other directions than those which belong to this world? Blessed is the man whom no trouble can altogether destroy, but who, if he finds an enemy in his chamber, retreats to another, and bolts and bars the doors; and who, if he is driven out of that, finds another resource, and another, and rises higher and higher till he reaches the threshold of his Father's house, where no more sorrow nor crying can come for ever more.

We live too narrowly.

We live on too few alternatives.

We want broader resources.

Where sorrow more effectually introduces us into the knowledge of our own kind, it is a great blessing. There is nothing that makes a man take to his fellow-men, I think, as sorrow does. Men do not know much beyond their own sphere. I think they know very little of what is going on among the class that they do not belong to, though they know what happens in their little circle. It is the tendency of human nature to make a man separate himself from his fellows; but it is the tendency of true Christian growth to lead a man to recognize the bond of a common brotherhood. And toward this end some kinds of sorrow work wonderfully. This experience of sorrow—how it humanizes men!

A woman of great gifts and high culture, at about twenty-one years of age, was affianced to a man distinguished in literature and science, and she looked forward to a life of joy; but the ocean claimed him. The sorrow that fell upon her fell like multitudinous frosts in autumnal days; and no green and bright thing was left in all the field of her heart. With mighty strugglings through weeks and months she sought to stop her sorrow; and finally turned from it saying: "I will give my whole life hereafter to others, and let my own self go." She consecrated herself to the work of

Digitized by Google

educating, and is still earnestly, successfully, and bountifully spending herself in that work. And behold! her sorrows are all taken away and gone. She learned to give herself away to others; and when she found herself again, she was, as it were, regenerated.

Where sorrows disenchant life of its exaggerated satisfaction and goodness, without going to the other extreme, it is a great benefit. We are at first apt to think that life is better than it is, better than it wears, better adapted to give satisfaction than it proves to be; and when we discover our mistake we are apt to go to the other extreme, and find that life is all care and hardship. Blessed, therefore, is the sorrow that tempers our judgment.

Sorrows which make us feel that, good as the world is, it is not enough; that give as a sense that bright and sweet and desirable as life is, there is something brighter, sweeter, and more desirable, and that plant in our hearts the hope and expectation of a higher and better life—such sorrows are angelic. They prophesy to us, and fulfill their own prophecies. They do not lead us to deride the present, nor to refuse any wholesome bitterness, but they tell us of a rest hereafter.

I appeal, if not to your present or past experience, certainly to an experience that you will have. I do not say to the young: "Act sorrowfully." I would not check the innocent hilarity and mirth of the present hour. I would not have any one feel that because sorrows are to come he is to act as though they had already come. If childhood rejoice, let it rejoice; only this: remember that days of darkness must come. And when they draw near, remember that sorrow has a meaning.

One More Glass.—A short time since, at a Temperance meeting, before me sat a very respectable young working-man, with his wife by his side. They both seemed listening with much interest and emotion to the speakers. During the meeting some one left the platform and came up and spoke to him. I heard what was said.

"Heppell, I wish you would stand up and say a few words. If any one in the town knows the blessings of total abstinence, I am sure it is you."

The young man shook his head, and appeared to be saying "No" very often. But in the end he did stand up, and I think this was his speech:

"My friends, I never stood up to speak before, and I feel rather out of my place, but if any thing I can say should help you, I shall indeed, be very glad. I do not want to set myself up as a model for others, for I well remember those words: 'Let him that thinketh he standeth, take heed lest he fall.' What I would warn my fellow-workmen against is, the habit of indulging in what they call just one glass. Ruin lies at the bottom of it. Some of you know me, but many do not, and I may just say that two years ago what I called just one glass was all but the ruin of me, body and soul. I went for this into a public house, and that glass sadly changed my home, nearly broke my wife's heart, lost me my character and my work, and sent me to prison. After that, when I should have known better, the delusion of tossing off one glass nearly overcame me. If it hadn't been for God's mercy just then, I might now have been far away beyond the seas, or in a drunkard's grave. Working-men, strike! and let it be not only against the drinking traffic generally, but against what is the ruin of thousands. I mean the delusion of just one glass. Giving up the drink has done more for me than merely making me respectable, it was the first step to my becoming a Christian. It led me to the house of God, where I learned to pray for a clean heart and a new life in every way. Take my advice and try it, all of you, and I can only hope it may do for you all what, through God's blessing, it has done for me.

"Once more let me warn old men and young, women and children too, of the danger of just one glass."—*B. W.*

The Philosophy of the Temperance Reform.—The philosophy of the Temperance Reform, so far as I have ever joined in it, is this: to emancipate society from this dire system of evil, the business of the country from this unfair competitor, and the politics of the nation from this evil and overshadowing influence. The great work which the Temperance men of this generation, and those who shall follow us when we have fallen asleep, is not to effect personal reformation only. That, as regards it, is incidental merely to the main work in hand. We seek rather to instruct ignorance, remove prejudice, quicken conscience, interpret economic law to the masses, and, by thus arming the moral sense of the nation against the traffic, eventually banish it from the land.—*W. H. Murray.*

Digitized by Google

Comparative Longevity of Man and the Lower Animals.

BY E. RAY LANKESTER, B. A., OXFORD.

I. INTRODUCTORY.

THE periodic phenomena observable in organisms have always a special interest for students of Nature on account of the extreme obscurity of their relations, as well as from the practical importance which they possess for mankind. There is probably but small room for doubt that ultimately the various recurring periods of death, of reproduction, of sleep, of hibernation, of gestation, of puberty, are all related to or derive their origin from those great astronomical cycles of change in the relative positions of sun, moon, and earth—which we know as year, month, and day. While in some of the periodic phenomena of organisms this relation is clear and direct, in others it is obscured by the introduction of most complex factors, which do not permit us to trace in the majority of organisms the operation of the astronomical cause. The duration of life * is vastly influenced by varying conditions in various organisms, but the prime factor in all cases is the influence of changing day and night, of alternate winter and summer, or wet and dry season.

Although it is vain (with present knowledge) to expect to gain a complete insight into those agreements between beings and their environment, of which the duration of life is one, yet certain facts and considerations have been pointed out which go far toward enabling us so to do. From the time of Aristotle onward, observers and philosophers have accumulated facts and multiplied speculation on the causes of longevity—the field is a well-trodden one, and for many years to come any increased knowledge of it must be looked for rather from the examination of long-acquired facts and their re-arrangement, than from new or unexpected observations by individual workers.

* The great importance which man attaches himself to long life, gives the inquiry into longevity in animals a greater importance than it deserves as a physiological or philosophical question. The varying intensity of life in different species, and the average mortality of a species, are more clearly influential quantities in nature than the possible length of life. Time does not appear in the organic world as an easily recognisable factor, for though in life, as in levers, what is lost in power is gained in time, it is difficult to distribute the amount of life of any given species rightly between intensity and length.

2. WRITERS ON LONGEVITY, AND GENERAL SOURCES OF INFORMATION.

In consequence of the general nature of the inquiry proposed in this essay, we have little in common with those who in former ages have enlarged upon the possible means of prolonging human life; nor are we concerned specially with those questions as to the possible and extreme periods of man's tenure of existence, which to-day occupy the attention of many literary men of an antiquarian or curious turn of mind. In the writings of these men we can not expect to find more than one limited class of facts bearing on comparative longevity; and in too many cases the facts so-called are not supported by scientific evidence. In a recent article in The Quarterly Review, and still more lately in The Fortnightly Review, admirable *résumés* are given of what is known and has been supposed with regard to this possibility of human life—a subject to which the term "longevity" has had its meaning narrowed, but one which will here be treated subordinately. It will be unnecessary, therefore, to refer further to authorities on this question, until their opinions are discussed. Naturalists and philosophers, including Aristotle, Bacon, and Haller, have incidentally given expression to opinion as to the causes of the varied tenure of life of organisms; but naturally the later writers have had a larger number of facts to deal with, and have been able to bring a sounder scientific knowledge to bear on the problem than those who preceded them. The treatise of Bacon, entitled "Historia Vitæ et Mortis," contains a most admirable inquiry into the causes of longevity. The question is attacked from every side, and the most ingenious hypotheses, with regard to animals and men, are suggested and discussed with that order and precision which belong to the great philosopher. At the same time it must be admitted that, in Bacon's time, strange traditions and superstitions held men's minds, and that he actually, who showed the means by which we have become free from such impediments, was to a considerable extent affected in this way. The account of the ages attained by various species of birds and animals, given by Bacon, is very extensive, and his remarks upon each case val-

Digitized by Google

uable. These are referred to hereafter; but his statements with regard to various cases of human longevity are less trustworthy, as well as his discussion of the value of inunction, of smelling fresh earth on waking, and other curious devices for prolonging life; little reliance, moreover, can be placed on the strange connections between longevity and personal qualities and characteristics, such as hairiness and temper, which Bacon enumerates. This treatise, however, is well worth the study of those interested in the subject, if only as a collection of strange fancies. Bacon's conclusions, set forth in the thirty-two canons at the close of his treatise, explain variations in longevity as due to variations in the density of the "vital spirits," and other causes affecting these spirits. The work of the Prussian physician, C. F. Hufeland, entitled "The Art of Prolonging the Life of Man," published in the beginning of this century, is to a great extent founded on Bacon's work, from whom most of his facts are derived. The advance in science during a century and a half, enabled him to treat the subject in a less metaphysical style than Bacon could; at the same time, his philosophy is one which has now in its turn become antiquated. Hufeland endeavors, by an examination of the various leases of life in the vegetable and animal world and their connected conditions, to discover what will favor and what will combat the prolongation of life in man; and the latter part of his work is a recommendation of temperance and regularity in the exercise of the various functions, such being the lesson derived from his general study. At the outset of his inquiry Hufeland observes: "Is it, then, impossible to penetrate the intimate nature of this sacred flame (life), and to learn to distinguish what will feed it from what will diminish it? I know how rash is the enterprise I have undertaken. I am about to approach a sanctuary from which so many presumptuous men have had to depart abashed and confused, and of which Haller himself, the favored confidant of Nature, has said that no mortal can penetrate therein." Hufeland had no cause to regret his enterprise, for though he did not accomplish his task, which indeed he could not hope to do, he has shown an excellent path, which it remains for others to improve and extend.

The general conclusions Hufeland arrived at are as follows. He says: "The duration of life depends then, in general, on the following circumstances—1. It depends on the quantity of vital force contained in the body. 2. Life consumes and destroys not only vital force, but also the organs; the destruction of life ought then to occur later in a body endowed with vigorous organs than in one in which the organs are delicate. . . . Thus, a certain solidity of general organization and a suitable condition of the vital organs are the second condition on which length of life depends. 3. The consumption (of vital force and of organs) may be more or less rapid, consequently its duration, or, what amounts to the same thing, that of life, may be, other things being equal as regards forces and organs, shorter or longer, according as the act of destruction operates with more or less intensity. 4. Finally, since the reparation of losses is the principal means of counteracting consumption, a body which has the most perfect means of regeneration, both internal and external, will endure a longer time than one not provided with these means. In a word, the duration of life in a being depends on the sum of the vital forces which it possesses, on the greater or less consistence of its organs, on the rapidity or the slowness of its consumption, and on the perfection or imperfection of regeneration.*

The only criticisms on these views which it is at present useful to make, is that they involve certain ideas which have become modified with the advance of science, and hence require to be adapted to present knowledge. In the sequel it will be seen how far they differ or agree with modern conclusions.

A second work on Longevity, which treats of the general subject, and which, therefore, has an interest for the present inquiry, is that of the late P. Flourens, who was Perpetual Secretary to the Academy of Sciences of Paris, and Professor of Comparative Physiology at the Museum of Natural History. Flourens's work is devoted to human longevity in its first part, and in this connection he considers the longevity of other mammalia in order to answer this question: "Is there any sure characteristic in animals from which we may infer their length of life?" He gives the supposed age of several mammals, and the age at which the epiphyses of their bones are supposed to become united throughout the skeleton, and from this comparison he comes to the conclusion that in mammals and man the period of life is five times that of the period of growth—a very neat and valuable rule to aid us in examining the ques-

* Hufeland observes in one passage: "The more imperfect the organisation the longer the life," after describing the prolongation of life in plants by pruning. His own facts are sufficient to refute this as a general law. The truth is the very opposite of this.

Digitized by Google

tion of the causes of longevity, where there is a real foundation for it in fact.* The data used by M. Flourens are, however, very few and of small credibility, while, such as they are, they do not bear out his law of an exact quintuple ratio. The suggestion of fixing by the junction of the osseous epiphyses the period of growth, is nevertheless one of great practical value.

In a work entitled, "Life—its Nature, Varieties, and Phenomena," Mr. Leo H. Grindon has discussed what he terms the various leases of life in plants and animals, using the data and inferences of Bacon, Hufeland, and Flourens, to a very large extent, but adding some which are of value. The relation of length of life to bulk, intensity, and fertility, which have been more or less clearly apparent to all who have thought on the matter from early times, are briefly set forth, and apparent exceptions to the laws enunciated are attributed to special design on the part of the Creator, to serve the special requirements of the exceptional organism, or of some other organism dependent on it.

Lastly, in regard to works, the volumes of Mr. Herbert Spencer must be mentioned. For whether we accept the new philosophy of Evolution, so marvelously born of Mr. Darwin's theory of the Origin of Species, or cling to an older belief, the fitness of things to their conditions, the correspondences of organisms to their environment, so ably set forth in Mr. Spencer's grand work, must enter into our theory of Nature. It may be a fair boast of the evolutionist that the founder of his philosophy has been led by the course of his speculations to trace a closer connection, a more complete adaptation of living things to their wants than the teleologist ever even hinted at, much as such a close connection would have added to the consistency of his theory of design. In his "Principles of Biology," Mr. Spencer, in the chapters on Genesis and on Multiplication, establishes certain laws of correspondence, which, together with the facts he so adequately cites, have the closest bearing on the antecedents of longevity. Nevertheless it is to be noted that the term "longevity" is not once used in these chapters, nor is the duration of individual life discussed directly at all. Did the nature of this essay permit, it would be perhaps the most satisfactory way of treating the question of longevity, to assume the contents of Mr. Spencer's volumes, and to write a last chapter on the Duration of Individuals. This is not, however, the form which it is deemed right to adopt upon the present occasion, though frequent reference to and use of the views of this most eminent philosopher will be made.

Having dismissed the subject of books, let us consider for a moment the nature of the data which are available with regard to the duration of life. We shall find that the paucity and uncertainty of observations on this class of facts is something really extreme. Lord Bacon, in his "Historia Vitæ et Mortis," makes a remark which is true to this day: "*De diuturnitate, et brevitate vitæ in animalibus tenuis est informatio, quæ haberi potest; observatio negligens; traditio fabulosa; in ejusmodi vita degener corrumpit; in sylvestribus injuria cœli intercipit.*" To begin with man himself, we have statistics, individual assertions, general impressions, experiment. It might be supposed that statistics would furnish very valuable evidence on this matter; but, in the first place, it is only within certain European areas and a part of America that statistics relating to age are prepared, and the qualifications to which these are subject, from the shifting of population, are of a very complex character; further, there is a remarkable personal equation in the observers, who are at the same time the subjects of the inquiry into age, which it seems almost impossible fairly to estimate. Men do not tell the truth as to their age, either from ignorance or from deceitfulness. The ill-educated and the aged are specially likely to make false statements from ignorance, while that "vanity which never grows old" affects equally the statements of old and young.

Individual assertions, taken alone and apart from the correction which the average of a vast number must insure, are, of course, still less to be depended upon, and for the same reasons. General impressions, such as are imparted to us by travelers, by poets, and even historians, are of very small value when they relate to the duration of life, where it is so easy to confuse wear and one of its factors age. Experiment of what will insure long duration of life in himself has been too rarely tried by man to make this class of evidence of any scientific value, while among animals man seems never to have selected or endeavored to produce longevity, probably because of its uselessness; had he done so, we might hope for some valuable facts from his experiments.

With regard to observations on the length of life of other animals, the certain knowledge is very small, only that tenure of life which is

*Buffon had previously supposed a ratio of 7 to 1 as that of the length of life to length of growth.

Digitized by Google

very brief being easily observed. The greatest uncertainty or even ignorance prevails as to the duration of life of even the commonest mammals, birds, and fishes; in most cases it seems only possible to say that it is not less than a certain period. This, of course, furnishes a limited means of comparison. A writer in the "English Cyclopædia" says: "Of the age to which the horse would naturally arrive, it is impossible to say any thing satisfactory. Many have exceeded thirty, and some of them even forty, but from ill usage and over-exertion the majority come to their end before they have seen nine or ten years." M. Flourens gives exceedingly wide ranges for many mammals in his book above noted, while it is obvious, if we consider the position of many wild animals, such as the larger carnivora, most birds, reptiles, fishes, and aquatic animals, that any suppositions as to their duration of life can rest on but few facts. In reply to inquiries, Mr. Charles Darwin writes that he has no information with regard to the longevity of the nearest wild representatives of our domesticated animals, nor notes as to the longevity of our quadrupeds. Mr. Thomas Bell, the author of most valuable works on "British Quadrupeds," "British Reptiles," and "British Crustacea Podophthalmia," in reply to special inquiry, writes that the opportunities of observation are few, and the results necessarily uncertain as to length of life in Reptiles and Crustacea. Dr. Gunther, of the British Museum, a most able ichthyologist and naturalist, remarks, in a letter in reply to inquiries: "There is scarcely any thing positive known of the age and causes of death of various fishes." So, too, in Mr. Yarrell's works little is said of duration of life; while in Mr. Gwyn Jeffreys's admirable treatise on the British Mollusca a similar absence of knowledge with regard to those animals is admitted. The Insects form a remarkable exception, since in a great number of them the duration of life is well known.

Of still lower forms of life there is as little knowledge in most cases as in the higher forms. The Vegetable division of organisms among its higher and terrestrial members furnishes ample data; the ages of trees, shrubs, and such like forms appear to be well ascertained, but those whose condition and structure are diversified by aquatic habitat, leave us as much in ignorance as do similarly inaccessible animals.

Here, then, before entering on this inquiry, while but looking out on the road, we see how few are the guide-posts—how small the assurance we can have of taking the right turning. When that immense engine of scientific observation, which is wielded by statisticians, has been fairly and fully applied to the human species, and to such of the many and varied forms of animal life as may be possible, not only so as to determine length, but other quantitative phenomena of life also, then we may hope to see the problem, about to be discussed, definitely and clearly investigated by inductive methods.

THE MORMONS, shrewd and far-seeing with respect to temporal advantages, yet profess to keep the rewards of the celestial Zion ever before them, as the chief motive of their actions and the goal of their desires. They present an extreme case of *other-worldliness*, a satire, as it were, upon that spirit, which prevails too extensively among every people, of leaning upon worn-out traditions rather than upon eternal principles, and of reaching forward to an unknown existence, to the neglect or misapprehension of the life which now confines us, and in which our work manifestly lies.

The Mormon school system, too, is a poor substitute for the advantages of our common schools, to say nothing of those few great educational centers which are fast adding the results of old-world culture to new-world freedom from cumbersome traditions.

The Mormon law with respect to marital rights and duties is extremely strict, requiring far more self-denial on the part of the husband than is usually practiced by monogamists of the outside world, while the fulfillment of such laws is guaranteed through the piety of the citizens, and their firm belief that they are under the authority of a divine command.—*Mrs. Evans.*

WHAT IS DANGEROUS TO THE STATE.—Whatever tends to lower the tone of public morals, to debauch the mind, to corrupt the manners, to lessen the sum total of its industry, is, to the full limit of expression, dangerous to the State. These causes, although slowly operating and often unnoticed, are none the less causes producing evil and evil only. The assertion that no representative government can long abide when the majority of the voting population are addicted to the vice of drunkenness, carries with its utterance the force of a demonstration. It produces a conviction on every candid mind, against the current of which no argument can stand.—*W. H. Murray.*

Digitized by Google

STUDIES IN HYGIENE.

A Word about Air.—The poet writes of "trifles light as air," but air itself is no trifle, that is quite certain. If you could but estimate the amount of mischief done by this ignorance of air, it would be so stupendous that it would astound you. Some persons have a notion that the only means of comfort is to shut up every hole in a room, and prevent the access of air. It is God Almighty's arrangement to give an unlimited quantity of pure air, and it seems to be man's arrangement to endeavor to limit that supply, and to deteriorate its purity in every way in his power. I have often mentioned the observation of an old clergyman, who used to complain greatly of his flock for shutting out the air. He said: "If I were to preach in a barrel, they would stop up the bunghole." That is just what the majority of us do. I have been in houses—I have been in some to-day—where, for example, the top sash is nailed up—a suicidal act—doing such damage as one could scarcely tell of in the ten minutes that have been allotted to me. Now people will not drink dirty water—not willingly, though sometimes they are obliged to—but they have no objection whatever to take in dirty air. If they would but remember that from dirt comes death; if they would but realize the absurdity of the saying that "own dirt is no dirt;" if they would but see the absurdity, the dangerous absurdity of that saying, I am sure they would act very differently. From our own breath may come our own death. It has been shown pretty conclusively that about 700 cubic feet—say 10 feet by 10 feet, and 7 feet high, and we can all imagine a room of that sort—is about as small as a single individual should inhabit. I have been in houses where six people were sleeping in that same space; and, therefore, having 120 cubic feet, or something of that sort, each, instead of 700.—*Godwin.*

Look to Your Pumps and Water Pipes.—Galvanized iron is supposed by many to be perfectly safe for use in pipes for conveying water, and it is often used in the endless-chain pump so common in some farming districts. Dr. Jackson, the Boston chemist, says, in regard to galvanized iron, that "it is protected by the more ready oxidation of the zinc, and the oxide of zinc is largely dissolved by water, rendering it unwholesome. In several instances I have detected large proportions of oxide of zinc in water that has remained over night in galvanized iron pipes; and, in one instance, a gentleman who brought me such water said it produced in him much nausea. The water analyzed was found to be highly charged with oxide of zinc. It is well known that when zinc-covered roofs were first introduced in Boston, and rain-water from them was used for washing, that the washerwomen complained that the water made the skin of their hands crack, and the rain-water from zinc roofs was hard, and decomposed the soap. It is also known that the French Government has recently forbidden the use of galvanized iron water-tanks in their ships, on account of the injurious effects of the dissolved zinc on the health of the men." Our readers will do well to remember this, as unprincipled dealers will deny these statements in order to sell their wares. Galvanized iron is sold at a great profit.

Cleansing Blankets.—It is quite as important to have the blankets on our beds clean as to have the sheets pure and white. The foul emanations which they absorb in time makes the bed any thing but sweet. The Boston Journal of Chemistry gives the following method of cleansing blankets:

"Put two large tablespoonfuls of borax and a pint bowl of soft soap into a tub of cold water. When dissolved, put in a pair of blankets, and let them remain over night. Next day rub and drain them out, and rinse thoroughly in two waters, and hang them to dry. Do not wring them."

But this is not the only domestic use to which borax may be put. Says the same journal:

"Borax is the best cockroach exterminator yet discovered. This troublesome insect has a peculiar aversion to it, and will never return where it has once been scattered. As the salt is perfectly harmless to human beings, it is much to be preferred for this purpose to the poisonous substances commonly used.

"Borax is also valuable for laundry use, instead of soda. Add a handful of it, powdered, to about ten gallons of boiling water, and you need use only half the ordinary allowance of

Digitized by Google

soap. For laces, cambrics, etc., use an extra quantity of the powder. It will not injure the texture of the cloth in the least.

For cleansing the hair, nothing is better than a solution of borax water. Wash afterward with pure water, if it leaves the hair too stiff. Borax dissolved in water is also an excellent dentrifice, or tooth-wash.

PERSPIRATION.—The amount of liquid matter which passes through the microscopical tubes of the skin in twenty-four hours, in an adult person of sound health, is about sixteen fluid ounces, or one pint. One ounce of the sixteen is solid matter, made up of organic and inorganic substances, which, if allowed to remain in the system for a brief space of time, would cause death. The rest is water. Beside the water and solid matter, a large amount of carbonic acid, a gaseous body, passes through the tubes; so we can not fail to understand that they are active workers, and also we can not fail to see the importance of keeping them in perfect working order, removing obstructions by frequent application of water, or by some other means. Suppose we obstruct the functions of the skin perfectly, by varnishing a person completely with a compound impervious to moisture. How long will he live? Not over six hours. The experiment was once tried on a child at Florence. Pope Leo the Tenth, on the occasion of his accession to the papal chair, wished to have a living figure to represent the Golden Age, and so he gilded a poor child all over with varnish and gold leaf. The child died in a few hours. If the fur of a rabbit or the skin of a pig be covered with a solution of india-rubber in naphtha, the animal ceases to breathe in a couple of hours.—*Journal of Chemistry.*

Where the person is confined in-doors the perspiration adheres to the skin, hence the necessity of bathing. A good bath also brings the blood to the surface, and makes the skin vigorous and healthy, as well as clean. Those who imagine a bath is only valuable as a means of cleanliness are mistaken. It is quite as useful in promoting surface circulation.

WHERE DO YOU LIVE?—It makes some difference where we live after all, as well as how we live. If you happen to live in Fifth Avenue, for instance, you have a fourth chance more of life than you have if you live at Five Points—that is to say, for every twenty-nine persons who die at Five Points, there are only about twenty-four persons who die in Fifth Avenue. Now say that five persons additional in a thousand die because of bad arrangements—and we should say that a great many were dying even in Fifth Avenue from bad arrangements; but take the worst as compared with the best, and what does the death of five persons in one thousand, in a great city of nearly a million of inhabitants tend to imply? It means the unnecessary death within the year of nearly five thousand persons! Points of this sort, if got into the mind, will show the necessity and value of sanitary movements and improvements, the provision of fresh air, good water, and pure food.

A BAD BED.—Mr. Godwin, an able lecturer on sanitary science, in a recent address in Newcastle, England, says:

"I knew a bed in a hospital where every patient died who was put into it; I knew a stable in which no horse would live beyond a certain number of months; I know houses where successive families are stricken down by fever as they go in, all of which might be prevented by a little knowledge."

Mr. Godwin does not tell us what that little knowledge is to which he refers, but it is not hard to guess. Cleanliness and disinfection, sunlight and fresh air, would prevent any such results as Mr. G. speaks of.

SERVANT GIRLS' KNEES—Mr. Richard Davy, in a communication to The Medical Journal, in reference to "Housemaids' Knees," remarks that during the past year twenty-one cases of this affection have been registered as in-patients at the Westminster Hospital (one man and twenty girls), demonstrating that some mechanical improvements are needed in the common scrubber's necessaries. He maintains that it is an unnecessary and quite a cruel custom that servants should subject their knees to the cold pavement or damp floor, and to continued pressure, to insure a clean doorstep, a bright hearth, or a polished floor. Flunkeys, who, of course, have too much self-pride to knuckle down and clean their halls, use the American squeegg-brush, or a long-handled mop; the women in Holland clean their steps with an appliance combining the brush and wiper; the Parisian garçon waxes his floor with a footbrush, and so on. Let, therefore, our poor English girls be supplied with brushes and wipers, that can be used in the erect posture. Then our housemaids will be eased of a frequent and painful, if not a dangerous affection; our hospitals will be provided with more

Digitized by Google

empty beds; and employers will be spared the inconvenience of sending their broken-kneed drudges into the wards of the nearest charitable institution."

Perhaps some American servant girls may be in need of this knowledge. It is not at all uncommon in New York to see them on their knees with the scrubbing-brush cleaning floors and stairways. The work can mostly be done by a long-handled brush or mop quite as well, we think.

MISTAKES OF AMERICANS WHO LIVE IN CITIES.—In the cities of America the worst sanitary defects of the worst cities of Europe are being repeated. The sanitary engineer of the future will know nothing of "refuse matter" other than as a useful product, which, properly applied to the soil, will add to the wealth of the community. The aim and end of statesmanship ought to be to insure to every individual born in the State means of health and of morality. Each man's home should not only be his castle, but his hospital. Charity will not then degrade, but will elevate; and that alone will be true charity which assists the poor to assist themselves, and so to live independent of all alms-begging and alms-giving.

It is often said that the charitable institutions of New York are the pride and glory of the city. In one sense this is true, but it occurs to us that it would be better if we did not need quite so much of this sort of glory. Passing along Baxter Street recently we noticed tumble-down rookeries enough to disgrace any city, and yet these holes swarm with inhabitants. Why do they live so degraded. The only answer is, the people spend most of their wages in drink, consequently their homes must be degraded. Two-thirds of the working people of New York drink and smoke up all their surplus savings, and as long as this is so sanitary regulations must be very imperfect, and the necessity for charitable institutions far beyond what it ought to be.

EFFECT OF TREES UPON CLIMATE.—Of the effects produced upon climate by the denudation of the soil there is no room for doubt. To a certain extent the influence of human labor in the thinning of forests is beneficial. But the limits between culture and destruction are rarely maintained. In the year 1816 the forest came up close to the city of Philadelphia. The Delaware, a mile wide, was then often frozen in a single night. The edge of the forest has receded to a distance of more than thirty miles. The thermometer is now rarely down to zero; the river is hardly ever frozen; nor does snow lie long on the ground. In the forest it lies very long. The increased aridity of Palestine, of Spain, and of the south of France, is well known. In the former case it has been partly caused by the cutting down of the olive, a barbarous incident of warfare, merely forbidden by ancient law. In the last-named country it has been the need of fuel that has led to the denudation of so many districts, and the double evil has ensued—first, that the humidity of the climate has been reduced to a formidable extent; and, secondly, that when rain does fall, in any unusual proportions, the absence of the great natural absorbing power of forest districts allows the entire product of the rainfall to be discharged at once by the natural drainage, thus causing those floods which have proved so formidable in their ravages within the last few years.

Trees have a wonderful effect in purifying the air and supplying it with oxygen. A large tree takes in daily more carbonic acid, and gives out more oxygen, than several men can consume.

PERISHING FOR LACK OF KNOWLEDGE—In Great Britain alone more than one hundred thousand people perish annually, and at least five times as many sicken grievously, out of pure ignorance of the laws of health, which are never imparted to them at school. They have no chance of learning them afterward, as they possess no secondary schools. The mere tools of education are put into the hands of children during their school time, without any effort being made to teach them how to use the tools for any profitable purpose whatever.

In Great Britain statistics are more carefully taken regarding these subjects than in America, but it is probable that here there is quite as much loss of life and time, from ignorance of the laws of health, as there. If we are to judge of the general diffusion of sanitary knowledge in England by the sale of books on health, they certainly read more on the subject than we do.

HIGH AIMS.—Those who aim at high intellectual achievements may be assured that no part of their time will be less wasted than that which they employ in becoming familiar with the methods and with the main conceptions of the science of organization and life.—*John Stuart Mill.*

Digitized by Google

RECIPES FOR COOKING.

PORRIDGES.

No. 1. Wheat-meal Porridge.—Having boiled one quart of soft water, and mixed half a pound of meal in a *little* cold water, mix them together, and boil for fifteen minutes, stirring it occasionally. Pour it into basins, and let it stand for ten minutes. To be eaten with fruit, sugar or molasses, and bread.

No. 2. Oat-meal Porridge.—People generally err in cooking this article, and hence they seldom succeed in making it palatable. There are two kinds of oat-meal—the Fine and the Round. We recommend the latter. It should be fresh. Having dissolved a little salt in a quart of soft water *boiling* in a saucepan, sprinkle with the left hand, while stirring with a wooden spoon with the right hand, half a pound of meal; let it boil *all over the surface* for twenty minutes, stirring it nearly the whole time. Turn it out into basins or soup-plates, and let it stand for five minutes before eaten. It should be served as Wheat-meal Porridge.

No. 3. Indian-meal Porridge.—Make same as the Wheat-meal Porridge.

No. 4. Indian Farina Porridge.—To one pint of boiling water add four table-spoonfuls of farina; mix and serve the same as the Wheat-meal Porridge.

No. 5. Arrowroot Porridge.—Mix one ounce of prepared arrowroot with a table-spoonful of cold water, then pour *boiling* water on it to make it the required thickness, stirring it well at the same time. A slice or two of lemon, with a little sugar will be found an improvement. To be eaten with crackers or bread.

No. 6. Boiled Wheat Porridge.—Having soaked over night one pound of good wheat in pure soft water, strain the water off and add a quart of fresh; stew it gently till quite soft. It may be eaten as Wheat-meal Porridge.

No. 7. A Good Breakfast for eight persons for about a dime. Put half a pound of rice and half a pound of Scotch barley into one gallon of soft water; stew them gently for four hours. Then add four ounces of molasses and a little cinnamon; boil another half hour. This will produce eight pounds of good food.

No. 8. Lentil Porridge.—Three table-spoonfuls of lentil-flour; one salt-spoonful of salt, and one pint of water. Mix the flour with the water and salt, and boil ten minutes, stirring it all the time while boiling.

No. 9. Sago Porridge.—Four table-spoonfuls of sago, one salt-spoonful of salt, and one quart of water. Soak the sago in cold water for a few minutes, and boil it gently about an hour, adding the salt; pour it into soup-plates, and serve with molasses or sugar.

No. 10. Sago and Rice Porridge.—Equal quantities of sago and ground rice. Proceed as with Sago Porridge.

No. 11. Milk Porridge.—Take of new milk a pint and a half, and half a pint of water; place it over the fire. When just ready to boil, stir in a table-spoonful of flour, wheat-meal, oat-meal, or Indian corn-meal, previously mixed with a little water; after boiling a minute, pour it on bread cut into small pieces.

GRUELS.

No. 12. Arrowroot Gruel.—Pour a pint of boiling water on three-fourths of an ounce of arrowroot, previously mixed till smooth with a little cold water, stirring it constantly; return it into the pan, and let it boil a few minutes, adding sugar and lemon-juice, or raspberry vinegar.

No. 13. Arrowroot Gruel.—Take one ounce of arrowroot, and two large table-spoonfuls of preserved black currants. Put the currants into a pan with a quart of water; cover the pan, and let them stew gently about half an hour; then strain the liquid, and set it on the fire; when boiling, pour it gradually upon the arrowroot, previously mixed with a little cold water, stirring it well; return it into the pan, and let it boil for a few minutes gently, adding sugar if required.

No. 14. Oat-meal Gruel.—Set a quart of water on the fire, and when quite hot, but not boiling, pour it on a table-spoonful of oat-meal, previously mixed with cold water, stirring it well; take out the spoon, and leave it to settle for about two minutes; then pour it carefully into the pan, leaving the coarse part of the meal at the bottom of the basin; set it on the fire, stirring it till it boils; when boiled for five or six minutes, skim it, and add either salt, pepper, and butter, or sugar and nutmeg.

No. 15. Currant Gruel.—To a quart of oat-meal gruel, strained, add two table-spoonfuls of currants, and after boiling a few minutes, add sugar and nutmeg.

No. 16. Groat Gruel.—Pick the groats very clean, and steep them in water for several hours; then boil them in spring water till quite tender and thick, and add boiling water sufficient to reduce the whole to the consistency of gruel, also currants, sugar, and grated nutmeg.

No. 17. Sago Gruel.—Take two table-spoonfuls of sago, and one quart of water. Wash and soak the sago a few minutes in cold water; stir it into the rest of the water when boiling; boil slowly till the sag is well done, and add sugar and nutmeg as required.

No. 18. Tapioca Gruel.—Wash a table-spoonful of tapioca, and soak it in a pint and a half of water twenty minutes; then boil gently, stirring frequently, till it is sufficiently cooked, and sweeten.

Digitized by Google

EDITORIAL DEPARTMENT.

HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE.

Devoted to the Improvement of the Body and Mind.

NEW YORK, JANUARY, 1871.

WATER.

"To the days of the aged it addeth length;
To the might of the strong it addeth strength;
It freshens the heart, it brightens the sight;
'Tis like quaffing a goblet of morning light."

☞ THE PUBLISHERS *do not hold themselves as indorsing every article which may appear in* THE HERALD. *They will allow the largest liberty of expression, believing that by so doing this magazine will prove to be more useful and acceptable to its patrons.*

☞ *Exchanges are at liberty to copy from this magazine by giving due credit to* THE HERALD OF HEALTH AND JOURNAL OF PHYSICAL CULTURE.

TOPICS OF THE MONTH.

BY M. L. HOLBROOK, M. D., EDITOR.

A NEW YEAR'S TALK—HYGIENE.—Hygiene is an art which has for its object the promotion of the health of body and mind, and the lengthening of life for as many years as the laws of our being will allow. It teaches those conditions by which perfect growth is secured. It shows how bodily decay may be made less rapid, and it tells how life may be made more vigorous and death more remote. In its largest sense Hygiene relates to and includes rules for the best culture of both body and mind. A perfect system of hygienic knowledge would take in all that is known by the physician so far as it relates to preserving health of body, all the knowledge of the teacher pertaining to the care and education of the mind, and all the wisdom of the minister bearing on moral and religious life. Without a knowledge of Hygiene, perfect men, women, and children will never grace our earth. It is the blind hope of thousands, it is the longing of multitudes of earnest souls, that at some future day the world will be filled with perfect people, who can live together in peace and happiness. It is the belief of very many that some time in the future history of our globe the enormous waste of life which now goes on by war, and pestilence, and disease, will be stayed, and the terrible sufferings which fill the world with wailing will not exist. But this day can never come until a perfect application of hygienic knowledge is made. Look at the world as it stands to-day. What awful perversions and alienations—what terrible sufferings and abasements! The capacity for happiness is great—the enjoyment of it comparatively little. Would such a state of things exist if a knowledge of the laws of life was well understood and put in practice? Certainly not. If hygienic knowledge were sufficiently exact, and could always be applied, we might hope to see the dreams of prophets and reformers realized. This may never be; but we may hope in some degree to approach a time when human health and strength shall be more nearly universal, human suffering rare, human happiness more abundant, and the terrible waste of life that now disgraces our civilization stayed. We consider it the duty of every human being to not only acquire such knowledge as shall enable him to live long and well, but to help to spread it among others. Most of us live too much to ourselves. What work can we engage in that will help on the good time coming so much as to extend a knowledge of the laws of life among all people as we have opportunity! On this beautiful New Year's morning let us, one and all, give some attention to this subject

Digitized by Google

It is the usual custom, on each recurring New Year's Day, to salute our friends with a wish for a Happy New Year. We do this with a hearty good-will, and we mean during the next twelve months to make our wish good, by spreading before our friends such a feast of good things as shall contribute to their real happiness. New Year's Day should not be a day devoted to reckless dissipation, to drinking, and frivolous pleasures, but to plans for a new life. Our hearts are sickened by the methods which people have of turning the first day of the year into a day of evil instead of good. It should be exactly the reverse.

Oh beautiful New Year's morning,
We rise at thy glorious dawning;
We bless the Father for duties done,
For battles fought, and victories won.

The old, old year reviewing,
We are glad for past well-doing—
We are glad for the moments nobly spent,
And glad for mercies kindly sent.

We are glad for our life-blood flowing,
For the health sweet joy bestowing;
For this world's goods a fair increase,
And glad for our homes of love and peace.

The old, old year reviewing,
We are sorry for all ill-doing—
We are sorry for treading forbidden ways,
And sorry for idle hours and days.

We are sorry for harsh words spoken,
For promises given and broken—
For gains ill-gotten and squandered wealth,
And sorry for wasted strength and health.

Oh beautiful New Year's morning,
May we all by the past take warning,
And garner our time, and sow good seed
That may yield us a golden crop in need.

THE FIRST OF JANUARY—WINE.—Last year we entered our protest against the custom of treating friends with wine on New Year's Day. It is bad enough to become gluttons on holidays, and stuff the stomach to excess with unwholesome food: but when wine is added the case is a hundred times worse. No matter what excuse is offered for using wine, do not do it! These bodies of ours are too sacred to be made the receptacle of a drink that takes away all grace of motion, all power of upright, manly carriage; these brains too valuable to be muddled so as to talk only gibberish. This is woman's field of reform. She ought to make drinking so disgraceful that a young man with an ounce of wine in his circulation would hide himself from sight until it is out. THE HERALD OF HEALTH has been first and foremost against this fatal practice of beginning the year by being, even for the time, a wine-bibber. We have reason to believe the work it has done in this direction has been useful; indeed, we know that most of our readers think as we do on this subject. But there are thousands who do not think as we do, and to such we give this warning voice: DO NOT OFFER WINE TO YOUR FRIENDS ON NEW YEAR'S DAY!

LITERARY VALUE OF GOOD HEALTH.—We trust that many of our readers have already made the acquaintance of Col. Higginson's last book. We refer to "Malbone—An Oldport Romance," a work full of poetry, of subtle and eloquent thought, and practical wisdom. In the course of the story the principal character, Philip Malbone, says to his friend, Harry:

"Who cares for literature in America, after a man rises three inches above the newspaper level? Nobody reads Thoreau: only an insignificant fraction read Emmerson, or even Hawthorne. The majority of the people have hardly even heard their names. What inducement has a writer? Nobody has any weight in America who is not in Congress, and nobody gets into Congress without the necessity of bribing or button-holing men whom he despises."

"But you do not care for public life," said Harry.

"No," said Malbone; "therefore this does not trouble me, but it troubles you. *My digestion is good.* I can always amuse myself."

Digitized by Google

Perhaps some readers will not instantly recognize the logical connection between the short sentence above which we have italicized and the one which precedes it. The man swears that he is content; and the reason he gives for being in that enviable frame is—not that the world wags to suit him, not that he has found a great mission, not that he is making money, friends, or fame—but simply that his "*digestion is good.*" In our opinion that explanation is the best that could be given, because it is the most scientific. The world is full of misanthropes and grumblers. To them every thing seems askew and upside down. Their lives are passed in doleful complaints or in growling. Their faces tell the whole story of their discontent, and the tones of their voices echo the miserable eloquence of their faces. It is of no use to preach to these people the religious duty of a contented spirit. The difficulty with them is not moral, but physiological. Their case is not one of impiety, but of indignation. They have a vivid sense of the truth of a recent epigram: "Hell is full of dyspeptics, and dyspeptics are full of hell!"

But, when we commenced this article, we were thinking of the few very great writers whom America has produced, and of the long years of neglect which they had to endure before their souls were gratified by general recognition. What enabled them to bear cheerfully this period of obscurity? What kept them from lowering the standard of their thought and style in order to catch instantaneous notice? We have no doubt that the answer is found in Malbone's sentence: their digestion was good—they were healthy men, and were able to find a lofty joy in their intellectual labors, even though slighted by the world.

Thoreau was one of the rare and true geniuses of the world, and what he wrote was filled with the divine breath of inspiration. Yet his first book sold so slowly that for very shame he carried home from the publishers the entire edition and stowed it away in the garret. But Thoreau held daily communion with Nature—he was as natural and as healthy as the birds and the fishes with which he associated, and he could pursue his career of literary activity without fretfulness, without letting down his standard, and without despair.

The example of Nathaniel Hawthorne is even more pertinent. By the unanimous suffrage of the best judges he is now recognized as the most perfect prose writer yet produced in America; but how many long years did he toil, and how many exquisite volumes did he print and leave to their repose on the booksellers' shelves, before the public found out his worth? Was he sorrowed by this injustice? Not in the least. He was endowed with a fine and happy physical organization; his health was good, and he was able to make his very obscurity material for pleasant jokes, and to say merrily of his one appreciative reader: "I had always a sturdy faith in his actual existence, and wrote for him year after year, during which the great eye of the Public (as well it might) overlooked my small productions."

Unless we are greatly mistaken, Col. Higginson has himself had experience of the truth which he has put into the mouth of Philip Malbone, and could testify to the fine connection between a contented spirit and a sound physical condition.

The literary value of good health is seen likewise among famous men who toil with brain and pen, though on a lower plane of literary art than those whom we have just mentioned. Consider such men as Horace Greeley, Henry Ward Beecher, Garrison, James Gordon Bennett, Theodore Tilton. What workers they are! What wonders they accomplish! What splendid health they have, and how they try to keep it!

There are those who appear to think that health is indispensable to those who toil with their bodies, but not absolutely so for those whose labor is mental. No mistake could be greater. Says Wasson: "Intellect in a weak body is like gold in a spent swimmer's pocket—the richer he would be under other circumstances, by so much the greater his danger now."

Digitized by Google

WESTON, THE WALKER.—Weston, the far-famed walker, recently made an unsuccessful attempt to walk four hundred miles in five days in this city. Mr. Weston is a small but tough man, weighing, probably, one hundred and twenty-five pounds. His limbs are small; the girth about his waist can not be much, if any, over thirty inches, showing too little digestive power for long-continued exertion. He is very straight, and in walking carries himself remarkably erect. His gait is like that of a man of energy, but not of great power. On the second day he undertook to walk one hundred and twelve miles in twenty-four hours, but succeeded in walking only one hundred miles, and we think this feat quite enough for him. Mr. Weston, we judge, is a trifle nervous—indeed, his temperament indicates this. The first night after he commenced this feat he was restless and only slept one hour. We are not confident but this condition was caused by the amount of tea the papers reported he drank. The medical gentlemen who had Mr. Weston in charge promise to publish a report in due time which shall have valuable scientific bearings on physical questions. If any thing useful is brought out we shall let our readers have the benefit of it. In a moral point of view, we do not consider such exhibitions as useful, but the reverse, and we hope that Mr. Weston will not repeat his last experiment. The talent he exhibits in his attempts to walk long distances, if turned to other channels, would produce better results. If he chooses to sacrifice himself to science, let him do it in a less public manner.

INSANITY IN PARIS.—The Times says that "it is not strange to hear that a terrible number of cases of insanity have declared themselves in Paris, and that they are chiefly due to drink. From the first, the quantity of wine and spirits in the besiegod city, as is well known, has been relatively greater than the amount of food. There has been no need, except for the sake of preserving order, for limiting the wine rations at all. It is easy to understand how grief over the loss of friends, and the woful state of the country, unwonted excitement and barrack life, should have combined with bad food to produce this sad result. Of seven hundred cases of insanity in the National Guard alone, we are told that six hundred have been brought about by spirituous liquors. Several instances have occurred of men falling off the ramparts into the ditch and being killed—the fatality being ascribed to excess at the canteen. Respectable citizens, who have never before been known to drink hard now, it is reported, remain in a constant state of intoxication, and the same is said of women."

THE THRALDOM OF FASHION.—A society of ladies is being formed in Lafayette, Ind., "the general objects of which are to free the members from the thraldom of fashion, and leave more time for pure, healthy pleasures, intellectual improvement, and ennobling pursuits, such as every true woman's heart craves."

If the women of a hundred other cities would do the same it would be well. Fashion has its uses, but when it interferes with true development, when it consumes time that ought to be devoted to high attainments, then it is time to put it under our feet.

STAMPING OUT SCARLET FEVER.—The patient should be placed in a separate room and no persons allowed to enter the sick room except the nurse and the physician in attendance, or to touch the clothing or bedding used in the sick room until it has been thoroughly disinfected.

All clothing, bedding, and other articles not absolutely necessary for the use of the patient should be removed from the sick room. Articles used about the patient, such as sheets, pillow-cases, or clothes, must not be removed from the sick room until they have been disinfected by placing them in a tub with the following disinfecting solution: Eight ounces sulphate of zinc, one ounce carbolic acid, three gallons water. They should be soaked in this fluid for one hour, and then be thrown into boiling water and thoroughly washed. Feather and

Digitized by Google

hair pillows and mattresses require fumigation.

All vessels used to receive the discharges of patients should have some of the above solution kept constantly in them, and immediately after their use be removed from the sick room and emptied. Water closets and privies must also be disinfected daily with some of the same solution. A piece of muslin, one foot square, should be dipped in this solution and suspended in some part of the room constantly, and the same be kept in the hallways adjacent to the sick room. All straw beds should be burned after use, but not removed from the room.

It is advised not to use handkerchiefs about the patient, but rather old, soft rags, which should be immediately burned after use.

The ceilings and side walls of the sick room should be thoroughly cleansed and lime-washed whenever the patient has been removed therefrom.—*Moreau Morris, M. D.*

COMPENSATION.—Compensation, in the workings of organic law as to the human body, is strikingly illustrated by George Combe, in the eighth chapter of his admirable book on "The Constitution of Man." He shows that the penalties for violated law often most clearly exhibits the benevolent designs of the law itself. The organic law of *Vital Sensation* is under consideration. We give the general thought and not the language: In the long time ago, when Jupiter, *pater*, ruled the world, and fables were facts, a poor plowman lay on his couch racked with pain and burning with fever. He cried out in his anguish: "O Jupiter, O Jupiter!" The god came at his cry. "What wouldst thou, my child?" was the kind inquiry. "Thou art unreasonable and cruel in thy laws, O Jupiter. I was plowing in my field, which thy laws make needful, in order to support myself and my family; and, while thus employed, a storm of thy rain drenched me and a cold blast of thy wind chilled me, and now I lie agonized with excruciating pain. Compassionately Jupiter replied: "I see, my poor child; thou dost complain of my law of sensation, common to thee and all my sentient creatures. Shall I release thee from the operations of this law, so far as thyself art concerned, both as to its penalties and its rewards as well? At thy wish, and on these conditions, shalt thou be quite relieved from pain." "Most kind and mighty Jupiter," earnestly exclaimed the sufferer; "for such a boon thou wilt have my highest and most lasting gratitude!" "Be it so," replied the god. The plowman was at once restored to perfect health, and again follows his team a-field. How great must now be his happiness! The law of sensation is no longer applicable to him. Fever will no more burn up his blood; pain in none of its sharp agonies will ever again course through any part of his body. How little did he understand that in thus curing pain he also made all pleasure impossible. As before, the blood poured its vital currents through his veins, the air came to his lungs, light to his eyes, sounds to his ears, but he heeded them not. The law of sensation was suspended as to him. He went to his home; no sweet voice of wife or child greeted his coming. The loving kiss and fond embrace gave back no emotion. Tenderness and affection no more swelled his bosom. What consternation and distress unutterable now fills his soul. "O Jupiter, O Jupiter!" was again the intensified outburst of his wretched heart. Again the god listened to his call. "What now, my miserable child? Art thou still not content, since at thy wish I even set aside my law of sensation so far as applied to thee? What wouldst thou now?" The poor man recited his sad experience, while exempt from the law of sensation, and cried out: "Any thing rather than this." "Wouldst thou then be returned to thy couch of pain, to accept and bear patiently the penalty of my violated law? Wilt thou also more wisely and carefully seek to obey all my laws?" "Most gratefully, O Jupiter, do I accept thy clemency and promise obedience."

The same principle of compensation is equally true of every organic law not only, but all laws of the blessed and infinite Law-maker.

Digitized by Google

A PLEA AGAINST WHISKERS BY AN OLD MAN.—Much has been said and written about the disgusting practices of chewing and smoking tobacco. There is another practice or habit very prevalent, which, I think, is much more disgusting, pernicious, and prejudicial to health than the use of tobacco, which ought not only to be disapproved of, but condemned, by every person who has any regard for self-respect and the comfort of others. It is only about fifty years since the practice of wearing whiskers, and only about half that time since that of wearing mustaches, was first practiced by the people of our Eastern and Northern States. The practice was aped from foreigners. Webster says (see the word "Ape"): "Weak persons are always prone to ape foreigners." I would not say that all persons who wear whiskers and mustaches are weak-minded, but I am very sure the practice is not evidence of strength of mind. Physiologists tell us that the blood is highly charged with carbonic gas, a deadly poison, and which, if retained in the lungs, will produce speedy death. The blood, in circulating through the system, passes through the lungs, where the carbonic acid is thrown off in the form of gas, after which the blood again passes through the system, again imbibing carbonic acid, which is thrown off again, as before, through the nose and mouth, but almost wholly through the nose in persons in good health. The mustache, being a thick tuft of hair, receives the full charge of this poisonous gas at each expiration of the breath, and at each inhalation of the pure air it has to pass over and through the mustache so poisoned into the lungs. Many persons who wear whiskers and mustaches chew or smoke tobacco, the poisonous effluvium of which is thrown into the mustache, to be carried into the lungs at each inhalation. A knowledge of these facts ought to be sufficient to induce every person of common sense and reflection to abstain from a practice so prejudicial to health.

There is another reason why the practice should be repudiated—it changes the tone of the voice and makes it more indistinct, and should never be tolerated in public speakers, and particularly in clergymen, who ought to set better examples. The practice also makes the human face look more like that of an ape or monkey than of a man of intelligence. Perhaps it will be said that a protest in this matter will have no more effect than has been produced on those who use tobacco, or that of the Pope's bull against the comet.

However it may be as respects the efforts of *men*, there is a power which has as yet been kept in reserve, which, if brought into action, will, I believe, be effectual.

Women have rights which *men* are bound to and will respect in this matter. It must be extremely disgusting and offensive to every lady of any sense of delicacy to have a mustache saturated with the poisonous effluvia of carbonic acid and tobacco-smoke thrust under her nose and mouth.

If every wife and maiden will resolve, and strictly adhere to the resolution, that they will neither receive from, nor give to, a husband, lover, or beau, the salutation of a *kiss*, who has not a smooth and clean face, this very disgusting practice will soon be abolished.—*D. J.*

[EDITORIAL NOTE.—We fear it is too late in the day to protest against whiskers. The fact that they grow and can not be extirpated is an indication to our mind that Nature intended them to be worn. Like the nails and hair they should be well cared for, and there is no more sense in shaving them off than there is in shaving the hair off the head, or cutting the finger-nails down to the quick.]

INSANITY AND POOR DIET.—In England and Wales, out of 54,713 persons of unsound mind, 48,325 were of the pauper class, and the Lunacy Commissioners report that in a great majority of cases impaired nutrition was the cause of malady. Upon bodies and minds thus reduced, griefs and perplexities act with most damaging influence. Wholesome food, and a good stomach to elaborate it, would keep a majority of the race sane in mind and body.

Digitized by Google

How to Treat the Sick.

HAS SCARLET FEVER ANY RIGHT TO SO MANY VICTIMS?—Scarlet fever seems to enjoy that immunity which is accorded to what are called "necessary evils;" but when we come to inquire what right this disease has to carry off ten or twelve thousand persons annually, we find that it ought no more to exist among us than small-pox or cholera.

Scarlet fever is essentially a contagious disease, and exhibits all the phenomena of a malady which, being communicated from one individual to another, is more or less under the control of human action. Under these circumstances, it is impossible for the Government to stop such a disease by mere enactment, or for medical men to superintend efficiently arrangements for the prevention of its spread. It is only by the intelligent apprehension on the part of the public who are infected, that any hope of the arrest of the disease can be expected. We therefore take this opportunity of addressing the public on the subject. Unless heads of families and the public generally are acquainted with the real nature of this disease, no external organization of any kind is sufficient for its control.

We need not refer here specifically to the returns of the Registrar-General, to show how fearfully prevalent scarlet fever has been. In London the weekly mortality has been as high as one hundred and ninety in a week, giving a mortality for London alone of nearly ten thousand a year. Professor Huxley, in his late address at Liverpool as President of the British Association, says that in the years 1863, 1864, and 1869, ninety thousand persons were killed in England and Wales by scarlet fever. These figures point to a much higher mortality for scarlet fever than we have ever had to record for cholera. The point most remarkable about this mortality is, that while death from cholera has agitated every community, no public anxiety has been manifested about scarlet fever. Every one has submitted to it as a necessary evil, and no one has made any efforts to diminish its prevalence.

Yet, when we come to inquire into the nature of scarlet fever, and the laws of its distribution, there seems to be no more reason why it should prevail among us than plague, small-pox, or cholera, whose laws of distribution we now know, and on which we can exert the most obvious control. Scarlet fever is a contagious disease, and it is not too much to say that we have all contagious diseases under our positive control. Their nature, and the laws of their distribution, are so well known, that it is possible to teach the humblest individual interested in their destruction the means by which it may be effected.

We need not here enter into the discussion of the nature of "poison germs," of "microzymes," or other ultimate forms which the poisons of contagious diseases may assume, but we may affirm that in every body affected with scarlet fever there is produced poisonous matter, which, passing from the diseased body, is capable of generating anew the same disease as that which affects the body from which it is derived. The proofs of this are so abundant that we can not for a moment admit that the question is open to discussion. The point of most importance here is to know how long the "poison germs" of scarlet fever retain their vitality—the terrible power of starting anew the changes of which they are the offspring. With regard to scarlet fever, we have more evidence of these "poison germs" retaining their vitality than with many other contagious diseases. Sir Thomas Watson, in his classical lectures on the "Practice of Physic," mentions a case in which a piece of flannel worn round the neck of a scarlet-fever patient, being accidentally discovered two years after, and applied to the person

Digitized by Google

of a servant in the family, produced an attack of scarlet fever. Were it necessary, I could mention several instances, coming within my knowledge and reading, of the scarlet-fever poison lying dormant in woollen clothes for years, and not having lost its vitality, or power of communicating the disease.

Another point of importance with regard to the scarlet-fever "poison germs," is the length of time which a person once affected with scarlet fever is capable of communicating the disease to others. When a person has got well of scarlet fever as far as general health goes, it is by no means the case that he is no longer capable of communicating the disease, but many days after he is strong and apparently healthy, he is capable of disseminating "poison germs" from his body. A recent instance has been recorded in one of our journals, of the prevalence of scarlet fever in families supplied from the milk of a particular dairy. On searching inquiries being made, it was found that the persons connected with the farm from which the milk was supplied, had been affected with scarlet fever. Although they had not been allowed to milk the cows till they had recovered from the scarlet fever, it was, nevertheless, found that they had been engaged in this occupation while the effects of scarlet fever in the desquamation of the cuticle of the skin was still going on. There are abundant other examples on record to show that until the desquamation of the cuticle which always follows scarlet fever is complete, no person who has had scarlet fever is safe from giving it to others.

Such being the nature of the poison of this disease, what ought to be known in families where it breaks out, and what to be done as the result of this knowledge to prevent its spread? It is no use saying that the doctors will give all necessary directions. In the first place, it may be said that the doctor in nine cases out of ten will not give any directions at all. It is not his interest to do so; and if it were, he gets no information in his books or lectures on the subject at all. The medical profession is not required by its governing or examining bodies to know any thing about public health or prevent ive medicine. In the next place, however ad mirable may be the directions of medical men persons utterly ignorant of the nature of dis ease will fail to carry out the simplest direction given to them. Nothing can be a substitut for a knowledge of the first principles involve in the destruction of "poison germs" in a fam ily attacked with contagious disease.

What, then, ought to be done in a famil when scarlet fever, or any other contagious dis ease, has broken out? In the first place, th entire isolation of the persons attacked shoul be secured. They should either be removed t a room in the house to which none but th nurse and doctor have access, or the famil should be removed to some house of refuge o place where the disease does not exist. It ma be urged that this can not be done; but if it b a mere question of expense, it should be consid ered whether the cost of the deaths, the fune rals, and the doctor's bills of a family of sev eral children, and perhaps the father or mother may not really, in a money point of view, b greater than any cost of isolation.

But whether isolation is attempted or not there is another set of facts which must b borne in mind. The "poison germs" of whic we have spoken can really be destroyed. I left alone they can lead a life of poisonous ac tivity. We have the means of killing them— poisoning them in their birth, as it were—b certain substances whose properties we wel know. We can not here write a history of dis infectants, but they are well known, and th advertising sheets of every newspaper will a ford information with respect to them. Th most common and available are carbolic acid permanganates of soda and potash (Condy' Fluid), chlorinated lime or soda, chloride o zinc (Burnett's Fluid), chloride of aluminium (chloralum), sulphate of iron, and others These agents have the power of destroying th poisonous activity of scarlet fever germs. I the sick room and around the patient they should be constantly employed. All the secre tions of the person affected, whether they come

Digitized by Google

from the nose, the mouth, or other excretory organs, should be immediately brought in contact with one of these agents. All linen and clothes worn by the patients should be placed in a solution of one of them. Nurses attending on the sick, and medical men touching them in any way, should not leave the room without washing their hands in one of these disinfecting fluids.

Woollen clothing that can not well be washed should, by some agency or another, be exposed to heat. It is well known that a temperature of 212 degrees Fahrenheit, the temperature of boiling water, will destroy poison germs. Woollen clothing of all kinds, such as shawls and mantles, men's clothes, as also curtains, bell-pulls, carpets, rugs, and beds, should be placed in ovens, or by some contrivance or another exposed to a heat above 212 degrees. In St. James's, Westminster, a disinfecting apparatus has been erected in the Workhouse yard, where the various articles can be disinfected.

Having thus indicated general principles, I must leave details. I am convinced that the holocaust of victims that we annually offer to this Moloch of scarlet fever arises from ignorance, and that a general knowledge alone of the facts above stated can suffice to drive from us this plague, so disgraceful alike to our intelligence and our humanity.—*E. Lankester.*

AN ULCER CURED BY A DOG.—*To the Editor of* THE HERALD OF HEALTH:—Some time in the month of February, 1864, I was called to see an elderly man—say 60 to 65 years of age—named Jacob Hawk, a Pennsylvania Dutchman, whom I found in his parlor. On entering he said: "Doctor, here is a very sore arm for you; I have had many doctors to treat me, but here it is. By this time he had the bandage removed from it, and just at that moment a large dog got up and walked over to his master, as he held the arm exposed, filled with bloody pus-looking stuff—a bad looking ulcer indeed. The dog offered to lick it, but he ordered him away. I said: "Let him lick it off, if he will; I can see it better." "Here, Watch!" The dog walked up, went to work and licked it clean and nice from the shoulder to the wrist. The man seemed to experience considerable pain, but I kept his attention by getting an explanation of how long the sore had been there, the cause, etc. When the dog had finished, he retired to his resting-place on the rug in the room, perfectly contented. In answer to an inquiry as to the cause of the ulcer, he said: "I was bitten by a garter snake in harvest. My arm did not pain me much, and I did not tie it up; but after a while it became very much swollen. I doctored myself for some time, and then went to Dr. A., who said he would cure it in six weeks, but got worse instead of better. Then for one month I was under the care of Dr. B., but experienced no change for the better. I then used three or four bottles of patent medicine, but it did not help me. I began to think it a very bad case. Finally, I tried a German doctor; have taken medicine, but it still remains uncured. I have sent for you to ask what you think of it." The arm presented a general ulcerated surface. I indeed thought it, as the man himself remarked, "a bad case." I ordered him to let the dog lick it three times a day, and if necessary apply a little lard to it to induce him to lick it faithfully, and after each operation to apply a cloth moistened with melted lard and salt. I told him to call at my office in ten days. I did not see him for about six weeks, when in he came, saying: "Good evening, Doctor. I am well! How much is your charge?" (To tell all the facts, when I went to see him he had paid out so much, he said, and with no good result, that he would give me one hundred dollars if I cured him, and nothing if I did not.) Said I: "One hundred dollars—what you offered." "Oh, that is too much; I will give you twenty-five dollars." "All right." I took a good look at the arm—it was well and entirely healed up. I have no doubt as to the dog being the instrument of cure. I told some of my medical brethren, but it did not seem to impress them favorably, and so it has remained ever since, as above stated.—*James M. Hole, M. D.*

Digitized by Google

Food for Mirth and Thought.

A VERY EXTRAORDINARY PERSON.—The following is said to have been copied literally from an old tombstone in Scotland:

"Here lies the body of Alexander Macpherson,
Who was a very extraordinary person,
Who was two yards high in his stocking feet,
And kept his accoutrements clean and neat.
He was slew
At the battle of Waterloo
Plump through
The gullet; it went in at his throat,
And came out at the back of his coat."

CAST-IRON STOVES.—Against close cast-iron stoves there lie the serious objections that they do not afford proper ventilation; that when coal is used they are liable to emit deleterious gases; that in giving them fuel and removing ashes they introduce an irritating and disagreeable dust (an objection which also lies against open fire-places and grates), and that it is difficult to maintain an equable temperature by their use. They, nevertheless, from their small cost and the possibility of their use in small apartments and situations where more perfect apparatus can not be employed, enjoy a wider favor than any other form of heating apparatus in use, and are doubtless destined to maintain their popularity, unless some inventive genius shall give to the world something which combines their advantages with the removal of their defects. We are certain such an invention could not fail to secure at once universal favor and adoption.—*Scientific American.*

A HOMŒOPATHIST FRIGHTENED.—A Homœopathist, having laid in a supply of his kind of medicines, feeling unwell, went to take one of the globules, and by accident took two. He was greatly alarmed, and, there being no Homœopathic doctor near, he, in his extremity of fear, called in an Allopathic doctor to see if he could do any thing for him. The doctor looked at him and his pill in despair. He then poured a dozen or two into his hand, and said: "I can not help you, but I can die with you, and swallowed them all. No evil following, the frightened man went on his way rejoicing.

ANTI-VACCINATION.—The anti-vaccination movement is making rapid progress all over England. R. B. Gibbs, Esq., Secretary of the Anti-compulsory Vaccination League, has many calls to attend meetings and deliver lectures. He has recently been in Ireland, and found that the assertion so widely made that vaccination had stamped out small-pox is erroneous, as multitudes of children remain unvaccinated. The fact that 96 per cent. of the small-pox patients in Paris have been vaccinated has made a profound impression on the mind of this country.—*Human Nature.*

A MAN WITHOUT A SOUL OR BODY.—Here is a quaint anecdote from the biography of Dr. Marshall Hall: Dr. Wilkins had lent Dr. Hall the well-known book, "Body and Soul," and, as it was not returned in due time, he sent this note: "Dear Doctor, do send back my Body and Soul; I can not exist longer without them." The servant who received the note read it (as servants sometimes will), and, horror-stricken, rushed into the kitchen, crying: "Cook, I can't live any longer with the Doctor!" "Why, what's the matter?" "Matter enough," replied the man; "our master has got Dr. Wilkins's *body* and *soul*, and I don't dare to stay where there are such goings-on!"

A BRAVE IRISHMAN.—An Irishman, being afflicted with the toothache, determined to have the old offender extracted, but there being no dentist near, he resolved to do the job himself, whereupon he filled the excavation with powder; but being afraid to touch it off, he put a slow match to it, lighted it, and then ran off to get out of the way.

Digitized by Google

ANSWERS TO CORRESPONDENTS.

BY A. L. WOOD, M. D.

Short Heeled Shoes and Flat Feet.—The fashion of wearing short and high-heeled shoes is a very injurious one to the shape and use of the feet. A short heel does not support the arch of the foot, but allows it to sink, stretching and weakening the ligaments that hold the bones of the arch together, and making the person flat-footed. The purpose of the arch of the foot is to give elasticity and spring to the feet, and prevent sudden shocks being transmitted too abruptly to the body and brain. A person with a high-arched foot steps lighter, easier, and more gracefully, can walk with much less fatigue, and run and jump much better than a flat-footed person. Thousands of people lose their natural ease and grace of motion, and become stiff and awkward walkers, simply from wearing short-heeled shoes, and thereby losing their natural elasticity of step. The matter is made still worse by having the heels very high, as well as short. Another effect of flattening the arch of the foot is to increase its length, and the foot is often lengthened in this way to the extent of half to three-quarters of an inch. Short and high-heeled shoes also readily permit the easy turning over of the ankle, and many a strained and weakened ankle is the result of them. Ladies are the greatest sufferers from this foolish fashion, but men suffer also to some extent. The heel is usually made at least twice as high as it should be, and oftentimes not more than half as long. They can in all cases be safely made from one half to three-quarters of an inch longer than they are. In conclusion, if you value the appearance of your feet, the ease and gracefulness of your step, and the strength of your *understanding*, LOOK TO YOUR HEELS.

How to Remove Hair.—"As you give valuable 'Answers to Correspondents' in THE HERALD OF HEALTH, perhaps you would have the kindness to tell me what will remove hair permanently. I have been told to pull it out, but it grows in about as fast as I pull it out."

The least injurious way is to continue pulling it out, until the glands about the roots of the hair become so weakened as to be unable to reproduce it. Two or three times pulling out will be sufficient with some, while others may have to repeat it half a dozen times or more.

Dizziness—Its Cause and Prevention.—"What is the cause of sudden attacks of dizziness, and how can they be prevented?"

The condition existing in cases of dizziness is an unnatural pressure of the blood upon the brain. The exciting causes are usually some sudden exertion or hurried motion, as rising quickly from a recumbent position, stooping, etc. Unaccustomed motions, as sailing, swinging, walking circularly, riding backward, etc., often occasion it, even in healthy persons. The predisposing causes are either such as produce an undue thickness or viscidity of the blood, as torpidity of the excretory organs, particularly the liver, and excessive alimentation, or those that cause an unnatural thinness of the blood and weakness of circulation, as hemorrhage, an insufficient quantity of food, protracted disease, etc. The preventive treatment should be such as to restore the blood to its normal condition and equalize the circulation. Where the blood is thick and impure, the diet should be very plain and simple in quality—composed largely of fruit—and abstemious in quantity. Active out-door exercise and a thorough course of bathing are also indicated. Where the opposite condition exists, the indications are to nourish and strengthen the body, and equalize and invigorate the circulation. To this end the patient should have an abundance of pure air, as much nourishing food as can be digested and assimilated, and a moderate amount of daily exercise.

Rules for the Examination of Recruits.—The following rules for the examination of army recruits were established by Kettele, a celebrated German army surgeon, and will prove interesting as showing the comparative measurements of different parts of the

Digitized by Google

human body, its proper height, weight, etc.: "A man should measure around his thorax at least half his hight.

"Minimum age, 20 years.
Minimum hight, 5 feet, 4 inches.
Minimum weight, 125 lbs.

"A man 5 feet high must weigh 100 lbs., and measure around the chest over the nipples one-half his hight, or 30 inches. For every additional inch in hight he must increase 5 lbs. in weight, and the weight must increase in proportion as the age increases.

"A man *may* measure around the thorax two-thirds of his hight.

"The weight must increase with the size of the chest as well as the hight.

"The maximum distance around the chest is 45 inches.

"The maximum weight is 240 lbs.

"No restriction as regards hight.

"The distance from nipple to nipple is one-fourth the distance around the chest.

"The antero-posterior diameter of the chest is one-fourth the circumference.

"From acromion process to acromion process one-half the circumference.

Size of head not less than 22 inches in circumference."

Position of the Head During Sleep.—"Should the head be elevated or upon a level with the body during sleep; or, in other words, are pillows and bolsters useful or injurious?"

The head should be in the same relative position with the body during sleep as when the person is sitting or standing. Consequently, when lying upon the back, no pillow or bolster is needed. When lying upon the side, a pillow of sufficient size to keep the head upon a line with the spine should be used. If the head is raised above the level of the body, both respiration and the circulation of the blood are interfered with in proportion to the degree of elevation. The air passes to and from the lungs, and the blood to and from the heart, in tubes contained in the neck. Now take a straight tube of any kind, and a certain quantity of air or liquid, at a certain pressure, will pass through it in a given time; but if you bend the tube as the tubes in the neck are bent by having the head elevated, the quantity of air or liquid which will pass through in the same time with the same pressure will be diminished, and the greater the bend the greater the obstruction. Twisting of the neck also interferes with the respiration and circulation by diminishing the capacity of the trachea and blood-vessels.

How to Cure a Cold.—Upon the first indication that you have taken cold, stop eating until the cold is cured; drink freely of cold water; induce a free perspiration over the entire body, either by exercise, the Turkish, vapor, lamp, or hot-water bath or wet-sheet pack, followed by a tepid spray or sponging; go to bed, cover up warm, and breathe all the pure air you can. Nine cases out of ten will yield to this treatment in less than twelve hours, and the tenth one will hardly continue twenty-four hours.

Liver as Food.—Do you consider liver worse than other animal food because it is an organ of excretion?"

The liver and kidneys are most unhealthful parts of an animal, for the reason that they are constantly charged with the worn out excrementitious matters of the system. This is why they are the parts first subject to decomposition.

Eating Before Retiring.—"Please inform me whether it is injurious or not to eat any thing before retiring. It does not seem right to me, but the desire for something to eat about that time is so strong (although I eat a moderate supper) that I am in doubt."

It is very injurious to eat just before retiring. The desire for it is simply the result of habit or of a morbid craving—the result of disease—and should be at once overcome.

How to Prevent Injuries from Runaway Horses.—An Englishman writes as follows:

"A complete electric apparatus can be purchased in a small case. Let one of these be fixed in an out-of-the-way nook in the carriage, two wires to hook to harness, beneath which have two very thin copper plates properly placed. In the event of a runaway, the driver and inside occupants would only have to press a glass knob to stop instantly the mad career of the strongest horses. It could be adopted for equestrians also."

Digitized by Google

NOTICES OF NEW PUBLICATIONS.

Why and How, or Why the Chinese Emigrate; and the Means they Adopt for the Purpose of Reaching America. With Social Customs, etc. By Russell H. Conwell. With Illustrations by Hammatt Billings. Boston: Lee & Shepard, Publishers. New York: Lee, Shepard & Dillingham.

Our Republic has been more or less the asylum for almost all peoples on the face of the earth, who have come to us, driven out by the oppression of rulers, or because their own native land afforded no field for the growing intelligence of the masses. The hardy and impulsive Hibernian bent his pliant back to carry the hod and become a welcome medium for the building of our houses or the construction of our railways. The cheery Teuton plows our fields and contributes a healthful element to our growing nationality. Except the Irish little can be said in favor of the more limited ingress of the Celtic nations, who by the cheapness of their labor crowd our native young men out of counting-rooms, and away from the official desk. These immigrants belong to christianized peoples and were welcomed without a demur.

But there is now landing upon our shores an altogether different type of the race—representatives of another type of man, Mongolians, not Circassians—Pagans, not Christians, and in this emergency our people naturally open their eyes and ask, Why and how these new and strange people leave their homes to settle among a race ignorant of their language and opposed to their kind of religion. It is currently reported and believed that Boston merchants lent themselves to the infamous Coolie trade, carried on for the last thirty-five years in order to supply labor for the Peruvians, Cubans, etc. Of this however we have nothing to say—to the honor of our Government be it stated that, by acts of Congress in 1862, was totally prohibited, under heavy penalties, the importation of Coolies (Chinese term for laborers), under what was called the Apprenticeship System. This method, under pretext of employing the Coolie a certain number of years at good wages, after having deducted therefrom his passage fee, ended, in fact, by consigning the unhappy dupe by false representations to a bondage more cruel and more hopeless than that of the African slave, inasmuch as he was deprived of all domestic relations. Under this cruel system hundreds of Coolies mutinied at sea perished in the middle passage, and finally committed suicide rather than endure the pangs of exile and servitude.

Congress forbade all except *voluntary* immigration, and stipulated that in no case should a Coolie be allowed to enter shipboard till his passage-money was paid, besides making other provisions still farther to protect and secure the rights of the emigrant. Notwithstanding all this, abuses unquestionably creep in, and evasions of the law exist, for bad men will find a road to iniquity for the sake of gain in spite of the most stringent measures.

No immigrant lands upon our shores under so many disadvantages as the Coolie, and at first sight it would seem that these impediments would be enough to prevent his coming at all, or almost drive him to despair when once here. This, however, is by no means the case. The round, stolid face of the man, with his shaved front and ridiculous pig-tail, betrays at once the unit from an effete civilization, whose thirty centuries have culminated in four hundred millions of grown up, mechanical babies, utterly incapable of further progress. At some time or other he has anticipated all the inventions and discoveries of all other peoples, if we except the Telegraph, the Railway, and the Steamer, yet his isolation and foolish conceit have prevented him from making any very effective or progressive use of his inventions, for the lack of other people to "rub his head against" and suggest new ideas.

Those of us who saw the Chinese junk, which many years ago entered the harbor of New York, will realize the force of this observation, for never was seen a more innocent, helpless piece of mechanism designed to float upon the sea, than this pretentious craft with its clumsy paraphernalia for steering and its receptacle for the terribly hideous Joss.

The first considerable immigration of Coolies was under the auspices of the Pacific Railway Company, who imported great numbers for the purpose of completing, perhaps, the most stupendous enterprise of modern times. It is believed this Company redeemed their pledges to the Coolie—paying him for his labor, so that he could return with a full pocket to China, or religiously returning his embalmed body to the Flowery Kingdom, there to repose by the side of his dead ancestors, and in the spiritual world promote the interests of his family and friends.

Of course, in this Chinese immigration we have only the lower classes, and yet by no means an unintelligent class of men The Coolie is patient and laborious, imitative to the last degree, and cunning. His trade or profession being hereditary, he has for generations developed its highest capabilities, and can practice it well nigh by instinct, like the beaver, the ant, and the bee—hence the perfectness of his imitative powers. Question, as we naturally do, the consequences of this Pagan element among us, from what we have said it may be inferred that the Chinaman is by no means a bad sort of a man to receive in the midst of us. We, who have stood the ordeal of the African slave, with his Jumbo mysteries and Fetish worship; the Mormon, with his plurality of wives; the Perfectionist, with his Community of wives, may well endure the pig-tailed Chinaman with his joss-sticks and lanterns. More than this, he has one or more beliefs which may vie in beauty with the graceful mythology of the Greeks. His kitchen god, for whom he puts aside little dabs of rice and melon, is no other than the Hestia of the Greek, and the Penate of the Roman; and the classical Hamadryades are revived in his worship of a beautiful tree, in which he believes some good god has made his habitation, and under which he builds his hut, surrounding the tree with burning joss-sticks.

The Coolie feels it his bounden duty to return home at some time, and often finds himself pledged to a limited period. As a religious man, he desires that his bones should repose on his native soil, for he believes the old cemetery is blessed by the presence of Fung Shuy, and that his ancestors being buried there insures prosperity to all of his descendants. More than this, he believes that unless his body is able to repose there, his soul will wander for ages homeless and disconsolate, and in danger of a miserable and degrading eternity; as a moral man

Digitized by Google

is bound to return, for he has debts there which the Chinaman thinks it disreputable to evade the payment of; and his wife and children being to all intents and purposes his slaves, he has, most probably, pledged the family as security for his passage-money, and unless he faithfully comes back to redeem them, they will be sold into a hopeless bondage. Then, too, the laws of China forbid a married woman to leave the country, and he must return if he would see her again

The Coolie is literally driven out of his own country by the mismanagement of its Government. The police may arrest him for crimes he has never committed, to extort from him a bribe, or at the instance of an enemy; the tax collector may seize his coat, his rice, or the bones of his ancestors, to induce him to pay his extortionate levy; and the landlord so reduces the wages of the laborer that he is, in fact, a slave to any body who would give him rice on which to feed himself and family. His wretchedness at home has become past endurance, and he could be no worse off abroad.

It is probable that in the course of time the Chinese will outgrow many of their superstitions, and not improbable that the good Fung Shuy may migrate to some favored locality in this country, and there make hallowed some lovely burial spot where the bones of the Coolie may repose under the favor of the gods and the blessing of his ancestors. They have done this at Singapore, and the precedent may be followed here.

The Coolie makes a very neat, orderly servant. He minds his own business, and as a general rule is honest. He does not openly steal, but his cunning will find many ways to appropriate. His pride is exacting and irrascible, hence he does not tolerate fault-finding, and can not stand abuse, but is grateful for kindness, and appreciates praise.

On the whole, we incline to the pig-tail barbarians, if such they can be called; we cotton to the joss-sticks, and gongs, and little pagodas. If we do not do so, it will not matter any more than a straw would stay Niagara, for the tide is streaming in our direction, the advance corps of a few thousands to be swelled by the discontented, half-starving population from a country numbering four hundred millions.

The book before us is a lively, well written treatment of a subject which must more and more engage the attention of our citizens and our legislators. How it will all end it is not wise for us to predict, but we believe it may safely be left in the hands of Him, who ordereth human events, and over-rules all for the best good of the many.

THE PUBLISHERS' DEPARTMENT.

Contributors to this Number.

NATHAN ALLEN, M. D.,
W. T. CLARKE,
MRS. D. HARRY PRIME,
REV. CHARLES H. BRIGHAM,
MRS. E. E EVANS,
EDGAR FAWCETT,
MRS. H. C. BIRDSALL,
REV. HENRY WARD BEECHER,
E. RAY LANKESTER, B. A.,
JAMES M. HOLE, M. D.,
DR. A. L. WOOD, and
THE EDITOR.

This Number.—We call the special attention of our readers to this number of our monthly. Great pains have been taken to prepare a programme for 1871 which shall be comprehensive and valuable, and the number before the reader is, we think, but an indication of what we shall be able to do during every month in the year. The general articles are all by writers and thinkers who have something good to say. We have opened a department devoted to Hygiene, which will during the year be filled with matter of great value to our readers. There will also be a department devoted to Recipes for healthful food, which will interest all. We believe that no number of our monthly has yet gone forth with a greater variety of more interesting material than this. We send it forth to our thousands of readers with a hearty wish that it may prove a messenger of good.

Notices of the Press.—We call special attention to the notices of Mrs. Gleason's book which we have received from persons who have read it, and from the newspaper and magazine press. It is rarely that a work of this character has been so well received.

Facts for the Ladies.—My Wheeler & Wilson Machine has been in use nearly eleven years without any repairs. Five and a half years ago I set a No. 1 1-2 needle, which has not been changed since. The machine has been used by as many as seven or eight different persons during that time, and has made dresses, shirts, boys' jackets and pants, tucked and hemmed cotton cloth, linen, Nansook and Swiss muslin, without either tucker or hemmer.

Adrian, Mich. MRS. H. HART.

A Good Sewing Machine is given free for a club of 30 subscribers and $60. This premium is very popular. If there is a poor, deserving family in your neighborhood help it to get a good sewing machine by subscribing at once. Perhaps your minister's wife wants one. If so, help her to get it, by helping her to get up a club. The Empire is one of the best sewing machines in use, and we are sure that it will give you good satisfaction.

Talks to My Patients.—Read what the Press say about this valuable book:

After reading the whole of this book, we pronounce it the most admirable and excellent that we have ever seen of its class. It is written for women. The style is pleasant and readable, and it is full of wise counsels and suggestions regarding the very things in which so many people most need assistance. It is a safe book for young people to read, for any body, indeed, and this can be said of very few books devoted to such subjects. There is not a sentence in it that can be perverted, or misused, so as to do any harm. We wish the book could be read in every household in our country.—*Liberal Christian, N. Y.*

A book that contains much new and valuable information; no nonsense in it.—*San Francisco Alta California.*

Digitized by Google

Notice to Our Correspondents.—

The following hints to correspondents should be observed in writing to us:

1. ALWAYS attach name, Post Office, County, and State to your letter.
2. SEND MONEY by Check on New York, or by Postoffice Money Order. *If* this is impossible, inclose Bills and register Letter.
3. CANADA AND NEW YORK CITY SUBSCRIBERS should send 12 *cents extra*, with which to prepay postage on subscriptions to THE HERALD OF HEALTH.
4. REMEMBER, if you are entitled to a Premium, to order it when you send the Club, and inform us how it is to be sent.
5. REMEMBER THAT WE NOW GIVE the *Empire Sewing Machine* as a premium. It is guaranteed to give good satisfaction.
6. REMEMBER TO SEND in Clubs early.
7. REMEMBER TO LOOK at our Premium List and Book List, and see exactly what we give and have for sale.
8. REMEMBER that for the names and addresses of 25 persons, either invalids or friends of Temperance and Health Reform, we give Prof. Wilson's book on the Turkish Bath. It contains 72 pages.
9. STAMPS should be sent to prepay postage on letters that require an answer.
10. Those who want a good *Spirometer*, *Parlor Gymnasium*, or *Filter* for making their water clean, will find the prices in another column.
11. INVALIDS from all parts of the country are invited to write to us for our circular, and full particulars as to Treatment or Board in the Hygienic Institution. See advertisement elsewhere.
12. See List of Books elsewhere.

Books C. O. D.—Parties who order books will find it cheaper to send the money with the order, than to order C. O. D., as in this case the cost of collection will be added to the bill. This is considerable, when the money has to be returned from a distant point. Those who order C. O. D., should send one-fourth the value of the order in advance to insure prompt attention

Caution.—Our friends in writing to us will please be very particular and give Postoffice, County and State with every letter, and not depend on us to remember where they live, though they may have told us a hundred times. Those who think we can turn to our books and find their names and address without trouble, are quite mistaken.

Home Treatment.—Invalids wishing prescriptions for home treatment can have them for Five Dollars. They should send full particulars of their cases. Any person sending five new subscribers to THE HERALD OF HEALTH and Ten Dollars, will, if he does not choose other premiums, be entitled to a prescription for treatment free.

The Address Label.—By this method our subscribers can keep their own accounts as to when their terms of subscription close; for instance, if the printed slip has "De71," or "Je72" added to the name, it signifies that the subscriber's term of subscription expires with the December number of 1871, or the June number of 1872, and so on *et seq.*

Our Premiums.—We shall be careful to send out as Premiums nothing which is not all that we claim for it in value. No cheap, second-hand, or indifferent article will be used.

CLUBBING
WITH OTHER MAGAZINES.

We will send *THE HERALD OF HEALTH* and any one of the following Journals one year for the sum below mentioned. The order and money for both must be sent at the same time.

THE HERALD OF HEALTH, $2 00, and

Atlantic Monthly	$4 00	for $5 00
Harpers' Monthly	4 00	for 5 00
Harpers' Bazar	4 00	for 5 00
Harpers' Weekly	4 00	for 5 00
Phrenological Journal	3 00	for 4 00
Our Young Folks	2 00	for 3 50
New York Tribune	2 00	for 3 35
American Agriculturist	1 50	for 3 00

Cash Clubbing Rates.

1 Subscriber	$ 2 00
4 Subscribers	7 00
10 Subscribers	15 00
25 Subscribers	25 00

Single Numbers, 20 *cents.*

Address WOOD & HOLBROOK, Publishers,
15 Laight Street, New York.

How to Send Money.—In making remittances for subscriptions, always procure a draft on New York, or a *Postoffice Money Order*, if possible. Where neither of these can be procured, send the money, *but in a Registered letter.* The present registration system has been found by the postal authorities to be virtually an absolute protection against losses by mail. *All* Postmasters are obliged to register letters whenever requested to do so.

Job Printing.—We are prepared to execute in neat, substantial styles, various kinds of JOB PRINTING: such as Pamphlets, Circulars, Envelopes, Billheads, Letter-heads, Cards, Labels, Small Handbills, etc., at the same rates as in all first-class New York printing establishments. Stereotype work done to order.

☞ Our friends in the country who wish neat and accurate printing, can rely on first-class work, by sending plainly written and well-prepared manuscripts. For terms, send sample or copy of work, state quality of printing material to be used, and the number of copies wanted, inclosing stamp for reply.

Talks to My Patients.—Mrs. Gleason's book, advertised and noticed elsewhere, is meeting with a good sale. We can supply it to subscribers and agents in any quantity. A good many ladies are selling it with success. We should like to have in every town a good Lady Agent. For particulars of agency, write to the Publishers.

Wanted.—Will our readers please send us brief items of news and experience referring to Health and Physical Culture topics. Make them pointed and practical, and we will publish them for the benefit of others. Do not mix them up with business or personal matters but on separate sheets of paper and in readiness for the Printer.

Clubs of Twenty-five.—Any person who will send us at one time twenty-five new subscribers to this monthly, shall have them for Twenty-five Dollars. Remember they must be new subscribers, and all be sent at one time.

Digitized by Google

New Premium List for 1871!

NOW IS THE TIME TO BEGIN!!

OCTOBER, NOVEMBER, & DECEMBER NUMBERS FREE

TO NEW SUBSCRIBERS!

GRAND PREMIUMS.

For 300 Subscribers and $600

We will give A BRADBURY PIANO, worth $600!

For 100 Subscribers and $200

We will give ONE OF ESTEY'S FIVE-OCTAVE COTTAGE ORGANS, Black Walnut, Double Reed, Harmonic Attachment, and Manual Sub Bass, Three Stops, worth $200!

For 85 Subscribers and $170

We will send ONE OF MASON & HAMLIN'S FIVE-OCTAVE ORGANS, worth $125, with Five Stops, Viola, Diapason, Melodia, Flute, Tremulant, with two sets of Vibrators throughout, and Knee Swell.

For 50 Subscribers and $100

We will give A LADY'S ELEGANT GOLD WATCH AND CHAIN, worth $75.

For 30 Subscribers and $60

We will give A SPLENDID EMPIRE SEWING MACHINE, worth $60. This is as good as any machine in the market, and can not fail to give the best satisfaction.

For 25 Subscribers and $50

We will give A SPLENDID WILSON SEWING MACHINE, half case, worth $50. This is the same style of machine that other Companies sell for $75.

PICTURE PREMIUMS.

For 8 Subscribers and $16

We will give one of Prang's Beautiful Chromos, entitled "STRAWBERRIES AND BASKET;" size, 13x18 inches; value, $7 50.

(This is a large and very handsome picture, quite equal to the original oil painting from which it is copied, which was valued at many hundred dollars.)

For 6 Subscribers and $12

We will give Prang's Splendid Chromo, entitled "THE KIDS' PLAYGROUND;" size, 11x18 in.; value, $6.

(This is also a very handsome gem of art, and will greatly delight any family that may own it.)

For 4 Subscribers and $8

We will give one of Prang's Chromos, entitled "THE BABY; OR, GOING TO THE BATH;" size, 7x10 inches; value, $3.

For 3 Subscribers and $6

We will give one of Prang's Chromos, entitled "PIPER AND NUTCRACKER, valued at $2.

(This is a very popular picture after Landseer, a sufficient recommendation to any work of art.)

☞ If our friends wish to ornament their homes with beautiful works of art, at small expense, these offers of pictures will suit them. We guarantee the pictures will give perfect satisfaction.

BOOK PREMIUMS.

For 60 Subscribers and $120

We will give the NEW AMERICAN ENCYCLOPEDIA in 20 volumes, worth $100!

This great work is a complete library of itself, and for reference or information ought to be in the hands of every family.

For 15 Subscribers and $30

We will give ONE OF WEBSTER'S PICTORIAL UNABRIDGED DICTIONARIES, Illustrated with 3,000 Cuts, worth $12.

For 10 Subscribers and $20

We will send two of Prang's Chromos, entitled "MORNING" and "EVENING;" size of each, 12x18 inches value, $10.

The above pictures are copied from Rosa Bonheur's wonderful paintings known by these names. They are companion-pictures, and ought to go together. No description can do them justice.

For 10 Subscribers and $20

We will give A BOUND VOLUME OF THE HERALD OF HEALTH for 1867, 1868, and 1869.

3 Subscribers (1 Old, 2 New) and $6

A copy of Prof. Welch's New Book, "MORAL, INTELLECTUAL AND PHYSICAL CULTURE," worth $2 25

This is a perfect encyclopedia of Gymnastics and Physical Culture.

2 Subscribers (1 Old, 1 New) and $4

A copy of "A WINTER IN FLORIDA," worth $1 50.

Premiums to Each Person in the Club.

There are many persons who would like to send Subscribers to THE HERALD OF HEALTH without thought of personal reward, but for the good they can thus do. To such we make the following enticing offer:

For 25 Subscribers and $50,

All sent at one time, we will give to each THE HERALD OF HEALTH for one year, and a copy of either of the following new works, viz.: "Winter in Florida," value, $1 50; "Talks to my Patients," value, $1 50; or, The American Agriculturist for one year, value $1 or, if 35 cents be added to each name, The New York Weekly Tribune for one year, valued at $2. Bear in mind that the 25 names and the $50 must all come at one time.

☞ SEE PAGE 47 FOR CLUBBING.

Address WOOD & HOLBROOK,
Nos. 13 & 15 Laight Street, New York

Digitized by Google

Advertisements.

☞ ADVERTISEMENTS of an appropriate character will be inserted at the following rates: Short advertisements, 25 cents per line; thirteen lines, for three or more insertions without change, 20 per cent. discount; one-half column, $12; one column, $22; one page, $40. All advertisements must be received at this office by the 5th of the month preceding that on which they are to appear.

Are You Going to New York?

If so, and you wish to stop where you can *FEEL AT HOME*, and get *GOOD FOOD HEALTHFULLY PREPARED*, and *PLENTY OF IT*,

Go to the Hygienic Institute,

Nos. 13 *&* 15 *Laight Street.*

Horse Cars pass near the door to all parts of the city, making it a very convenient stopping place for persons visiting New York, either upon business or pleasure. Open at all hours, day and night. Board by the day or week, at reasonable rates. Rooms can be secured in advance by writing. Address

WOOD & HOLBROOK, Proprietors,

Nos. 13 & 15 Laight Street, New York.

Healds' Hygeian Home.

WILMINGTON, DELAWARE.

DRS. PUSEY and MARY H. HEALD will open their new institution for the Hygienic treatment of invalids (without medicine), JAN. 1, 1871.

Dr. M. H. Heald (formerly Dr. York) was widely known to Hygienists during several years' practice at Our Home, Dansville, N. Y. Dr. P. Heald has also had large experience in the Hygienic system of treatment.

The building, beautifully located in the suburbs of a most delightful and healthful city, near the romantic and historic Brandywine, and overlooking the Delaware River, is entirely new, and was planned expressly for a "Cure." Every apartment will be warmed by *Steam-heated Air*, and be *thoroughly ventilated*, thus giving a *pure* atmosphere, free from all gas and dust, and insuring the comfort and welfare of winter guests. The best appliances provided for Water and Sun Baths, Swedish Movements, etc. Mrs. H. will devote especial attention to lady patients, giving them the benefit of kindly sympathy as well as of experience and skill. The Hygienic diet supplied, will include the choicest fresh and canned fruits and vegetables, and varied farinaceous preparations.

Railroad communication North, South, East, and West.

☞ For Circulars, etc., address, with stamp, HEALDS' HYGEIAN HOME, Wilmington, Delaware. j-1t*

See Book Advertisements,

read them carefully, and then ask yourself if you can use your money to better advantage than to purchase, read, and become possessed of information highly important to your well being for ever.

WOOD & HOLBROOK, 15 Laight St, N. Y.

1871.

THE

National Standard.

Published every Saturday.

An Independent Reform and Literary Journal.

AARON M. POWELL, EDITOR.

WENDELL PHILLIPS, LYDIA MARIA CHILD, REV. JOHN T. SARGENT, HON. GEORGE W. JULIAN, FREDERICK DOUGLASS, MARY GREW, JULIA WARD HOWE, LOUISA M. ALCOTT, COL. T. W. HIGGINSON, and others, contributors.

Mr. Phillips's articles alone are worth many times the subscription price for the year.

THE NATIONAL STANDARD

will be radical in its treatment of public questions; independent in its political relations; will seek to eradicate the spirit of caste; to secure equal rights for women; to promote the welfare of the laborer; to extend civilization and ultimate citizenship to the Indian; to obtain justice for the oppressed everywhere; to strengthen the cause of Temperance; of Education; and to promote practical, unsectarian religion, and all that makes for peace and a true civilization.

Subscription price, per year, $3 00. To Clubs of Five, $8 50; to Clubs of Ten, $2 00. Single copies, Six Cents. A Liberal Premium List. The Standard offers superior inducements to Advertisers.

Specimen numbers sent free.

THE NATIONAL STANDARD, $3 00.

☞ Now is the Time to Subscribe. ☜

Address A. M. POWELL,
Editor of The National Standard,
Xj-3t P. O. Box 1416, New York.

Digitized by Google



A Trial Trip. 3 Months for 30 Cents.

Do you love Fruits, Flowers, Gardening, Designs of Cottages, Ornamental Trees, Shrubs, and Embellishment of Home Grounds? Take a trial trip for three months or a year with

THE HORTICULTURIST

Every one who has a Garden should take it.
Every Lady who loves Flowers should take it.
Every Lover of Rural Architecture should take it.
Every Fruit Grower should take it.

It is the oldest, ablest, and best illustrated Journal of Horticulture, Gardening, and Rural Taste in America.

☞ Send stamp for Illustrated Prospectus and Premium List of Valuable Books, Lilies, Gladiolus, etc.

Specimen Copies only Ten Cents.

HENRY T. WILLIAMS, Proprietor,
5 Beekman St., New York.

☞ *GET UP A CLUB. PRICES REDUCED.* ☜
2 Copies, $3 50. 3 Copies, $5. 5 Copies, $7 50.

PREMIUMS.

To every Trial Trip Subscriber a choice Engraving—"Gathering Fruits and Flowers."
For a club of Five Trial Trip Subscribers a Fine Japan Lily.
For a New Subscriber, or a club, a choice of a valuable Lily, Grapevine or Book. See Premium List. Xj2t

---

GREAT SUCCESS!

American Sunday school Worker

TERMS FOR 1871.

J. W. McIntyre, St. Louis,
PUBLISHER.

A Monthly, 32 pages octavo, for Parents, Teachers, and Scholars, with Sunday-school Lessons, Expositions, Illustrations, Questions, etc., for each Sabbath.

This publication is designed to develop a greater depth and spirituality in the Sunday-school work, looking beyond methods to results.

Price $1 50 per Year, in Advance.

Sixty Lesson papers free to all clubs of 10.

Lesson Papers, per 100, 75 cents; less number, one cent each Clubs of 20, without Lesson Papers, $1 25 each.

☞ Specimen copy and list of Lessons for 1871 sent on receipt of postage stamp. Xd-3t

---

CLUBS.—100 PAPERS AND MAGAZINES. Cash commission to Agents. Books, Wringers, Watches, Dictionaries, Sewing Machines, etc., as premiums. Send stamp for list. L. L. FAIRCHILD, Rolling Prairie, Wis. n 3t

GOOD HEALTH.

A Popular Monthly Journal,

HAVING ORIGINAL ARTICLES, WRITTEN BY EMINENT MEDICAL AND SCIENTIFIC MEN,

GOOD HEALTH STANDS ABOVE, AND IS INDEPENDENT OF ALL THE SECTIONALISM OF SYSTEMS AND SCHOOLS.

IS A VEHICLE OF

INSTRUCTION TO THE PEOPLE.

GIVING LESSONS OF CORRECT LIVING,

As Developed by Medical Science.

The Only Magazine of its Class.

It has received more and higher commendations from Eminent Scientific Men, and from the Press, than any other journal of its age.

Every Family should Take it.

HOW TO SUBSCRIBE FOR GOOD HEALTH.—Send $2 00 by mail, or otherwise, to Alexander Moore, Bromfield Street, Boston, Mass., and the Magazine will be sent monthly for One Year. Xj-1t

---

Empire Shuttle Sewing Machine

Patented Feb. 14, 1860, and Sept. 18, 1866.

Received the First Prize at the Great Fair of the American Institute, in New York, Oct. 26, 1867, and highest premium for the Best Manufacturing Machine at the Paris Exposition, July, 1867.

No. 1, FAMILY MACHINE.

This machine is constructed on a new principle of mechanism, possessing many rare and valuable improvements, having been examined by the most profound experts, and pronounced to be simplicity and perfection combined.

The following are the principal objections urged against Sewing Machines:

1. Excessive fatigue to the operator.
2. Liability to get out of order.
3. Expense, trouble, and loss of time in repairing.
4. Incapacity to sew every description of material.
5. Disagreeable noise while in operation.

The Empire Sewing Machine is exempt from all these objections. Address the EMPIRE SEWING MACHINE CO., 294 Bowery, N. Y.

For 35 Subscribers and $70,

to THE HERALD OF HEALTH, we will send an Empire Sewing Machine worth $60

WOOD & HOLBROOK.
f-tf 15 Laight Stroet, New York

THE PHILADELPHIA BATHING AND Boarding Establishment. Turkish, Russian, and Electrical Baths. 1109 Girard Street, R. WILSON, M. D. m-tf

---

WANTED—A SECOND-HAND MANIKIN. Address Dr J. W. DENNIS, Des Moines, Iowa. d-2t

Digitized by Google



ESTB. **Enoch Morgan's Sons'** 1869

SAPOLIO

For General Household Purposes,

Is Better & Cheaper than Soap.

COLGATE & CO.

Recommend their

"RONDELETIA" Toilet Soap.

Sold by Dealers in Perfumery and Fancy Goods and First-class Grocers.

INCORPORATED THE IN THE YEAR 1851.

BERKSHIRE

LIFE INSURANCE COMPANY

OF PITTSFIELD, MASS.

T. F. PLUNKETT, *President.* JAMES FRANCIS, *Vice-President.* BENJ. CHICKERING, *Secretary.* EDW. BOLTWOOD. *Treasurer.*

PURELY MUTUAL.—ANNUAL CASH DIVIDENDS.

The First Company in the World to issue NON-FORFEITABLE Policies.

Gentlemen with satisfactory references desirous of acting as Agents of the Company, are invited to communicate with its Officers. *Send for Circulars, and examine our Plans and Rates.*



THEA-NECTAR
IS A PURE
BLACK TEA
with the Green Tea Flavor. Warranted to suit all tastes. For sale everywhere. And for sale wholesale only by the *Great Atlantic and Pacific Tea Co.*, **8** Church St., New York. P. O. Box 5506. Send for Thea-Nectar Circular.

Agents Wanted (*Male or Female*) **for the**
"Eminent Women of the Age,"
40,000 ALREADY SOLD.
Address S. M. BETTS & CO., Hartford, Conn.

MAGIC LANTERNS.

Catalogues sent on application. W. MITCHELL McALLISTER, **728** Chestnut Street, Philadelphia.

DIABETIC FLOUR

FOR MAKING BISCUIT,
For the Diabetic and Dyspeptic.
JOHN W. SHEDDEN, Pharmacist,
363 Bowery, corner Fourth Street, New York.

GETTING UP CLUBS.

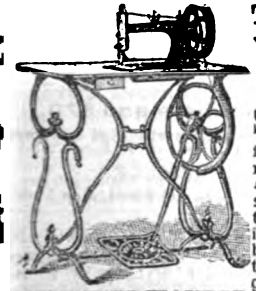
GREAT SAVING TO CONSUMERS.

Parties inquire how to get up clubs. Our answer is, Send for Price List, and a Club Form will accompany it, with full directions, making a large saving to consumers and remunerative to club-organizers.

The Great American Tea Co.
31 & 33 Vesey Street,
P. O. Box 5643. NEW YORK.

WESTERN

Subscribe Now for the Western World. A $5 00 Prize to every Subscriber. $3 00 a year. Send stamp for specimen and Prize List. Address JAS. R. ELLIOTT, Publisher, Boston, Mass.



THE IMPROVED
WILSON
SHUTTLE
SEWING MACHINE

for **simplicity, durability & beauty** *stands unrivaled!* For stitching, hemming, tucking, felling, quilting, cording, binding, braiding, gathering, gathering and sewing on gathers, *it is unexcelled!*

AGENTS WANTED in every County in the United States where we have not one already employed. For particulars address Wilson Sewing Machine Co., Cleveland, O.; Boston, Mass., or St. Louis, Mo.



"IT STILL WAVES," Rich, Rare and Racy as ever. 8 large pages. *Ledger* size. 40 columns of charming Tales, Sketches, Wit, Humor, Fun, Quacks, Humbugs and Swindlers exposed. 200 Swindlers "vesticated" in 1870. It is a paper for LIVE people. It "Cusses" for all. Established 1868. It is NOT a NEW paper. It belongs to no sect or party. It is reliable, fearless, and truthful—a paper for ALL. There is nothing like it. EVERY subscriber will receive mounted on roller and prepaid, the NEW and superb engraving, "PIONEERS OF AMERICA," over-and-a-half feet by two feet in size, and costing $1000 to engrave. NOW IS THE TIME. We guarantee satisfaction or money refunded. Only 75 cents secures this paper a whole year, and $3 engraving free gratis and prepaid. Specimens for stamp. Address, "Star Spangled Banner," Blanchard, N. H.

WOOD'S **HOUSEHOLD MAGAZINE** contains in every number one complete prize story valued at $100. Forty pages of other matter. Yearly, $1. Sold by Newsdealers at 10 cts. per copy. Splendid Premiums. $500 cash to be awarded for prize clubs. Specimen copy free. Address S. S. WOOD, Newburgh, N. Y. n tf

THE ELMIRA WATER CURE WILL

be re-opened May 1st for the reception of patients, being under the general care of Dr. S. O Gleason and Mrs. R. B. Gleason, M. D., assisted by Miss L. Z. Brooks. Address for Circular, with Stamp, S. O. GLEASON, M. D., Water Cure, Elmira, New York. my-tf

THE HYGEIAN HOME,

A first-class Water-cure, with pure air, soft water, grand scenery, and a mild climate. For terms and circular address A. SMITH, M. D., oc tf Wernersville, Berks Co., Pa.

Digitized by Google

INSTITUTE DEPARTMENT.

☞ In this Department we purpose giving, from month to month, a description of the various agencies we em ploy in the treatment of disease, the reasons why we use them, their effects in different diseases, occasional reports o ases, and various items of interest in regard to the institution.

We Never Give Poisonous Drugs!



Poisons Never Cure Disease!

THE NEW YORK HYGIENIC INSTITUTE,

Nos. 13 & 15 LAIGHT STREET, NEW YORK CITY.

A. L. WOOD, M. D., Physician.

The objects of this institution, which has been in successful operation for more than twenty years, are two-fold, viz. 1. The treatment and cure of the sick without poisoning them, by Hygienic agencies alone. 2. To furnish a pleasant, genial Home to friends of Hygiene throughout the world, whenever they visit this city.

CURE DEPARTMENT.

Thousands of invalids have been successfully treated at this institution during the past twenty years, and its fame extends wherever the English language is spoken. Its appliances for the treatment of disease without the use of poisonous drugs are the most extensive and complete of any institute in America. They comprise the celebrated

Turkish Baths, Electric Baths, Vapor Baths, Swedish Movement Cure,

MACHINE VIBRATIONS, the varied and extensive resources of the WATER CURE, LIFTING CURE, MAGNETISM, Healthful Food, a Pleasant Home, etc., etc. Particular attention is given to the treatment of all forms of CHRONIC DISEASE, especially of Rheumatism, Gout, Dyspepsia, Constipation, Torpidity of the Liver, Weak Lungs and Incipient Consumption, Paralysis, Poor Circulation, General Debility, Curvature of the Spine, Scrofula, Diseases of the Skin, Uterine Weaknesses and Displacements, Spermatorrhea, etc. Any one wishing further information should ☞ *SEND FOR A CIRCULAR,* ☜ containing further particulars, terms, etc., which will be sent free by return mail.

BOARDING DEPARTMENT.

We are open at all hours of the day and night for the reception of boarders and patients. Our location is convenient of access *from* the Railroad depots and Steamboat landings, and *to* the business part of the city. Street cars pass near the doors to all parts of the city, making it a very convenient stopping place for persons visiting the city upon business or pleasure. Our table is supplied with the BEST KINDS OF FOOD, HEALTHFULLY PREPARED, AND PLENTY OF IT. In these respects it is unequaled. Come and see, and learn how to live healthfully at home. Terms reasonable.

Drs. WOOD & HOLBROOK, Proprietors.

Digitized by Google

THE FAMILY CIRCLE,

FOR 1871,

WILL BE PUBLISHED SEMI-MONTHLY AT $1 00 PER ANNUM, AND MONTHLY AT 50 CENTS PER ANNUM.

EVERY SUBSCRIBER TO THE SEMI-MONTHLY,

WILL RECEIVE A BEAUTIFUL STEEL ENGRAVING,

THE BABE OF BETHLEHEM,

Which Retails at $2 00.

THE PAPER.

The Family Circle is an Eight-page, Illustrated Paper, which will be a welcome guest in every family.

It is filled with the choicest reading, both original and selected, which will interest both old and young.

Its design is to furnish not only INTERESTING but USEFUL and PROFITABLE reading for all classes.

Its pages will be enriched by contributions from the pens of the best writers.

The publication of a series of Illustrated Articles upon Natural History; a description of some of the most remarkable cities in the world; and various games for the amusement of the Home Circle, will be prominent features of the issues of 1871.

While not strictly a religious paper, its whole tone will be in favor of every thing that is pure and good. Its influence in any home will be beneficial and elevating.

Pastors, as well as Superintendents and Teachers of Sabbath and Day Schools, will find it an efficient ally in their work, and can confidently recommend it.

While the price of most of the illustrated papers place them beyond the reach of the mass of the people, the price of this is so low that every family may have it.

THE ENGRAVING.

This is a fine Steel Engraving, very beautifully representing the Nativity of Our Savior.

It represents the Babe in the Manger; Mary beside him, with her face beaming with sweetness and beauty; Joseph standing by; and the shepherds bowing in humble adoration before the Holy Child.

The lamb which they have brought for sacrifice, the cattle in their stalls; the shepherds' dog waiting at the door; the stars shining in through the casement; the rustic appearance of the stable—in fact, the whole grouping of the picture is admirably portrayed.

This engraving is executed in the highest style of line and stipple by Messrs. Kellogg & Wilcox of Boston. The size for framing is 10x22 inches.

It is sold exclusively by Agents. Price $2 00 per copy.

It is not strange that people wonder that with so valuable a paper we can afford to give such a beautiful and excellent Engraving to EVERY SUBSCRIBER. We reply that we could not do it if we did not use so large a quantity of them, and also that we expect by this means to secure the largest subscription list ever obtained for any paper of its class.

SUBSCRIBE NOW!

And send Ten Cents extra for postage on Engraving. The Paper, or the Engraving, or both, will make a nice **Holiday Present.** We want one person in every village to get subscribers for us, for which we give SPLENDID PREMIUMS. Among which are Webster's Dictionaries, Chromos, Gold Watches, Sewing Machines, S. S. Libraries, Silver Ware, Games, etc., etc. If your town has not been canvassed, send at once for a specimen copy, and go to work.

Agents Wanted Everywhere!

To whom liberal CASH COMMISSIONS will be paid, if these are preferred to our Premiums. Clergymen, Teachers, Students, Ladies, Book Agents, and Children can make money. You can get a beautiful Present for any of your friends by a few hours' work. The Chromo Morning Prayer, price $6 00, is given for 12 subscribers, and will be a beautiful present for your Pastor, Teacher, or Sabbath School Superintendent.

NOW IS THE TIME TO WORK. Say where you saw this. Send for Clubbing List.

C. H. CUSHING, PUBLISHER, 85 WASHINGTON STREET, CHICAGO.

BOOK AGENTS WANTED.

TO CANVASS FOR THE LIFE OF

GEORGE PEABODY, the Great Philanthropist.

One Agent sold sixteen in one day. Exclusive territory and large commissions. Apply at once stating experience and First, Second, and Third Choice of territory. (Xj-1t) C. H. CUSHING, 85 Washington St., Chicago.

Digitized by Google

A NEW ILLUSTRATED MASONIC MONTHLY.

RURAL GAZETTE

AND

MIRROR OF LIGHT.

Published by J. B. BREWER, Stamford, Conn.,

ON THE FIRST OF EACH MONTH.

It is the only Masonic Journal published in the State, and should be read by every Mason in the land. In it will be found the Choicest Literature, Scientific, Agricultural, and Masonic matter, together with other choice selections which are useful and interesting to the Merchant, the Mechanic, the Farmer, the Gardener, and Household. The GAZETTE is held in esteem high above all others as a fireside companion, to edify and amuse those gathered around, and no family can afford to be without it,

For the Small Sum of One Dollar a Year.

Its circulation is already Thirteen Thousand, but we wish to place it far beyond all others in regard to the number we shall issue each month. To do this we offer better Inducements to Agents and give Better Premiums than any other journal in the land.

Active Agents Wanted Everywhere,

and inducements offered to make it pay those who will work.

The RURAL GAZETTE will be found the best Advertising Medium in the United States. Being in pamphlet form, it will be bound in volumes. Advertisements inserted in it will be read and re-read, and must be considered permanent.

Terms of Subscription, One Dollar per year. Sample copy free. Address

J. B. BREWER, Stamford, Conn.

READ WHAT IS SAID BY THE PRESS.

The Rural Gazette and Mirror of Light, published by J. B. Brewer, Stamford, Conn., has come to hand. It is a fine journal of eighteen or more quarto pages. In it will be found the finest and most choice Literature, Social and Useful Reading. It has an able corps of contributors and translators. It is filled with Foreign Translations, Biographies, Scientific, Agricultural, and Masonic matter, together with Poetry, and other choice selections, that no family can afford to be without it, for the small sum of one dollar a year, in advance. We recommend The Rural Gazette to the public as one high in tone and standing, it offers to those who will secure subscribers better remuneration (all first class) than any other journal in the land. The Gazette is rapidly growing in favor, being the best enterprise of the kind ever attempted east of New York City, and we hope our readers will give it a hearty support. Terms One Dollar a year. Sample copy free. Address J. B. Brewer, Stamford, Conn.—*Moore's Rural New Yorker, Evening Post, N. Y., N. Y. Daily Globe, Sunday Mercury, Pomeroy's Democrat, Vermillionville (La.) Advertiser, South Port (Ct.) Chronicle, Norwalk (Ct.) Gazette, Westport (Ct.) Advertiser, Stamford (Ct.) Advocate, Bridgeport (Ct.) Farmer, Suffolk (L. I.) Times.*

Xj-1t

Digitized by Google

THE LITTLE CHIEF.

The Best Illustrated Magazine for Boys and Girls

WHAT IS THE LITTLE CHIEF?

AN ORIGINAL MONTHLY MAGAZINE of sixteen double-column pages, containing Stories, Biographies, Travels, Poems, Dialogues, Declamations, Studies in History, Geography, Botany, and Physiology; Rebuses, Charades, Puzzles, etc.

Every thing THE LITTLE CHIEF offers its readers shall be of sterling good sense, healthy in tone, and full of interest.

THE CHIEF aspires to be a leader of young people in the cultivation of their morals, manners, and minds.

THE CHIEF aims to combine instruction and amusement, pleasure and profit—to develop, encourage, elevate, and strengthen all good and generous impulses.

THE CHIEF will constantly, and regardless of expense, call to his aid such writers as will present the best thoughts in the most attractive and entertaining style.

THE CHIEF hopes to brighten many faces, cheer many hearts, gladden many homes, purify many thoughts, strengthen many hands—in short, make his readers everywhere better and braver for the fight of Right against Wrong.

THE CHOICEST WRITERS!

FOR NOTHING!

FOUR MONTHS.

Send at Once for Our List of Splendid Premiums!

To all New Subscribers sending us 75 cents before December 1, we will send THE CHIEF SIXTEEN MONTHS, beginning September, 1870.

Xj-2t Address SHORTRIDGE & BUTTON, No. 10 Martindale's Block, Indianapolis, Ind.

TOBACCO AND ITS EFFECTS,

Being

A PRIZE ESSAY,

Showing that the use of Tobacco is a physical, mental, moral, and social evil. By Henry Gibbons, M. D., Editor Pacific Medical and Surgical Journal.

CONTENTS.

I.....Tobacco. Its Nature and Properties.
II.....Effects on the Body.
III.....Effects on the Mind.
IV.....Moral Effects.
V.....Social Effects.
VI.....What Good does it Do?
VII.....Conclusion.

☞ Price, by mail, 20 cents. Address

WOOD & HOLBROOK,

jy-tf No. 15 Laight Street, New York.

BOOT AND SHOE STORE, No. 415

Canal Street. Ladies', Gentlemen's, Boys', Misses' and Children's Boots, Shoes and Rubbers, in all their varieties, always on hand. Work made to order, and Repairing done on the shortest notice and reasonable terms.

DAVID WALKER,

n-1y No. 415 Canal, corner Sullivan Street.

COLBY WRINGERS! Best and Cheapest! Try it! Children's Carriages, Sleds, Sleighs, and Velocipedes. COLBY BROTHERS & CO., 506 Broadway, N.Y. jy9t



A CHICAGO WEEKLY OF CHOICE, STIRRING, AND ELEVATING LITERATURE for old and young. A friend to all true religion and reform. Not sectarian in religion or politics. A paper for the people. Should be in every family in the land. Contains sermons of London's great preacher, C. H. Spurgeon. Contains latest news and market reports up to time of going to press. One of the cheapest and liveliest papers published. Only One Dollar a year; Six Months, 50 cts.; Three Months, 25 cts. Publisher of Game of "SOCIETY, OR THE SOCIAL CONFLICT BETWEEN GOOD AND EVIL." Address

Xn-6t E. C. EGGLESTON, Editor Life Boat.

HYGIENIC.

Dr. Jenkins' Institution, Binghamton, is now open for patients and a few boarders. The best facilities are afforded for the treatment of all forms of Chronic Diseases Special treatment given to women by Mrs. Jenkins. Address B. S. JENKINS, M. D., or MRS. L. A. JENKINS, M. D., Binghamton, New York. jy-tf

CAUTION.

All persons are hereby cautioned against infringing my Letters Patent for Improvements in Sewing Machines, extended for seven years by Act of Congress, dated July 14, 1870. All infringers will be prosecuted according to law. JOHN BACHELDER. n-5t

A MODEL HOUSE! Convenience, beauty, and economy combined! Descriptive circulars, free to all.
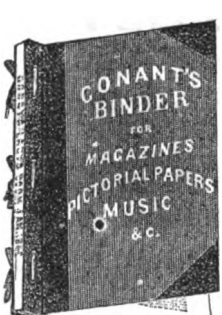
A HEALTHY HOUSE! Eight page description, with price list of plans, views, etc., for 25 cents.

A RADICAL REFORM in House Architecture! Address GEO. J. COLBY, Architect, Waterbury, Vt. jy-9t

Digitized by Google

Conant's Binder,

OR BOOK COVERS FOR PERIODICALS.



Adapted to the *Atlantic, Harpers', Putnam's,* and THE HERALD OF HEALTH, 50 cts.

MUSIC SIZE.—Adapted to the various Publishers' *Sheet Music*.....$1 00

A cheap and durable method of Binding Magazines, Papers and Music. Extremely simple. New numbers can be added as received.

We can recommend it as being just the thing for preserving Magazines perfect and clean.—*Gardener's Monthly.*

This is a useful invention, by which a Periodical is inserted in a moment between two durable covers. Various sizes are made. A good thing.—*New York Tribune.*

Conant's Binder is one of the best and cheapest contrivances for keeping Periodicals in good condition that we have ever seen, and it meets a want that has long been felt in every reading family. It is strong and durable, and is designed either for a Temporary or Permanent Binder."—*Dedham Gazette.*

WOOD & HOLBROOK,
oc-tf 15 Laight Street, New York.

Another New Work!

THE IDENTIFICATION

OF THE

ARTISAN AND ARTIST,

THE

Proper Object of American Education.

Illustrated by

A Lecture of Cardinal Wiseman,

On the Relation of the Arts of Design with the Arts of Production. Addressed to American Workingmen and Educators, with an Essay on Froebel's Reform of Primary Education,

BY ELIZABETH P. PEABODY.

This is a very instructive and valuable pamphlet. Price by mail, 25 cents.

WOOD & HOLBROOK, Publishers,
15 Laight Street, New York.

"Bradbury Piano."

☞ From personal acquaintance with this firm we can ndorse them as worthy of the fullest confidence of the Christian public. We are using the Bradbury Pianos in our families, and they give entire satisfaction.

Persons at a distance need feel no hesitation in sending or their illustrated price list, and ordering from it.

MRS. U. S GRANT, Washington, D. C.
S. P. CHASE, Chief-Justice, Washington, D. C.
D. D. PORTER, Vice-Admiral, U. S. Navy.
M SIMPSON, Bishop M.E. Church, Philadelphia.
S. HAWK, St. Nicholas Hotel, New York.
THEODORE TILTON, editor of The Independent.

The best manufactured; warranted for six years Pianos to let, and rent applied if purchased; monhly installments received for the same. Old pianos taken in exchange. Second-hand pianos at great bargains, from $50 to $200. Send for illustrated Price List.

F G. SMITH & CO.,
ate Sup't for and successor to Wm. B. Bradbury,
m-ly 427 Broome Street, New York.

List of Articles for Sale by

WOOD & HOLBROOK, No. 15 Laight Street, New York.

BACON'S HOME GYMNASIUM, with book of explanation and 100 cuts, $10.

——Trapeze Adjustment, with 32 illustrations, $3 50.

——Swing Adjustment, for children, $1 50.

Each part sold separately. The whole, $15.

This is the most valuable piece of Gymnastic apparatus for home use ever invented. Any one can use it. For weak chests, backs, and sides its use is the best remedy known. A half hour's use of it daily would prevent and cure many cases of dyspepsia and consumption.

SYRINGES.—The best styles in market. Usual style, by mail, $3. For children, with Eye and Ear Douche for sores, etc., $2. The Spray Syringe, $3. The Trade supplied.

LADIES' SUSPENDERS, to support the clothing over the shoulders, instead of on the hips, the latter mode causing many serious weaknesses. By mail, $2.

BOUND VOLUMES.—We still have a few Bound Volumes for 1863, 1864, 1867, 1868 and 1869 for sale, postpaid, by mail, for $3 Soon it will be impossible to obtain them.

HERALD OF HEALTH COVERS—so that every one can bind their numbers and preserve them neatly. 50 cents.

BREAD PANS—for making light, aerated Bread without soda, saleratus, yeast, or other poisonous compounds. Only by Express, $1 25.

HAND MILLS—for cracking Wheat, making Rusk, Hominy, etc. By Express, $3.

BEST GRAHAM CRACKERS—per barrel, $10 Half barrel -38 lbs., $6.

ELECTRIC MACHINES—Kidder's, best Manufactured, $20 to $22.

FILTERS.—Kedzie's, Family Size, $10 50.

Hygienic Home Water Cure,

637 California Street,
SAN FRANCISCO, Cal.

This is by far the most extensive and complete Health Institute on the Pacific Coast, based strictly on the Hygienic principles of treatment.

Dr. Smith has built and arranged the Home with special reference to its supplying the place in San Francisco that the Laight Street House and Hygienic Institute furnishes to the friends of Health Reform in New York city. The Medical Department is ample for the cure of all who may desire hospitalities, and the Boarding Department is well arranged for the accommodation of the friends of Hygiene throughout the coast. All are cordially invited to visit our healthful Home.

BARLOW J. SMITH, M. D.,
Consulting Physician.
R. S. MACBETH, M. D.,
aug-tf Attending Physician.

D H. PRIME, *Printer, at the Hygienic Institute, N. Y.*

Digitized by Google

MORAL,

Intellectual, and Physical Culture;

OR, THE PHILOSOPHY OF TRUE LIVING.

BY PROF. F. G. WELCH, Superintendent of Physical Culture in Yale College.

Letter from Dr. Dio Lewis, Boston, Mass.

Messrs. WOOD & HOLBROOK: Gentlemen—This book, full of Prof. Welch's singular purity and earnestness, i not only an admirable guide in Physical Culture, but most fruitful of suggestion in the mental and morel spheres.

Prof. Welch is playing an important part in America's attempt to give place and dignity to physical education. He deserves well of his countrymen, and has already secured recognition as an active force in the great revolution now in progress.

I watch his labors with the liveliest interest, and shall continue to rejoice that we have in the van a leader so wise, tast, and enthusiastic. Yours truly, DIO LEWIS.

From the State Temperance Journal of Commerce.

In these days of so much trashy literature, it is refreshing to see a book that teaches something of practical importance The one before us promises to be of much usefulness, as it abounds in matter that will put the reader to thinking concerning those things which are of the utmost importance to all. It treats, first: Of all that pertains to the subject of Physical Culture, Secondly: All that is necessary to know concerning the HOUSE WE LIVE IN. Thirdly, The Culture of the Mental and Moral. It contains beside, the complete Dio Lewis System of Musical or Parlor Gymnastics, with many suggestions, additions and improvements. Here are four volumes in one. Its subjects, too little heeded, too long neglected, are of vital importance, and needful to all. It contains many valuable hints of health, the means of guarding against sickness, the proper articles of food, all about our physical structure, and the care of the body; in a word, "True Living." It is noble in its purpose and counsel. None can read it without becoming higher, nobler and better. It is therefore worthy a place in every family. It occupies a new field, and will have an extensive circulation. The College Courant says of it, "There is sufficient useful and acceptable information in Parts III and IV to stock a new department in any newspaper or magazine, for months."

It has received the highest encomiums from the Press generally throughout the country, and many letters commendatory from several presidents and professors of colleges and many leading educational men.

☞ The book contains about 450 pages, is handsomely bound in cloth, and just such a book as should be in the hands of every man and woman in the land. PRICE $2; when sent by mail $2 25.

☞ *Copies sent to any address by mail on receipt of the price. Address*

WOOD & HOLBROOK,
Nos. 13 & 15 Laight Street, New York.

Spirometer for Strengthening THE Lungs.



☞ A FIRST-CLASS SPIROMETER, with which to enlarge and strengthen the lungs, we are now able to supply the public. It is so arranged that the person using it can measure the capacity of the lungs for air in cubic inches with each test, thus showing their strength and the amount of increase. The value of the careful daily use of such an instrument for those who have Weak Lungs or Incipient Consumption is very great, The inventor of this instrument cured himself of Consumption by its use as have many others, and we have no hesitation in saying that, if rightly used,

IT WILL DO MORE

TO PREVENT

AND CURE

THIS DISEASE

Than all the Medicines of the World.

Every Physician, Student, Sedentary Person, Professional Man, and Family should have one. They are ligh and portable, and any body can use them.

Sent only by Express. Price, $10. For sale by

WOOD & HOLBROOK,
Nos. 13 & 15 Laight Street, New York.

Digitized by Google

ATTENTION! 160 ACRES OF OCEAN-COVERED LAND, NEW JERSEY. 44 miles from New York, 2 miles from Atlantic City. Price per acre, $25 and upward. For Circulars and Maps, address ROBERT CAMPBELL, No. 138 Broadway, New York. Sold only to actual settlers, on easy terms. Price per acre, $25 and upward. For Circulars and Maps, address D. W. BRIGHAM, Agent, Bricksburg, N. J. Climate, mild and proverbially healthy. Water, soft and pure. No fever and ague. Soil enough for beauty and utility.

A VALUABLE HOME BOOK FOR WOMEN.

TALKS TO MY PATIENTS;

HINTS ON GETTING WELL AND KEEPING WELL.

BY MRS. R. B. GLEASON, M. D.

This highly important work, the first of its character, we have every reason to believe, ever written by an American woman, we have no hesitancy in claiming as the best, most complete and

Practical Handbook for the Maid, Wife, and Mother

EVER PUBLISHED.

It contains about 230 pages, handsomely bound in cloth. Price, by mail, postpaid, $1 50

The following is the

TABLE OF CONTENTS:

GROWING GIRLS.—The Development of Womanhood, Overwork and Invalidism; Good Blood Necessary for Good Work; Precocity Should be Held in Check; Lost Mental Power; Lost Physical Power; The Moral Force; Gymnastics for Overworked Students; Piano-Playing; The Season of Changes; A Note of Warning to Mothers; Religious Nature.

MENSTRUATION.—Commencement and Duration of the Menses; Premature Development; Girls at Puberty; Dangers of Ignorance of the Menses; Over-Exertion Causes Immaturity; Treatment; Causes of Derangement.

AMENORRHEA.—Its Peculiarities and its Remedies; Exercise.

MENORRHAGIA.—Its Character; Symptoms; Causes; Treatment.

DYSMENORRHEA.—Causes and Cure; Permanent Dysmenorrhea; Treatment; A Caution.

PROLAPSUS UTERI.—Its Peculiarities; Imaginary Prolapsus; Supporters, etc.; Causes; Treatment.

LEUCORRHEA.—Its Character; Location of the Disease; Causes; Means of Cure.

PREGNANCY.—Indications of; Stomach Troubles; "Longings;" Remedies for Stomach Troubles; Palliative Treatment during the Early Months; Exercise; Nervous Susceptibility; Inheritance; Discomforts of Advanced Pregnancy; Care of the Breasts before Confinement.

APPROACHING CONFINEMENT.—Premonitory Symptoms; Preparation.

DELIVERY.—General Remarks; Attention to the Infant; Removal of the After-Birth; Uterine Hemorrhage.

AFTER DELIVERY.—After-Pains; Diet.

CARE OF THE BREASTS.—Abscess; Care of the Nipples.

AFTER CONFINEMENT.—Remarks; Hemorrhoids; Local Inflammation; Tonic Treatment; How Long the Patient must Lie in Bed; Importance of Quiet after Confinement.

BATHING OF BABIES.—General Directions.

DRESS OF INFANTS.—Remarks; Tight Dressing; Our Fashion.

NURSING.—Regularity as to Time of Nursing; Caution to Nursing Mothers.

WEANING.—General Directions.

FEEDING OF INFANTS.—Remarks; Wet-Nurses; Foundling Hospitals; Kinds of Food.

INFANTINE DISEASES.—Water Treatment; Other Treatment.

DISEASES OF CHILDREN.—Teething; Affections of the Throat and Chest; Eruptive Fever; Diseases of the Skin.

CHILDREN'S DRESS.—General Directions.

CONFIDENTIAL TO MOTHERS.—Remarks; How to Teach the Young.

INTENTIONAL ABORTION.—General Remarks.

ACCIDENTAL ABORTION.—Preventives; Care during an Abortion; Relative Dangers of the Two Classes.

STERILITY.—Habit Local Causes; General Condition.

NERVOUS DERANGEMENTS.—Causes; Peculiarities; Help Imparted by Another; Hysteria; Mode of Life.

SLEEP.—Sleep Physiologically Considered; Influence of Habit; Influence of Sleep on the Senses; Dreams; Sleep Affected by Occupation; Mothers Worn with Night Care; Growing Children; Phases of Sleep; Lack of Sleep a Cause of Mental Derangement; Effects of Night Work; Failure of Health from Insufficient Sleep; Hints to the Sleepless.

INDIGESTION.—What Shall We Eat? Causes of Dyspepsia; Treatment.

CONSTIPATION.—Results of Continued Constipation.

MENOPAUSE, OR CHANGE OF LIFE.—Growing Old Gracefully; Precaution; Varied Phases of Cessation; Treatment during Menopause; Subsequent Discomforts; Palliative Treatment; Advancing Years.

It is a book written by a woman for women, and hence from a woman's standpoint. Mrs. Gleason's wide experience amply qualifies her for the work. It is pure and chaste in diction, and may safely be placed in the hands any one who needs the thoughts it contains. The publishers have brought it out in fine style, on good paper and handsome binding.

LADY AGENTS WANTED.

☞ Lady Agents of good moral character can sell hundreds of copies of this work. For further particulars address

WOOD & HOLBROOK, Publishers,

13 & 15 LAIGHT STREET, NEW YORK.

Digitized by Google

2 GAL 139

OLD SERIES—VOL. 51. NEW SERIES—VOL. 17.

THE HERALD OF HEALTH

Express Send notice

AND JOURNAL OF PHYSICAL CULTURE.

MEDICAL LIBRARY ASSOCIATION

A Higher Type of Manhood—Physical, Intellectual, and Moral.

CONTENTS FOR FEBRUARY, 1871.

GENERAL ARTICLES:	Page
Alcoholic Stimulants as Affecting Mentality—*Nelson Sizer*	49
Habits of Study—*Rev. Charles H. Brigham*	52
Crumbs from the British Scientific Association—*Dr. Lydia F. Fowler*	57
The Physiology of Man—*M. L. Edgeworth*, M. D.	62
Theories Put in Practice, or Diary of a Physician's Wife—*Mrs. H. C. Birdsall*	65
The Various Kinds of Longevity—*E. Ray Lankester*, B. A.	69
The Wooing (A Poem)—*Houghton*	72
Hints about Thought—*F. B. Perkins*	74
Studies in Hygiene	76
Recipes for Wholesome Cooking—Pies, Pie-crust, etc	80
EDITORIAL DEPARTMENT:	
The Best Governed Place in the World	81
A Meritorious Article—Miss Garrett—Monopoly by Male Medical Students	82
Hygienic Houses in New York City—A Veteran in the Cause	83
Diet for Children—Educated Nurses—A New York Lady-Surgeon in Paris	84
Amount of Water Needed for Daily Use—What is, and What Causes Consumption—Healthiest Town	85
HOW TO TREAT THE SICK:	
How to Get the Most Good out of the New Hygienic Treatment	86
Painter's Colic—Headache—Bee-stings	88
FOOD FOR MIRTH AND THOUGHT	89
ANSWERS TO CORRESPONDENTS:	
Weak Lungs—Position during Sleep—Horseback Riding—Cold Feet, etc.	91
Tomatoes as Food—Impure Blood—Drugs and Fever—The Forehead, etc.	92

NEW YORK:
WOOD & HOLBROOK, PUBLISHERS, 13 & 15 LAIGHT ST.
GENERAL AGENTS—AMERICAN NEWS CO. . . NEW YORK NEWS CO.
$2 per Annum. Single Copy, 20 Cents.

Digitized by Google

CATALOGUE OF BOOKS

PUBLISHED AND FOR SALE BY

WOOD & HOLBROOK, 15 Laight St., NEW YORK.

The Tree of Life; or, Human Degeneracy.—Its Nature and Remedy. By Isaac Jennings, M. D.—The author of this book was for thirty years an Allopathic physician, but becoming convinced that medicines did more harm than good, he substituted placebos of bread pills and colored water in his practice, and the record of his cases show that the latter treatment was eminently successful in removing disease. It contains the following table of contents: Man's Spiritual Degeneracy; Physical Depravity; Physiological and Psychological Reform; Remedy for Man's Spiritual Degeneracy; Man's Physical Degeneracy; Constitution of Human Physical Life; Vital Economy, or Organic Laws of Life; Source and Mode of Transmission of the Principle of Human Physical Life; Predisposition to Disease; Hereditary Diseases Mode of Renovation of Impaired and Feeble Vital Machinery; Analysis of a Few of the Most Prominent Symptoms of Disease; Law of Contagion and General Causation; Medical Delusion; Remedy for Man's Physical Degeneracy; General Directions Resumed; Specific Directions—Croup—Dysentery—Cholera; Final and Effectual Remedy for Man's Physical Degeneracy. Price, by mail, $1 50.

Sexual Physiology.—This work contains the latest and most important Discoveries in the Anatomy and Physiology of the Sexes; Explains the origin of Human Life; how and when Menstruation, Impregnation and Conception occur; giving the laws by which the number and sex of offspring are controlled, and valuable information in regard to the begetting and rearing of beautiful and healthy children. It is high-toned, and should be read by every family. With 80 fine Engravings. *Agents wanted.* Send stamp for Circular. Price, by mail, $2.

Hydropathic Encyclopedia.—Illustrated. A Complete System of Hydropathy and Hygiene, embracing Anatomy; Physiology of the Human Body; Hygienic Agencies, and the Preservation of Health; Dietetics and Cookery; Theory and Practice of Treatment; Special Pathology and Hydro-Therapeutics, including the Nature, Causes, Symptoms, and Treatment of all known Diseases, Application to Surgical Diseases and to Hydropathy, to Midwifery, and the Nursery. With 300 Engravings, and nearly 1000 Pages, including a Glossary, Table of Contents, and Index complete. Price $4 50

Physical Perfection.—Containing Chapter on Structure of the Human Body; the Perfect Man and Woman; the Temperaments; Laws of Human Configuration; Embryology; Childhood; Effects of Mental Culture; Moral and Emotional Influences; Social Conditions and Occupations; Effects of Climate and Locality; Direct Physical Culture; Practical Hygiene; Womanhood; the Secret of Longevity; the Arts of Beauty; External Indications of Figure, etc., etc. Beautifully illustrated with 100 Engravings, and handsomely bound Price, by mail, $1 50.

Rathe's Manual of Gymnastics.—Illustrated. For Instruction in Classes and Private Use. Dio Lewis's System Explained. By W. L. Rathe. Price 40 cents

The True Temperance Platform; or an Exposition of the Fallacy of Alcoholic Medication. Being the substance of Addresses delivered in the Queen's Concert Rooms, London; to which is added a Discussion on the Modus Operandi of Alcoholic Medication. This excellent Temperance document should be read by every one who would understand the true arguments against the use of alcohol. Price, by mail, 50 cents.

Diptheria; Its Nature, History, Causes, Prevention, and Treatment on Hygienic principles, etc. It contains chapters on the Nosology and Technology of Diptheria, Description and Pathology of Diptheria, the False Membrane, History and Infectiousness of Diptheria, its Causes and Mortality, Complications and Sequels, Morbid Anatomy of Diptheria, the Drug and the Hygienic Treatments, Stimulation, etc. Price, by mail, $1 25.

The New Hygienic Cook Book. By Mrs. M. M. Jones.—This work contains several hundred recipes for cooking the most palatable and wholesome food without the use of deleterious compounds. Also, directions for Washing, Ironing, removing Stains, Canning Fruit, etc. Price 30 cents.

Water Cure for the Million.—The processes of the Water Cure Explained, Popular Errors Exposed, containing Rules for Bathing, Dieting, Exercising, Recipes for Cooking, directions for Home Treatment, and cases to illustrate, etc. Price, by mail, 30 cents.

The Turkish Bath; Its History and Philosophy. By Erasmus Wilson. With Notes and an Appendix by M. L. Holbrook, M. D.—This is the only book on the Turkish Bath published in this country. Illustrated. Price 25 cents.

New Medical Charts, so arranged as to present to the eye at a glance the Fundamental Problems of all the Medical Systems and the Distinctive Principles in the Philosophy and Practice of the Hygienic System. Price $3. Sent only by Express.

Diseases of the Throat and Lungs. Giving their Cause, means of Prevention, and methods of Cure. Price, 25 cents.

The Cause of Exhausted Vitality; or, Abuse of the Sexual Function. Price, in paper, 75 cents; in muslin, $1.

Woman's Dress; with numerous Engravings showing how Woman's Clothing can be made beautiful, healthful, and comfortable. Price 30 cents.

Children; Their Management in Health and in Disease. By Dr. Joel Shew. Price $1 75.

How to Bathe.—This is a concise family guide for the use of all kinds of baths. Price 40 cents.

The Movement Cure; Its Principles and Practice. By Geo. H. Taylor, M. D. Price $3.

Is It I?—A Book for Every Man, by Dr. Storer. Price, by mail, $1.

Why Not?—A Book for Every Woman, by Dr. Storer. Price, by mail, $1.

Digitized by Google

THE HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE.

VOL. 17, No. 2.] NEW YORK, FEBRUARY, 1871. [NEW SERI

PUBLISHED MONTHLY BY WOOD & HOLBROOK, 13 & 15 LAIGHT STREET.

A NEW DISCUSSION OF TEMPERANCE PROBLEMS;

COMPRISED IN A SERIES OF TWELVE ESSAYS CONTRIBUTED BY OUR BEST THINKERS AND WRITERS.

No. IV.—ALCOHOLIC STIMULANTS AS AFFECTING MENTALITY.

BY NELSON SIZER.

EVERY body knows that alcoholic stimulants affect the brain to a greater or less degree; and few have failed to notice that their effects differ widely with different individuals. The general effect of all stimulants is to increase the circulation of the blood, accelerate the pulse, and throw the blood upon the brain in great abundance. The first result is mental excitement—an abnormal action of the mental functions.

As the brain is the instrument of all the mental forces—and as the intellect, the sentiments, the propensities, affections, and passions emanate from or are acted out through this great nerve-center, it is of the first importance that the brain be healthfully sustained by adequate and proper nutrition, and preserved from all undue excitement and stimulation.

Whenever this delicate organ, the brain, becomes over-excited by any mastering passion or sentiment, it produces a species of insanity, or warped and perverted condition of the mind. Anger, fear, jealousy, shame, or remorse, sometimes takes such a hold upon the man that for the time being he is utterly beside himself. The reader is fortunate if he has never been so angry as to lose all self-control and all care for consequences. Cautiousness or fear, also, is sometimes so wrought up as to deprive one of correct judgment of the condition of things, as well as of all power of appropriate action. These conditions of exalted and unusual action of the faculties are similar to that which occurs in the state of intoxication. The influence of alcoholic liquors varies with the temperament and peculiar mental development of the individual. One class of men have light complexion, and ardor and impulsiveness of organization. These are set on fire by alcoholic stimulants. They will do something when thus excited—they can not help it. Restless, nervous, ardent, and enthusiastic, they are full of action, and a glass or two of liquor puts them on the wing, and they will be ready for a speech or a song, a dance, a frolic, or a fight, differing in each case according to the peculiar development of the brain. Another is dark in complexion, is firm, strong, heavy in build as well as in

Digitized by Google

spirit, and to arouse him a great amount of excitement is required. In his manifestations he is severe if aroused to violence, and is headstrong, determined, and resistless in his feelings and efforts.

Another has a sensitive, fine, delicate nature, is easily acted upon, enjoys and suffers in the extreme; he lives in the realm of sentiment, and, if exasperated or unduly excited, becomes dramatic and intense in all he does.

On these three leading temperaments or classes of men the effects of stimulants, or of any other excitant, is as varied as are their constitutions. Then, again, individual men of each temperament differ in their mental developments, and each is, accordingly, differently affected. "The sad become sadder; the light-hearted, gay and boisterous; and the ill-tempered, quarrelsome and vindictive. As the poison is increased, ideas become confused, and the reasoning powers so disordered as to produce a condition approaching delirium."

The human organization may be compared with a musical instrument, and the influences brought to bear on that organization may be likened to the one who plays upon an instrument. As musical instruments are of various kinds, and players are as various as the instruments, the music produced is as unlike, as contradictory and peculiar, as are the mental manifestations of different human beings.

One man has a low, broad head. He is easily provoked to anger, restless and impatient. His Combativeness and Destructiveness being large and active, it is all he can do to carry himself without belligerency when he is sober. When stimulated, the excitement is naturally acted out through the strongest propensities, and he is ready to fight his best friend if by any means he becomes provoked; for the time being he is crazed with anger through the abnormal or intoxicated condition of those faculties of force. It is anger unregulated and superheated by intoxication, and, if not temporary insanity, it is but little removed from it.

Another has large Secretiveness, which gives policy and concealment, and, when excited, leads to suspicion and jealousy. When the man becomes heated with liquor that propensity becomes abnormal, his mind is poisoned by mortal jealousy, which is likely to rest on his best friends, and often leads him to abuse or even murder them.

Another has large Acquisitiveness, and when intoxicated thinks and talks of money and property, boasts of his wealth, or quarrels with persons between whom and himself some old business matter, which was not settled to his entire satisfaction, now breaks out afresh. Sometimes Secretiveness and Acquisitiveness lead the intoxicated man to commit burglary and robbery, which, when sober, would be thought of only to be banished from the mind. Nearly every great crime is committed by persons under the influence of strong drink. Though arson, robbery, or murder may be planned when the head is cool, or comparatively so, the climax is reached, the criminal act is perpetrated only when the brain is heated and the wicked resolution fortified by that bewildering enthusiasm which alcoholic liquors produce.

Nine-tenths of all the licentiousness which curses society is perpetrated under the inflammatory influence of ardent spirits Acting especially on the base of the brain, where the organs of the animal passions are located, alcoholic stimulants work out their baleful influence chiefly through the passions. If careful note be taken of the great crimes against *the person* which come under the cognizance of the courts, it will be found that most of the culprits committed their offences when intoxicated. It is notorious that the inmates of the dens of shame are habitual drinkers, and nine-tenths of their patrons and companions in lewdness are temporarily, if not constantly, under the influence of stimulants. The police reports of all cities indicate that rows, riots, and bloody affrays, resulting in manslaughter and murder, as well as crimes against decency, are perpetrated by persons who are intoxicated. If a rare exception occurs it is the wonder of all. We may rise higher, enter political conventions and halls of legislation, and it will be found that the dissensions, strifes, and disgraceful, if not traitorous, transactions frequently occurring grow out of the same fountain of evil—alcoholic stimulants.

Thus it will be seen that the chief crimes and disorders of society, growing out of the perverted activity of the propensities called Combativeness, Destructiveness, Alimentiveness, Acquisitiveness, Secretiveness, and Amativeness, located as they are at the base of the brain, are specially excited and maddened to abnormal action by the use of stimulants. Every propensity of man's mental nature, every feeling, the perverted action of which leads to excess and crime, is not only warped and perverted, but temporarily doubled in its activity and power, by the use of stimulants. Many thousands of men who, when sober, are self-regulated, just, amiable, and excellent as fathers, friends, and

HARVARD MEDICAL LIBRARY JUL 28 1884

Digitized by Google

citizens, become quarrelsome, dangerous, and fiendish by the maddening influence of ardent spirits.

As the organs of the animal propensities are more intimately related to the body than those of the higher mental powers, the use of stimulants tends to augment the force of those propensities, and by excess of action to drive them directly to abuse and perversion; while the reason, the memory, skill, taste, prudence, ambition, moral and religious sentiments are misdirected, clouded, and benumbed. We have known honest men, who, when under the influence of liquor, would lie and take every dishonorable method to obtain money, in order to carry out their maudlin purposes, but who, when sober, would scorn a lie or a dishonorable act. Who has not seen kind and benevolent men who, when disguised by liquor, seemed callous to every sentiment of kindness? The soundest reason, the sharpest perception, and the clearest memory become clouded by stimulants until the unhappy victim is unable to manage his affairs or reason correctly on any subject. Moreover, every social tie is severed by intemperance—not in every case, but in myriads of cases. The fair and loving wife and her prattling babe, who are the pleasure and pride of the husband and father, become the objects and victims of his hate and murder, when his brain is fired by stimulants. Many such a man has awakened from a drunken condition in a felon's cell, and been horrified when informed that he had slain his wife and child. If this state is not one of insanity it is akin to it, with the crime of intemperance added. The setting on fire of all the passions, and blunting all the higher feelings, dethrones all that is Godlike in man, and makes him more brutish than a beast.

In no instance does intoxicating drink exalt and ennoble the conscience, rectify and guide religious reverence and spiritual or philanthropic sentiments. It does not give delicacy to Ideality, or manly honor to Self-Esteem and Approbativeness. On the contrary it paralyzes the conscience, perverts Veneration to blasphemous activity, warps Ideality to extravagant caricatures of taste and art, drags wit and music and poetry to a disgusting bacchanalian level; it warps perception, it stultifies reason, undermines or perverts skill; it turns courage into brutal vengeance, love into lust, ambition into boastful strife, and pride and manliness into debasement and dishonor.

Its influence acting chiefly, in a positive way, through the animal and bodily impulses of men, enthrone the animal nature over the moral and intellectual, and temporarily reduces the civilian to a savage state.

The negative influence of alcoholic drinks on character is to blunt the refining, civilizing, and christianizing tendencies, by benumbing and perverting every moral and æsthetic faculty.

It is sometimes asserted that some men can not make a speech, or any other great and successful mental effort, until they are aroused and stimulated by strong drink. Men may become so accustomed to the use of alcoholic liquors as to require a large amount to rouse them to effort. The same is equally true of those who use opium, morphine, or arsenic. But who thinks the poisoning of a person by arsenic or morphine a proper or desirable mode of whipping the faculties into action? Who does not know that the slave of opium or of arsenic is using up his life-force, and will soon break down his abused constitution and die by poison? Does not the very common yet awful disease called delirium tremens settle the question as to the dire effects upon the mind and body of alcoholic stimulants? Is delirium tremens a more reputable or less terrible death than that produced by the poison of opium or arsenic? Who would not prefer to see a loved friend, if he must die an untimely death, glide into the dreamy elysium of the opium-eater, until consciousness is smothered in the silence of death, than to witness the mental agony of one whose brain, all on fire with alcoholic poison, sees monstrous specters which seem to the victim to bite and devour him? This is insanity intensified—a consciousness a thousand times magnified in its capacity for suffering, having all the pains of the martyr at the stake with none of the martyr's consolations. Dante's "Inferno" pictures no worse tortures than such a brain recognizes in rapid review and makes them all its own, until wearied nature releases its unhappy grasp of life, and the terrified spirit is launched upon the unseen and eternal.

THE CAKE QUESTION ON NEW YEAR'S DAY.—There is another and still more important aspect of the cake question, and that is health. Bits of rich cake, eaten instead of the regular meals throughout the day, would give some men the dyspepsia for twelve months; and when to these are added sips of all sorts of wine, they are compelled to intoxication, or a neglect of the social observances, which render the day memorable.—*Demorest.*

Digitized by Google

Habits of Study.

BY REV. CHARLES H. BRIGHAM.

"MUCH study is a weariness of the flesh," is a famous saying of the wise Preacher of Jerusalem. Lazy boys and men have often found in this a pious excuse for their neglect of learning; shall they be wiser than the Sacred Word? The tendency of our time seems to be in the direction of this maxim. We hear from physicians and from health reformers indignant protests against the quantity of study which the "high-pressure" system of education requires. The old fashion of two sessions of school in a day, with a long evening lesson at home, is giving place to the new fashion of one session, with no evening lessons. Forty years ago the schools of Boston, the Athens of America, had in all the year but three or four weeks of vacation, with three or four chance holidays, and the afternoons of Wednesday and Saturday. Christmas Day and New Year's Day and May Day were unknown as exceptions in the routine of school tasks, and the guns that announced the birthday of Washington disturbed ingenuous youth at their studies. Now the occasion of a special holiday is eagerly seized, and the stated days of school release are as frequent as the Saints' Days in a Catholic land. The universities and colleges find it expedient to shorten their terms of study, without, however, reducing their term-bills in corresponding ratio. There is a school movement for the reduction of hours analogous to the movement for shorter time among the working classes; and we may get back before the end of the century to the old custom of the District Schools at the beginning of the century, and find that three months of study in a year is enough for all the needs of mind and civilization. That too much study is bad for the body, for the muscles, the nerves, and the brain, is now an axiom of medical science and hygienic teaching. To pore over books for sixteen or twelve hours in a day is now only a form of suicide.

The favour which the German "Kindergarten" is finding everywhere is the protest of returning good sense against the confinement of little children to close schoolrooms and stiff desks and dismal rules. In tender years, at any rate, play shall come before study, and play shall be the work. The Kindergarten system may be carried too far, no doubt, and too much may be claimed for it. It certainly can not be prolonged into the schools of higher grade, or into college classes, with much advantage. The noise and confusion in the class-room of the foreign teachers can not be mistaken for judicious or instructive sport; and when the French class becomes, as it so often does, practically a Kindergarten in the prank of its members, it does not gain in Parisian accent. Study and play can not become identical until animal spirits shall be sublimated into intellect. We must have hours of study as separate from hours of play—ways of study which are other than ways of amusement. Study may be play to some, but it ought not to be the only play to any. On the other hand, no one can afford to trust in amusement alone to give him all his science; in the ball-ground to give him his instruction in physics or in curves and functions; in the theater to give him teaching in rhetoric and art. Study has its proper rules and laws as much as any other kind of toil, and these will continue in force longer than the laws which rule in physical labours. There will be no machine invented that can rescue the brain from working to make the soul wise. By study alone will knowledge come into the soul. Religion may be put on as a garment, but wisdom can not be secured in that external way. Study is the necessary instrument of all spiritual development which is to join the wisdom of the past to the experience of the present; and without study human life can not be broad or high or deep, though it may be pure and fresh and earnest.

It is not proved either by school statistics or by health statistics that there is "too much" study in the civilized nations; certainly the general intelligence of any people has not reached the point of redundance in knowledge. The fault is more in the methods and habits of study than in its quantity. Ministers are sometimes called "hard students," and are pitied because they have to spend so much time over their sermons. But not one minister in ten who breaks down prematurely is disabled because he has done too much or worked too hard, but only because he has worked in the wrong way. The amount of study does not do the mischief—it wearies and kills only because it is badly adjusted. Some will study straight on for two, four, six, or eight hours, with no re-

Digitized by Google

lief, reading incessantly, writing incessantly, hardly stopping for food. Six or eight hours a day are not excessive in quantity, but six or eight *consecutive* hours are sure self-destruction. Few constitutions can stand that strain, even if all the rest of the waking hours be spent upon the playground, and a solid bar of sleep be put between the days. It is never pleasant to hear a student say that he does all his work at a "single sitting;" that he locks himself in his room after breakfast, and stays there until his late dinner, when his work is done for the day. If the man who does that, month after month, and year after year, escapes organic malady, and keeps his mind whole to old age, it is a clear miracle, a special Providence. Such statements we find in the biographies of great men, but they are usually exaggerated and misleading. Too many consecutive hours of study are just as bad for the strong man as for the schoolboy. One will keep a brighter mind, and more capacious and retentive, too, who breaks away and walks in the garden at the end of each hour, than one who plods on without rest through the long day.

Another habit (much less common than this of studying too steadily), but still fascinating to the ambition of versatility, is the habit of studying *too much at once*. Variety in study is good, but not crowding many things into the place of one thing. Mr. Hartwell Horne, in his essay upon Bulwer, gives a brilliant sketch of that universal genius, dictating a novel to one scribe, a review notice to another, a speech in the House of Commons to another, a love-letter to another, all at the same time, and attending, moreover, to the niceties of his own toilet. Study of that kind is fatal to mental or physical soundness. The hands, no doubt, can be busy in one way, while the brain may be busy in another; and we may not dispute the word of those industrious dames who aver that they listen to lectures more faithfully while they are knitting mittens or darning stockings, or working on canvas elaborate worsted patterns. Yet we may fairly question the healthiness of a habit which shall distract the mind between two objects, and make it act in two or more processes, even if these are homogeneous. There are exceptional chess-players, who can play two or three games at the same time with separate persons, even without looking upon any of the boards. That power, nevertheless, is not a good suggestion for any kind of study. We knew a youth who carried a novel to church with him, and insisted that he heard the sermon all the better, as he read Mrs. Sherwood or Miss Edgeworth. His justification really was that the preacher had nothing to say, and that the empty word of the pulpit might fit as well on the pages of the novel as the covers which inclosed it. The attempt to study two things at a time is not healthy, as it vexes the brain, tries the attention, and leaves on the mind the effect of cross lights. One thing at a time is a proper and universal maxim of healthy study.

It is questionable, moreover, if the habit, now so common, of *taking notes* at lectures is altogether wholesome. More and more the lecture method is taking the place of the old method of instruction by text-book and recitation. The fifty or five hundred hearers have often their copy-book, in which they set down, as well as phonography or rapid writing will allow, the words which fall from the lecturer's lips. This practice may save for them some future readings; yet, after all, those who listen carefully to the lecturer may really know as much of his idea and his meaning as those who have been busy with pen and paper. Overmuch note-taking makes only a scribe and an amanuensis; and this occupation is by no means quickening to the intellect. The brain of a scrivener is apt to become dry and dull from the mechanical character of his toil, and the piles of well-filled note-books are a poor substitute for an empty brain. Other things being equal, a lecture that is listened to with ear and eye and every sense, while the hands are quiet, except as they applaud at intervals, and is followed by study upon the theme, does more good than a lecture which is transferred in fragments to a hundred note-books. It is an injury to the student, when any mechanical hindrance keeps him from taking in all the soul and life of what he hears. And every lecturer knows that there is far more pleasure and excitement in seeing the bright eyes and attentive look of an audience, than in hearing the rustle of busy pens. It is well enough to note leading points and ideas, to take references, and to record curious facts. But there is a lamentable waste of force and brain in putting upon paper the words of another, and losing in that supplementary work the magnetism of his voice and personal presence. That habit will never make a great scholar or an independent thinker.

Improper hours, too, have much to do with the injurious results which too much study is supposed to bring. Some try to save time by rising at the earliest cock-crow, and getting three or four hours before breakfast. That was the habit of the old Puritan divines, some of whom

Digitized by Google

certainly lived on, until, like the Boston schoolmaster, they allowed Time's scythe to grow rusty in waiting for them. President Quincy's best work in his study was done in the early morning. Early studies, nevertheless, are not the general rule; and the most of students prefer the boy's reply to his father about the early bird, and have no wish to insult the sun by anticipating his rising in their tasks of knowledge. The average habit rather carries study on into the night than pushes it back beyond the dawn. In spite of the demonstration that late hours are dangerous, there are not a few who find in the witching darkness the best reason for their investigation, and are not ashamed to confess that they study on into the small hours of the night. The midnight lamp burns in rooms where there is a ban upon pleasures of the appetite; and one who eats bran bread and drinks some thin decoction, will write until 2 o'clock in the morning without remorse. This is peculiarly a clerical vice of study. We need not wonder that so much of the pulpit doctrine is dark and mystical when it is elaborated at midnight, or that its teaching is so unnatural. The lawful use of the hours of the night is in sleep, one of the best helpers of the brain in any or all of its offices. To steal these hours for study is just as truly theft and spiritual destruction as to steal them for the frivolities of the ballroom, or the brutal orgies of the bar-room and gambling house. The preacher who sits up until 2 o'clock to write his sermon about the downward way of the profligate, sins as truly as if he were reeling homeward at that hour from some night debauch.

Hardly less mistaken and lamentable is the habit of studying immediately after a hearty dinner. When diet is meagre and monastic it does not matter much that the brain works along with the gastric juice; but when one lives generously, and gives his stomach a good task, he ought, for an hour or two, at least, to let the brain have quiet, and bend his whole soul to the work of digestion. A solid portion of beef and pudding must not be disturbed by any spiritual problems until it is fairly disintegrated, and its weight is dispersed. The practice of working the brain when the stomach is full is only one degree less immoral than gluttony, and is quite as dangerous. All study in this condition is difficult. A sermon written while the assimilation of turkey and oysters, and the other elements of a complete dinner, is going on in the body, can not be expected to speak spiritually or to give satisfactory pictures of heaven.

Posture in study, too, has an important part in its influence upon the flesh. There are those who study in bed, or lying prone, who dictate from the sofa, and affirm that their most inspired thoughts come as they are recumbent. Did not the Psalmist advise to "commune with your own heart upon your bed?" There are fancies and visions, no doubt, which come when the body is prostrate and the feet bear no weight; but for clear, intelligent perception, for logical reasoning, for the thought which is to ennoble man, the brain ought to be in its proper place for life by day, lifted above the body—not on a level with the heel. A fastidious poet, like Gray, may find his heaven in reading French novels on a sofa; but no man in that position can acquire or impart much that will make the world wiser or show men the way to heaven. The awkwardness of reading in bed is enough to condemn the habit, even without its risk to the brain, which can not fulfil its function in that attitude. A minister who dictates his sermons as he is lying down, ought in consistency to turn his pulpit into a couch, and preach in that posture. He would probably give the beloved sleep.

Others study in a stooping posture, bending over a desk or a centre table. We shall have more to say of this in another essay on schoolhouses and their furniture. But the "family study," as a group of round-shouldered boys and girls are huddled round a table lighted by one shaded lamp in the middle, is to a wise looker-on any thing but a cheering sight. The poetry of that quiet household gathering is disturbed by a sense of the wrong which these industrious scholars are bringing upon their frames. The "stoop of the student" is proverbial, and is expected as an almost invariable sign. But it is not really necessary that a student should stoop any more than a soldier or a peasant woman of Egypt. In nine cases out of ten it is a careless habit, which might have been avoided in the beginning, and can be changed, too, unless the back have become fatally and rigidly crooked. In the Jewish ritual law a crooked back was the mark of disgrace; and the instructed Scribe could not present his offering at the altar, if he came with that deformity. The Christian ritual would not be far amiss in reënacting that Hebrew statute. The bowing posture may be a fit attitude of prayer, but it is not the fit attitude of study. Study is inspiration to the soul, and ought not to take the posture of humiliation.

In the former years there was another bad habit of study, which happily the substitution

Digitized by Google

of gas and kerosene for oil has much diminished—a habit of reading with a dim candle, or oil lamp with a single wick, between the eyes and the book. It is impossible to estimate the number of eyes that have been ruined, and of brains that have been overtasked, by that preposterous method of economizing light. That some great men have gathered their knowledge in that fashion does not make it respectable now.

Not many absolute rules in regard to study can be given which shall suit all constitutions and all kinds of study. But there are some general advices that all will do well to heed.

1. In the first place, it may be confidently urged that *no study of any kind ought to be attempted when the body is fatigued and needs rest.* It is a great mistake for a tired man to give himself to a new occupation, which will only add fatigue of the brain to fatigue of the limbs. Study can not be profitably pursued, when the nerves are racked by lame joints or stiffened muscles. Study after moderate exercise is good, but not after prolonged exercise. One who has been out all day with gun and dogs, tramping twenty or thirty miles over meadow and moor, or one who has rowed in a boat-race half-a-dozen times up and down the river, or one who has sawed a cord of wood, is in no condition to spend three hours on mathematical problems or on Hebrew roots. The Home Journal, or Josh Billings's talk about "Milk," is as much as the brain ought to undertake in this condition of the limbs. Study nothing, not even your own constitution, when you are tired and want to go to bed. Postpone the reading of THE HERALD OF HEALTH until the next morning, and eschew all metaphysics. This is a rule which has almost no exception. Of course, there should be no more study when the brain itself is tired. The moment any one feels that his brain is becoming dizzy, that he thinks or writes by a painful effort, that he must wrap a wet towel around his head, he is guilty if he goes on with his writing or reading. Fatigue is the inexorable limit of all profitable study. And where there is uncertainty as to whether or not one is too tired to go on, the fatigue should have the benefit of the doubt. Even the fatigue which "bores" cause may destroy for the day all aptness for study. One who has entertained all the morning a persistent specimen of this tormenting class, had better spend his afternoon in the Central Park than in his library.

2. Then, in the second place, we may say that a wise student will be *regular* in his habits. He will have certain hours in the day when, *as a rule*, he will be with his books and papers; and he will not often take other hours, even if he may lose some of his regular hours. On the railways, a late train "makes up time;" but in study it is not well to try to make up lost time. One who has lost his morning task by some interruption, will err if he sits up at night to make the loss good. No amiable student will be unbending in the arrangement of his hours, barring the door rigidly between 9 and 1 A. M., or between 2 and 5 P. M., to all visitors. If the country cousin whom he has not seen in a twelvemonth comes to try his hospitality, he will sacrifice a portion of his dear study hours. A sick child will certainly derange them. But, except for such emergencies, the order of study hours should be kept, if good work is to come out of the study. Six hours of regular study in the daylight will accomplish more than ten hours of irregular study, and will leave body and mind at the year's end in far better condition.

3. A third rule of health in study is to *vary it, to have it in more than one kind.* "One thing at a time," as we have already said, is better; but *not one thing all the time.* If one studies six hours in the day, he will do well to divide his hours between two or three branches; not to spend them all on chemistry alone, or the calculus alone, or the works of Herbert Spencer. There are some college students who complain that they can not take all course required and do good work in any branch; yet the best students in college are almost always those who take all that the rules will allow, and add besides a large miscellaneous reading. Great harm is done to the minds of students by stimulating the passion for special studies. A specialist, who works always and only in one department, is apt to get a dry brain, and to decay before his time. Study as many things as you can study well, and body and soul will profit by the variety. It is quite possible to study four or five modern languages in the four years of a college course, without any neglect of the ancient languages—provided that those modern languages are taught, as they ought to be, in any university worthy of the name.

4. Another rule of healthy study is *quiet.* New York editors are compelled to work in incessant noise, if they would have their copy ready for the printer's devil, and after a time the noise ceases to trouble them. But an ordinary scribe would as soon choose pandemonium for his study as an office on Nassau Street or Broadway. The sensitiveness of the ear is

Digitized by Google

wounded by studying in the midst of noises of any kind, whether of carts rattling in the streets, or hammers pounding on boilers, or the screeching of viols, or the strumming of pianos, or the crying of sick and fractious children. A reason why so many prefer night studies is that most of the sounds of the day are stilled in the hours of darkness. Perfect quiet is not necessary. The ticking of the clock, the gentle murmur of wind in the trees, delicate and soft sounds, rather stimulate thought and imagination. But the habit of writing and reading in the roar and rattle of harsh sounds, or even in the swell of musical harmonies, is fearfully destructive to nervous integrity. The proper room for hard study is not the nursery, or the office frequented by all sorts of visitors, but the quietest retreat of the house—always remembering that this shall be spacious, light, and airy. We have already protested against the *sanctum* as a fit place for literary labour.

5. And this last reservation suggests another rule, *to have plenty of physical light in any kind of study which is done above ground.* The photographer must have a dark room to bring out the picture on his plate; but his study should be in the light, as his art is ruled by light. Not for the eyes only, but for the mind as well, is light necessary in studies. Knowledge comes into the soul from the printed page much more fully and cheerfully when the page is bright with radiance. The science that thrives best in darkness is mystical, occult, and devilish. "Study in the light" is a maxim as good as "walk in the light." Even a blind student finds more satisfaction in his studies by day than by night, and is quickened in his intellect by actinic influence.

6. Another rule repeats what we have said of *posture* in study. *Sit upright*, or *stand upright*, and do not study with the head reclining, either forward or backward. Sit straight at the writing-table or in the study-chair. The Roman practice of reclining at meals, and studying with head erect, was more philosophical than the American way of sitting bolt upright at table, but stooping to the desk.

7. And still another rule is in place. *Do not get into mechanical ways of study*, or follow any kind of study which is not interesting, merely as a matter of duty. For sanitary reasons, if for nothing else, routine studies should be discouraged. Mere memorizing, mere conscientious reading of even the best books, is bad. All study in which the heart is not engaged with the head injures the head and injures the body. A conscientious law or divinity student may grind out a certain amount of work, like a dog at his churn, but will ruin himself in that uncongenial business. Perhaps this rule of study should have been put first in our list.

IT MUST BE TRUE.—A very old man came to King Agis of Sparta to lament over the degeneracy of the times. The king replied, "What you say must be true, for I remember that, when I was a boy, I heard my father say that when he was a boy he heard my grandfather say the same thing."

It is a sufficient answer to most of the croakers, that doubtless the same things have been said in every generation since the beginning of recorded time. Till within twenty years, for instance, it has been the accepted theory that civilised society lost in vigor what it gained in refinement. This is now generally admitted to be a delusion growing out of the fact that civilization keeps alive many who would have died under barbarism. These feebler persons enter into the average and keep down the apparent health of the community; but it is the triumph of civilization that they exist at all. I am inclined to think that when we come to compare the nineteenth century with the seventeenth, as regards the health of women and the size of families, we shall find much the same result.—*T. W. H.*

THE TIMES OF STUDY.—It is a fact well known to the physiologist, that the attention of the human mind can only be given with success to a particular subject for a limited time. The younger the brain is, the less the time during which knowledge can be taken in or retained. In opposition to these obvious facts, children are kept at their studies or in school for much longer periods than they can successfully learn. The consequence is that they remain in the close schoolroom while they ought to have been in the yard at play. This system is doubly wasteful, for both health and learning are sacrificed. The whole system of hours of study, and of play or of work, requires to be revised in our primary schools. The importance of playgrounds in the open air can hardly be overrated. It is only the practical physiologist who can appreciate the real value of muscular exercise, and the influence of fresh air from time to time during the day, to enable children to pursue their studies with success.—*E. L.*

Digitized by Google

Crumbs from the British Scientific Association.

BY DR. LYDIA F. FOWLER.

IT was my good fortune to be lecturing in Liverpool during the last meeting of the British Association, held there in September, and I gathered a few crumbs that I thought would interest some of the readers of THE HERALD OF HEALTH.

There were seven different sections—one devoted to Mathematics and Physical Science; one to Chemistry; one to Geology; one to Biology, including Anatomy, Physiology, and Anthropology; one to Geography; one to Economical Science and Statistics; and one to Mechanical Science. Each of these sections had its President or Head Center, and held its meetings daily. As all the sections met at the same hour in different buildings, an individual could not attend them all, unless he were invested with omnipresent attributes; hence there was a fluctuating audience at each, and for a week the streets of Liverpool, in the neighborhood of St. George's Hall, Concert Hall, Town Hall, etc., were teeming with the savans of the present day coming and going perpetually, as those who had taken a ticket seemed to be impressed with the idea that they must get the worth of it by attending as many of the meetings as possible, even though they remained only fifteen minutes at a meeting. If it be true that there is an ethereal atmosphere or sea surrounding us, in which every thought is a wave constantly ebbing and flowing like the tide on the sea shore, how could one help becoming imbued with science of all kinds, even though there were no natural predilections for research, by constantly coming in contact with hundreds of these wise-looking, heavy-browed, spectacled savans, that invaded Liverpool like a swarm of locusts, and filled the whole atmosphere with a scientific aura that for the time seemed to permeate our very being.

It is considered to be the highest honor to be chosen President of the Association. This year the choice fell on Prof. Huxley, which plainly indicates that even science is progressive, for in many ways Prof. Huxley has made innovations in the stereotyped ideas of the past. It proved a very happy choice; for Prof. Huxley has not only his own pet theories, but his mind seems to be an *omnium gatherum*, and he is at home in all departments of science. Without having so much Causality as to make him originate theories, he has a fine analytical brain; the faculties in central part of the forehead, Individuality, Eventuality, and particularly Comparison, are very large, so he is well adapted to take the theories of all who have lived before him, test their respective merits, and deduce practical conclusions from them. This was very evident in his opening address, when he gave a very interesting synopsis of the "Germ Theory." This shall be my *first crumb*, and I send it with the hope that some of our American young doctors will make investigations on this subject, which is now agitating the scientific world this side of the great ocean; and though there have been many experiments, and many investigations by learned men, yet in these days of improvement, when the microscope may be considered to be only in its infancy, however marvellous its declarations are to us, there is yet very much to be discovered.

The Germ Theory, as Prof. Huxley believes it, is comprehended in a single sentence, that "living matter sprang from preëxisting matter." The old philosophers affirmed, 1800 years ago, that "life proceeds from no life." This was the universal doctrine accepted all throughout Europe to the seventeenth century. In 1668, an Italian, Redi, "a poet, a scholar, a physician, and naturalist," one who was contemporary with Harvey, dared to differ with the ancients, and made many experiments, till he raised a banner and on it wrote, "No life without antecedent life." Hence there were two general theories—"Biogenesis," the one Redi advocated, and "Abiogenesis," the opposite. Needham and Buffon advocated the latter. Needham boiled infusions, had them carefully corked and heated to kill the existing germs, and yet he declared, after due time, animalcules arose in the infusion. He supposed that "each individual living organism is formed by the temporary combination of organic molecules." Abbe Spallanzani criticized this conclusion of Needham's, and declared that "all the air could not have been excluded, or else the vessels which contained the infusions were not hermetically sealed by fusing their necks, and if they had been boiled at a temperature of boiling water for three-quarters of an hour, no

Digitized by Google

animalcules would make their appearance." Then, said Huxley, oxygen was discovered, and it was affirmed that the presence of free oxygen was one of the necessary conditions of the existence of life, and of the changes known as fermentation and putrefaction. Then arose another scientific contest. Schulze and Schwaren, Cogniard de la Tour, Berzelius, Schroeder, Dusch, and Helmholtz, made their experiments, by excluding oxygen, and with passing air through a sieve of cotton-wool. Prof. Tyndall demonstrated that the ordinary air is a sort of stirabout of excessively minute solid particles, that these are almost always destroyed by heat, and that they are strained off and the air is purified by being passed through cotton-wool. The solid particles, however, are thought by Huxley to contain germs of life. Pasteur made careful experiments, and strained the air through cotton-wool, and found that there was nothing competent to give life in the fluids submitted to heat. He submitted to a microscopic examination the cotton-wool that had served as a strainer, and he found sundry bodies recognized as germs among the solid particles that had been strained off. He proved that these germs were competent to give rise to living forms by a solution fitted to their development. He also found that if the neck of the tube was drawn out and bent downward, and the fluid was boiled and tube sufficiently heated to destroy the germs, if the air was allowed to reach the tube the germs could not *fall up*, and there would be no consequent life; but if the neck of the tube was broken so that the air should fall down *upon it*, in a few days the solution was full of life produced by the living germs in the air. When these principles are fully understood, Prof. Huxley thought that the nature of epidemic and epizootic diseases will be also understood, and then they will be checked and eradicated.

Crumb No. 2.—Prof. Huxley's opening address seemed to carry so much *prima facie* evidence with it, that one might have concluded that every one was willing to admit his theory of *Biogenesis;* but in the section of Biology, Dr. Bastian brought forth a paper on his experiments that proved to his mind the truth of the theory of *Spontaneous Generation.* He visited the manufactory of a gentleman in London who prepares meats in tinned cans. He observed that they were subjected to a heat of about two hundred and thirty-three degrees Fahrenheit, and kept at that heat for more than half an hour, and then subjected to a much higher temperature for two hours. He took three ti —one of salmon, one of lobster, and the oth of Julienne soup. He subjected these to m croscopical examination. The salmon was n quite fresh, but the other two were. He sa by means of the microscope that in portions each of the three different articles a number minute living things, which he called *living i fusions*, capable of coming into origin *de nov* These had a bacteria-like body, with projectin filaments. In the salmon there were the abs lute filaments of a fungus. The query wa whether these preëxisted when the meat wa fresh, and if not, whence came they? Ther were two alternatives—either that germs ca stand a greater heat than has been supposed, o that the molecules of dead matter are able t re-arrange themselves into living bodies, exactly such as can be demonstrated to be produced in another way. Dr. Bastian affirmed his belief in the latter hypothesis. As a proof he adduced the following as experiments he had tried. He took solutions and exposed them to a high temperature, after the vessels had been hermetically sealed to one hundred and fifty-three Centigrades for several hours, and then allowed them to cool. In three weeks a cloud-like floculi appeared, and on one of these a minute white speck, which increased in size. Prof. Sharpey, a friend of his, opened the flask sixty-five days after it had been sealed, and there was a whitish material one-tenth of an inch in size, and the whole mass was fungus with filaments and spora of fungus. These experiments made him doubt the truth of Pasteur's theory of putrefaction and the germ theory of disease. After some discussion, *pro* and *con*, the President of the section, Prof. Rallaston, said he hoped they would continue their investigations, and that at some future time he trusted that Dr. Bastian would, if he found he had made any mistake as to the manner in which his flasks were sealed, or if he gained any new light which would make him feel that his position was untenable, be the first to refute his own theory; that while the account of his experiments had been very interesting, yet he thought the fact that there were the same forms of life after a long series of years that had existed in the original strata, was one of the best arguments against spontaneous generation, for, had this been possible, we should constantly have new developments of life.

"What shall be done when doctors disagree?" asked some one a long time ago. The only reply we can make is that all should investigate, experiment, and observe patiently the

Digitized by Google

results. The only difficulty in investigation is that each experimenter has often prejudged according to his preconcieved prejudices. and finds it impossible to see truth only through his own colored glasses.

Crumb No. 3.—In the section of Chemistry, Mr. Gordon read a very interesting paper, "How to Prevent Lead Poisoning in Water and Other Liquids." If some could stereotype this article, and fasten it into the minds of those who make lead pipes in such a way that they would never be able to make them again, many lives could be spared. The pith of his article was as follows: That on account of the ductility of lead, and because it could be obtained cheaply, it was used extensively for cisterns and pipes for the transmission of water and other liquids. That it had been proved that when water remains in leaden pipes it accumulates poison. The query has arisen, What can be substituted for the lead? Iron has been proposed; but iron is liable to rust, is difficult to repair, is liable to break at the joints. Galvanized iron has a diminished tenacity, and is liable to split and to corrode. So iron will not do. Copper should not be used for any dietetic purposes, therefore copper will not do. Stone can not be used for practical purposes. Pottery is liable to fracture. Gutta percha is wanting in durability. Tin is too expensive and wanting in pliability. A pipe that shall combine purity, wholesomeness, strength, cheapness, and ductility, can be made by encasing a block-tin pipe in lead. These metals combined will give the ductibility and pliability of the lead, and the innocuous features, as well as the superior tenacity of the tin, while the lead casing will be a protection to the tin pipe. An ingot of tin nicely inclosed in an ingot of lead, formed simultaneously by hydraulic power—the superior tenacity of the tin admitting a diminution of thickness and weight in the pipe, allows the pipe to be made EQUALLY CHEAP with the lead pipe. This last argument may prevail with those who neither think nor care for the preservation of the health and lives of the people. Suffice it to say, that this new kind of pipe has been introduced in a number of towns of England and in Calcutta, in which lead-poisoning was one of the most active causes of disease, according to statistics.

Crumb No. 4.—In the busy thoroughfares of large cities *dust* has always been considered a nuisance, injuring the goods in the shops, and yet it accumulates nearly as fast as it is removed. If the germ theory of disease is the correct one, dust, by rising, is often the cause of carrying contamination to a whole neighborhood. Mr. Cooper read a very interesting paper on "The Use of Solutions of Soluble Chlorides for Laying Dust in Thoroughfares," and he gave the following important statistics, worthy the attention of the "City Fathers" in all large cities. In Liverpool, in 1869, Bold Street, Church Street, and Lord Street (three streets containing the finest dry goods shops or stores in Liverpool), were watered with this solution of salts with good effect. The Westminster Board of Works had also tried it on a limited scale, but determined to use it over their whole district, an area of 250,000 square yards, and they were pleased with the result, both in the saving of labor and of water. They found that by using one ton and a half of the chlorides per day, which cost £3 15*s.*, the labor of ten cart-horses and ten men, costing £4 10*s.*, can be dispensed with, saving 15*s.* per day. Then an additional saving of 350 loads of water, of 250 gallons each, at 10*d.* for 1000 gallons, would be £3 12*s.* 11*d.*, which, added to the 15*s.*, would amount to £4 7*s.* 11*d.*, and this would be the gain after paying for the salts. Then as a disinfectant, if the *Deliquescent Chloride of Aluminium* (one of the best antiseptics, free from odor, not poisonous, will arrest decomposition when it has commenced, and prevent its commencing if used in season) be added to the salts, and the streets were watered with the solution, especially in times of pestilence, this new disinfectant would not only cost one-third of the price of carbolic acid, but it would purify the air, destroy parasites and germs, and absorb all noxious vapors, as well as free the streets from dust.

Crumb No. 5.—One of the most interesting and important papers was read by Dr. Moffatt, on "The Influence of the Soil to Produce Endemic Diseases." This is a subject on which we have thought for many years, and have made many practical observations in our travels through the country, and on this account it was a pleasure to have our own observations corroborated by the Doctor, who affirmed that "the soil has an influence on cereal plants grown on it, and on the diseases to which the inhabitants are subject." He said that where he practised medicine, in some districts the soil was *carboniferous;* in other districts it was the new red sandstone, or Cheshire sandstone. The people who lived in the first district were mostly engaged in mining and agricultural pursuits, while those in the latter region were mostly

Digitized by Google

agricultural in their tendencies. The people who lived in the carboniferous region were troubled with goiter and anemia, and that these diseases were entirely unknown among the people who lived on the new red sandstone. The people of the latter were troubled with consumption. He had found one cause of anemia to be a deficiency of the oxide of iron in the blood of the patient. He had examined the wheat grown on the soil of the Cheshire sandstone, that on the carboniferous limestone, that on the millstone grit, and he found that the wheat that grew on the Cheshire sandstone contained the largest quantity of ash, the largest quantity of phosphoric acid, the largest quantity of oxide of iron; that each inhabitant of the Cheshire sandstone region, who eats a pound of wheat per day, would in this way take five grains of the sesqui oxide of iron more than the inhabitant of the carboniferous district, who suffers from the want of it, and hence has anemia. Then, again, the sheep that are wandering about in the carboniferous region have a deficiency in the phosphates and in iron; so they are troubled with anemia, and the people, hence, are doubly subject to disease—by the wheat they eat, and by the mutton they eat, as well as by the general influence of the soil. Such was the pith of his observations. It may be that the time will come when medical students will be taught how to prevent diseases among the people. It may be that even consumption's ravages can be stayed; but it will be readily perceived how futile it is for the consumptive patient, when ordered to change his residence as a curative *dernier resort* to go to a region where the soil contains the elements calculated to produce consumption. The same is true of other diseases. The young man about to settle in life will not only think of going to a spot where he can make money, but he will select one in a region which will be best adapted to his own organization in a chemical and physiological point of view.

Crumb No. 6.—Mr. Hope read an interesting paper on "The Antiseptic Treatment of Rinderpest and Scarlet Fever." He gave his experience in successfully treating and curing over one hundred cows by the use of lime and carbolic acid. But he used these remedies in earnest, and effectually killed or stamped out the disease in every one. His ideas on the treatment of scarlet fever are worthy of notice; for this disease is one of the greatest scourges that can attack children. Prof. Huxley affirmed in his opening address that the statistics of three years among the diseases of children, gave the astounding facts that ninety thousand children had died of scarlet fever in the three years. If doctors all over the land would confer with each other on the nature and best treatment of this disease, many lives might be spared every year. It certainly would do no harm for them to try the chemical or antiseptic method by the use of carbolic acid.

Mr. Hope, in his paper, made the following astounding declaration (which must have startled the prejudices of some of the doctors present): "A purely medical treatment, properly so called, of infectious disease, always has appeared to me, if I may be pardoned for the expression of so heretical an opinion in such orthodox company, to be empirical in the last degree." Mr. Hope found, after an absence from home, on his return, his child ill with the scarlet fever. He had dreaded this disease more than any other. He knew that the most active measures were requisite, and that immediately. He isolated the child, and then commenced to kill the scarlet fever germs, especially those in the throat that caused much pain in swallowing. For this purpose he used a gargle of one part of carbolic acid to two hundred parts of water. This had an instantaneous effect of the most cheering kind. He put cloths wrung out of the same proportion of carbolic acid and water on the bed, over the bed, and about the room, and had a basin of water with the mixture in it near the door, for them to wash their hands in it whenever they went out of the room. In a few days the child recovered, and during the process of "desquamation" he bathed the child's body with the same mixture. Before the child recovered sufficiently to prevent others from catching the disease, some of the family came in contact with it, by going into the sick room, and carried it to another child in the family. This, however, was taken in season and soon cured, and the house was cleared of the dire disease. There was considerable discussion, after the paper was read, about the chemical, therapeutic, and antiseptic treatment of disease by inorganic remedies. Dr. Bayles, the medical officer of health for Birkenhead, affirmed that he had used carbolic acid as a disinfectant for a number of years with great success, and he thought Mr. Hope's experiment with the rinderpest, a zymotic disease, very valuable, and it was also quite as valuable with regard to scarlet fever; but then they "all knew that children recovered from scarlet fever in an extraordinary and unaccountable way. Perhaps no treatment was better for this disease than cleanliness, fresh

Digitized by Google

air, and water!" He continued to discuss the point that he "did not wish the audience to believe that the action of medicine was not well understood by the faculty; for while some medicines were empirical, other kinds had been well tested and were understood. He could always arrest the progress of fever in any ward by the free use of carbolic acid." He requested those who were interested to make experiments with it and other disinfectants in the treatment of disease, and present the result of their experiments at the next meeting.

When we think of ninety thousand children that died in three years of this disease of scarlet fever, and that perhaps their lives might have been saved if these progressive ideas concerning the treatment of the disease by carbolic acid, or by cleanliness, fresh air, and an abundance of water, had been disseminated widely among the people, we shall begin to realize the importance of scattering them far and wide on the four winds of heaven—that the statistics of the next three years may show a great diminution of deaths by this disease among the children, and to think that perhaps it may be finally stamped out of existence, and be remembered as a thing of the past.

Crumb No. 7.—A paper was read on "The Utilization of Fibrous Cotton Seed." It was stated that more than a million and a half tons of the seed were wasted yearly, and that these could be utilized and much profit derived from the saving of the seed; that these wasted seeds, if saved, would produce 250,000 tons of pure cotton, 500,000 tons of cattle cake, and 250,000 tons of oil. The value of these different materials would be £20,000,000 sterling, while the husks of the seeds could be made into paper, and thus produce an unfailing supply of paper at a cheap price. If this be correct, how important the suggestion may be to our future paper manufacturers and to the people at large!

Crumb No. 8.—In the Geographical Section were many interesting papers. Lord Milton gave a synopsis of his trip across the American Continent. Col. Gilpin gave an account of his discovery of Colorado, and his experience in Mexico before any Anglo-Saxon had been there. Sir John Swinburne read a paper on "The South African Gold Fields," which had been supposed by some to be "the land of Ophir" spoken of by Solomon. He said a ton of the quartz yielded two or three ounces of gold. Hepworth Dixon read a paper on "The Holy Islands of the White Sea." Sir Roderick Murchison alluded to Livingstone, and said he hoped the traveler was still living, though they had not heard from him for many long months. But the most interesting Crumb, in many respects, in the the Geographical Section, was given by Rev. Robert Moffatt, the old missionary, who has lived fifty-three years in Africa. He remarked that he had often passed over the diamond regions; and that before he went to South Africa the chiefs were so barbarous and the natives so treacherous that no white man dared to go among them; but after he had prepared the way the dangers gradually diminished, because the natives had become accustomed to seeing a white man, and since then thousands of wagons loaded with ivory had come from the interior, while at the present time at the diamond mines there were many thousand Englishmen, and many from other civilized nations, who would not only explore the region, but would remain there and build up towns and settlements, and there was every reason to believe that benighted Africa would ere long become civilized, and Ethiopia stretch forth her hands unto God.

It may seem to us at times as if a highly cultured man sacrificed too much to spend his entire life among barbarous tribes who never appreciate his talents, and who are never willing to resign their idolatry for his ideas of Christianity. Yet it may be ourselves at fault in prescribing what shall be the result of his efforts. These may not be visible even during his lifetime, and yet one man may have power, like a Columbus, to open wide the gates of a continent to thousands of his own race, who settle and develop its resources.

Crumb No. 9.—A suggestion was made that ocean telegraphy could be brought within the means of the common people, by having *hemp* cable instead of *iron*, the hemp being the cheapest; and the objection was removed that it would decay, by the fact that the salt in the water would preserve the hemp.

There were many interesting papers on the different Caves that had been explored; on the Reef-coral found in limestone rocks; on the Portuguese Anchor Sponge, that has many long filaments that hold it in its place; on Left-handedness; on the Scientific Uses of the Imagination, that Prof. Tyndall thought was very necessary to receive (in good faith) all the varied scientific theories afloat at the present time; also on the North American Indians, with reference to their attention being given to agriculture. Some one proposed that the idea

Digitized by Google

of the intermarriage of the Indians with the Whites was one calculated to advance the Indians in civilization. He did not say what he thought would be the consequence to the Whites who should accede to his proposition.

Crumb No. 10.—Sir John Lubbock gave a very interesting address to the workingmen on "Savages." He affirmed as his opinion that the different nations had sprung from the savage tribes, and had gradually improved, rather than that the present races of savages had deteriorated from civilized life; that many of the customs of the present day are only the relics of those of the same races when they were in a savage state. This was true with marriage and with religious customs. There were the same innate feelings, instincts, and passions in the early ages as now; but as civilization progressed man was governed more by his higher moral nature. Woman had a more elevated position, and the religionist, instead of being satisfied with Fetichism, the worship of material objects, Sabianism, the worship of the heavenly bodies, or Heroism, the deification of men after death, was now based on worship of the Deity, and that the more science was understood, the better would man's condition be in every respect.

I have thus hinted at some of the most interesting features of this Scientific Association. professed to have the interests of humanity heart, and to desire to carry the benefice principles of science to every man's door.

"I will magnify my calling," was one of th most prominent characteristics of the princip speakers, especially those who had prepared pa pers; as each had looked at his own subje through the glasses that he was accustomed t wear, till the face of nature was red, green, o brown, as the glasses through which the looked were so colored.

Each ventilated his own theory, and many important suggestions were thrown out that th outside world will heed, and will make the nu cleii of inventions, and thus the world will pro gress to perfection. The discussions have a tendency to break up the old, stereotyped idea that have become moss-grown, and many inno vations have thereby crept in, which make us feel that "the world does move," and that pro gress is the order of the day, and that eventu ally the great questions to be solved will not be so much the geological age of the earth, or the spectrum analysis of the sun and the planets, as they will be how to prevent crime, misery, sickness, and pauperism; also how to make each home a paradise, which shall be in some degree a foretaste of the heavenly home to which we are all hastening.

The Physiology of Man.*

BY M. L. EDGEWORTH, M. D.

UNDER this rather ambitious title, Dr. Flint produces the third volume of a work less rudimental than most college textbooks, and not got up merely for the market, to cram students for the solemn farce of graduation. More a chemist and experimental manipulator than a writer, Dr. Flint lacks discipline of style; he is often diffuse, inexact, and tautologic, and might, with advantage to his readers and himself, condense the whole pith and substance of five volumes—two of which we learn are still in manuscript—into one clear, vigorous, and salable volume. A teacher should avoid hiding his candle of thought under a bushel of phrases.

Our limits oblige us to confine our review to the author's own researches on the functions of the liver in the present volume.

We need but allude to the history of bile, its secretion both from portal-vein blood and arterial blood, its service in the digestion of fats and in stimulating peristaltic movement of the bowels, the absorption of its acids with the chyle, and their disappearance in the act of respiration. The residual biliary excretion affords the theme of Dr. Flint's investigations on cholesterine and stercorine, published at length in The American Journal of Medical Science. Philadelphia, 1862; vol. xliv., p. 305.

Cholestorine was known to exist in the liver, in the spleen, in the crystalline lens, in the

* The Physiology of Man; designed to Represent the Existing State of Physiological Science, as applied to the Functions of the Human Body. By Austin Flint, Jr., M. D. New York: D. Appleton & Co. 1870.

Digitized by Google

brain, spine, nerves, and blood—but most in the nervous system. Is it carried to the brain by the arterial blood, or is it formed in the brain and nerves? This problem is met by analyzing the blood from the two systems of vessels going to and coming from the brain. The carotid artery revealed no cholesterine to the microscope three days after drawing blood, and only a few crystals after the eleventh day. In quantitative analysis, the proportions, although clear and decisive in their theoretic bearing, require implicit confidence in the skill and accuracy of the chemist to sustain our faith in conclusions based upon thousandth parts of a grain. Dr. Flint does not ignore the necessity of confirming the results observed by a number of independent operators.

Uncomplicated by the use of ether, the experiment upon a dog showed of cholesterine in the jugular-vein blood forty-six one-thousandths of a grain, and this, as compared with carotid-artery blood, was as 1.545 to .967 of a part per thousand.

As an instance of the loose way in which Dr. Flint strings his paragraphs together, let him take page 282, last paragraph, where he comments on Experiment IV., made on the nervous and arterial bloods of *one* dog, as follows: "Experiment IV. shows but a slight difference in the quantity of cholesterine in the arterial blood in the two animals; the proportion in the animal that was etherized being 0.774 per 1000, and in the animal that was not etherized 0.768 per 1000," etc. The simpl ereader, following the grammatical text, asks himself, Of what *two* animals?—since only one was mentioned in Experiment IV., on the same page. To get at the author's real meaning, he must go back a page and a half, to Experiment II., in which a dog was etherized. The comparison intended is between Experiment II. and Experiment IV. Of course, no one whose mind is grappling earnestly with the facts in question can fail to see this, on due reflection, but the inaccuracy of language in the statement is vexatious; it involuntarily suggests distrust of the exactness and lucidity of mind in the writer, who is, however, probably conscientious in the work which he writes about so carelessly. He has not brought his conscience to bear upon his style. But his fortune is made—the misfortune is his reader's.

Cholesterine, discovered by P. de la Salle in 1782, was extracted and described by Chevreul in 1814, and was demonstrated in the blood by Denis in 1830. It is an animal resin, of the composition C 25 H 22 O. The bile acids hold it in solution; it is concrete in gall-stones, and in certain cysts and tumors, and is united by organic molecular combinations with the other elements of nerve tissues and of the crystalline lens. Its so-called crystalline structure is simply lamellar, in thin, transparent rhombs or rectangles with distinct borders, and fracture in parallel lines. The microscope detects it in tumors and intestinal concretions. Inodorous, inflammable, and neutral, it does not saponify; it reddens with sulphuric acid, and is soluble in ether or hot alcohol. To appreciate its quantitative relations, let us accept the estimate of bile 2½ lbs. to 140 lbs. man in 24 hours.

Of this bile, in health, cholesterine may form 0.618 to 2.66 parts in 1000. Dr. Flint's experiments have been directed with a view to prove the importance of the depuration effected by the liver on the blood in eliminating the cholesterine resulting from the waste of nerve tissue. Analyzing the blood returned by paralyzed limbs, in three subjects, he finds no cholesterine. No nerve waste by action here, no cholesterine eliminated; the reasoning is sound; but, considering the number of years that Dr. Flint has been at work upon this matter, and the daily opportunities his hospital as well as private practice has afforded of verifying his theory by analytic facts, we are surprised to find only three cases cited. In the small quantities of blood experimented on, moreover, the largest amount of cholesterine found, even on the sound side of the body, was only sixty-two one-thousandths of a grain, so that the skeptic may ask, Is it certain that so little might not escape eyes and scales whose preconceived judgment its presence would reverse? Far from us be such skepticism, but we would desire experiments upon a larger scale. If the accumulation of cholesterine in the blood be so pernicious as Dr. Flint suspects, it will naturally be responsible for much of the damage to health, when cirrhosis from the habitual use of ardent spirits, or from other causes, has thickened the connective tissue of the liver at the expense of its cells. Their operations on the blood being thus in great measure prevented, analysis ought to detect in this blood larger proportions of cholesterine. In fact, Dr. Flint found in one case of cirrhosis, with jaundice, 1.850 parts per thousand, which is more than double what he had ever found in health. Two other subsequent cases of well marked cirrhosis, however, failed to confirm this theoretic view. There might have been little nerve waste to charge the blood with cholesterine in one case, as the patient was confined to bed; but the other one,

Digitized by Google

who, although dropsical, had pretty good general health, showed much less than the average proportion of cholesterine in his blood. Dr. Flint neither states nor resolves the question whether it passed into the serous exudation, yet he concludes, rather to our surprise, that these cases, taken in connection with three others of paralysis, and with his other experiments, *fully confirm* his views with regard to the excretory function of the liver. We raise no issue on the principle, but the facts cited in support of it are, it must be confessed, rather weak in the knees.

GLYCOGENY.

Our readers, all more or less physiologists are of course aware that they carry about in their livers each a small sugar factory, and are duly grateful to Prof. Claude Bernard for this sweet assurance. If any have been shaken in the faith by counterblasts from Messrs. Figuier, Sardou, Pavy, McDonnell, or other scientists, they may be consoled and reassured by the experiments of Dr. Flint. He has repeated Bernard's experiments, proving the presence of this liver-sugar in the hepatic-vein blood, caught in the living animal before its oxidation in the lungs; he claims to have done this many times, both in public and private, which is doubtless meritorious work in a certain point of view, but the sentiment of the numerous, unfortunate, and perhaps estimable dogs, who had a vital interest in these repetitions, is not taken into consideration. If we venture to allude to this, it is not to raise a question as to the devotion of the dogs to the service of science and humanity, but to ask the necessity of this mediation, after Figuier, Lehmann, Frerichs, Poggiale, Leconte, and many other physiologists of the first value, had already confirmed the fact of sugar in hepatic-vein blood; while, as Dr. Flint remarks, Pavy and McDonnell had never denied it.

Still, with the amiable "view of harmonizing, if possible, the discordant observations of Bernard and Pavy, we have ourselves made a number of experiments," says Dr. Flint, and another army of canine martyrs have equally verified, in his expert hands, the accuracy of Dr. Pavy's experiments, at first blush contradictory to Bernard's glycogenic inferences.

Dr. Flint boasts of having arrived at such facility, by dint of practice, as to have cut out a piece of living dog's liver, rinsed it from blood, and plunged it into boiling water, all within ten seconds.

It is true, as he admits, that McDonnell, Meissner, Jager, and Schiff, among others, had already abundantly confirmed Pavy's statement, that livers so treated never yielded saccharine reactions to the proper chemical tests and that Bernard, on his side, had never controverted this, so that with the utmost good will we fail to see the point achieved by Dr. Flint's mediation between the French and English experimenters. Be this as it may, the candid reader is taken by surprise when, immediately after circumstantial details of Dr. Flint's experiments on the aforesaid dogs, and the negative evidence on sugar, of their liver extracts he turns on Dr. Pavy in this style, (p. 313): "It is difficult to imagine how any observer, so well known and accurate as Dr. Pavy, could assert positively, as the result of personal examination, that the liver does not contain sugar when examined immediately after its removal from the living body, when Bernard and so many others have demonstrated its presence in this organ in large quantities. Yet such was the result of all the experiments of Pavy, and the same conclusion was arrived at by McDonnell, and afterward by Meissner and Jager, and by Schiff." Then, in a foot-note: "They took portions of the liver from living animals, and from animals at the instant they were killed, by section of the medulla oblongata, plunged the tissue immediately into boiling water, and invariably failed to find sugar in the extract. They did not, however, recognize sugar in the blood coming from the liver, as in our experiments."

Well, Doctor, how can you find it "so difficult to imagine" how Dr. Pavy can assert, what you yourself reaffirm after observations (pp. 310, 311, and 312) on four luckless dogs, who hold you responsible for their boiled livers. One might fancy, if such slips of the pen were not so continually happening to you, that you bore Dr. Pavy some scientific malice, for having got the start of you and made his dog cry, "No sugar in my liver!" first. But the best of the joke is, that Dr. Flint believes the dogs are all quizzing their experimenters—that they have got sugar in their livers but won't show it, passing it out of the liver country cells as soon as manufactured, like contraband goods, by the hepatic-vein blood, in traffic with the lungs. Chemistry and physiology are playing a little game of thimblerig with their liver sugar. The starch, called glycogen by Bernard, from its aptitude to become sweet glucase, and which all observers agree that all livers constantly secrete, is the main fact. Identical with animal glucose in its chemical composition, a few seconds of arrest, or of exposure in or out of the body, confer on it the taste and chemical reac-

Digitized by Google

tions of glucose. Pavy showed that this conversion could be prevented by sudden and intense heat or cold. Bernard had shown the spontaneous post-mortem conversion of liver starch into liver sugar before Pavy, while to Pavy reverts the credit of first proving that the healthy liver stores no sweets in life. Neither of these explorers contest the discoveries of the other, and Dr. Flint is not diplomatist enough to create between their claims a necessity for his mediation. The really important point in question now is, the hæmatosic function of the liver. Dr. Flint forbears to discuss this. He says in his first volume, about the blood, that he does not believe any particular organ charged with the formation of its corpuscles. In this third volume, however, he cites the analysis of Lehmann as very "curious."

"Lehmann estimated that the proportion of white corpuscles in the blood of the hepatic veins was at least five-fold the proportion in the portal blood. He also noted certain differences in the appearance of the red corpuscles, which he explained by the supposition that the liver was the seat of development of these elements, which were formed from the white corpuscles, and that the blood of the hepatic veins contained a greater number of newly formed or rejuvenescent blood corpuscles."

This important confirmation of the views of our older physiologists receives additional force from the observations of Bernard, of Rouget, McDonnell, and others, on the presence and probable function of amyloid or glycogenic substance in epithelial cells of the placenta, before its appearance in the fœtal liver. We can not, however, say more on this subject without leaving Dr. Flint, who guards a prudent reserve on the margin of the unknown.

THEORIES PUT IN PRACTICE;
Or, Extracts from the Diary of a Physician's Wife.

EDITED BY MRS. H. C. BIRDSALL.

JULY 14.

SO long a time has elapsed since the unpleasant occurrence to which I referred when last writing in my journal, that the sting is all gone, and I can now laugh at the recollection. Monday afternoon, June 26th, while washing the dinner dishes for Eliza, who is rather slow about her washing, a caller came in the shape of Miss Margaret Stanton, a lady whom I never see without the words "stiff-necked and perverse generation" coming to my thoughts. She had called before, but a number of other ladies being present at the same time, I had no definite impression in regard to her, except an uncomfortableness that a pair of curious eyes was prying into every corner. She told me, after I had greeted her, that she had come to sit for a short time with me before she went to tea at another friend's.

I concealed my surprise at this proceeding from so much of a stranger as cleverly as I could, and set myself to work to entertain my grim visitor. This I found wholly unnecessary, as she proved to be bent, with malice intent, upon entertaining me with her views of a young wife's duties. She plunged at once, *in medias res*, by saying:

"So you've begun right away keepin' help; that's the way with all the young folks now-a-days. For my part, I don't see what the risin' generation's a-comin' to. The young women don't seem to have no backbone to speak of, or, if they do have it, they don't think they've got any. Now, Mis' Sanborn, don't you s'pose you could do your own work—you're a well-looking young woman—I don't mean to say hansome; nobody ever found Margaret Stanton dealin' in flattery, and you don't seem to have no great beauty noways; but you look strong and healthy."

Her digression in regard to her victim's personal appearance gave me time to collect my thoughts, and I answered to her question—"Now, Mis' Sanborn, don't you s'pose you could do your own work?"—"I do." My reply was so unexpected that Miss Stanton did not know what to say next. She sat looking at me with the question on her face, "Why don't you do it, then?" but I did not choose to answer a question before it was asked by word of

Digitized by Google

mouth. She presently said, in a hesitating, uncertain way:

"Well, I never! I thought folks gen'rally was in the habit of doing what they could do, any how, if they was brought up in the country."

My first impulse was to say something sharp; my second, to say nothing more in regard to the subject. Henry says it would have served her right to follow the first one. Fortunately, *I* think, my better feelings came to my aid, and I said:

"I could do my housework very easily, Miss Stanton, for it is not heavy, and I learned enough about work at home to enable me to do very well; but my husband and I have concluded that I can find a better use for my time. A part of the housework I do, because I know that no exercise is better for a woman's general health than this. I do nearly all the sweeping, and the more delicate part of the cooking. Then I work in the open air every pleasant day at the flowers, and keeping weeds out of the small beds in the vegetable garden. An hour each day I spend in reviewing my old studies, and in trying to make further progress in them. Another hour I practise upon the piano and in singing. My sewing and reading occupy the remainder of my time, and from them I am always ready to be called, if my husband wants me to do any thing for his patients." Miss Stanton could bear it no longer, and she exclaimed:

"Do any thing for his patients! Gracious sakes! Are you a woman's-rights woman?" and, adjusting her spectacles, she drew a little further away from me, and scanned me from head to foot, as if to see whether I were clad in male costume.

"I quietly answered: "No, Miss Stanton, I am not a woman's-rights woman in the way you mean. But there is a great deal to be done for sick people which men can not do. Most of my husband's practice is among a class of people who know nothing of the common laws of health, and, when they are sick, know as little of the ways of getting well." Seeing that a different and softer look had come upon her face, I ventured still further away from the contested subject by speaking of a sick woman living near Miss Stanton's. As long as she remained I contrived to steer clear of allusions to the matter of housekeeping. I think I made a discovery—namely, that there is a sweet and tender kernel inside the shell of Miss Stanton's character. Perhaps, if she had married as young as I am, she might not be so gruff and hard—not that being unmarried *ought* to m one hard and selfish and unfeeling; and I kn it does not, if a woman tries to grow bet but so many people drift along just as it h pens, following every impulse—at first repe ing often, but never discovering that the tru repentance is that which shows its fruits in bitter word kept back, the hard thought s ened, the unkind act exchanged for one charity and self-sacrifice.

Just before Miss Stanton left, I asked her vice about some raspberry jam which I am ing to make very soon, and I found that talki of this sweet subject had a still further molli ing effect, and we parted much better frien than I should have anticipated at one stage our talk.

I had but little time left after her departu to prepare for our visit at Dr. Hutton's, but n hurry kept me from dwelling upon Miss Sta ton's disagreeable interference. The thoug of it would now and then return, making m feel uncomfortable, but I put it from me as re olutely as possible, and it all passed away in th delight of our visit.

I shall be obliged to keep my account of o visit till another day, as I've been writing so lon

July 5.—What would some of the good Bu tonville people say to inviting people to tea a giving them but one kind of cake. As I sat Mrs. Hutton's table, I could not but think the contrast between it, set with delicious foo but simple and wholesome and of few kind and the tables at which I have visited, whic were loaded with two or three kinds of hot bi cuits, meats, pickles, rich preserves, and at lea four kinds of cake, beside cheese, blanc mang coffee, and tea. I remember the time when thought a hostess in duty bound to lay an elab orate table for invited company, because of i being a general custom; but I have come to th conclusion to be sufficiently strong-minded t obey my sense of the right and the judicio in this matter, and, while making a daily effor to be a good cook, never to set before my guest a motley meal of the kind I have mentioned And, furthermore, *unexpected* guests must tak us as they find us, without any apologies fo what is upon the table, unless for an article o food really inferior. And this reminds me tha I have not yet recorded my cooking experienc I am afraid I must confess to myself that I have been a little ashamed to mention some o my first expériments. As I become more cour ageous and self-confident, I must do this fo Henry's amusement.

Digitized by Google

But to return to our visit. I have felt ever since as if I had realized the wish of my life, and had traveled in the easiest manner all over the European Continent; for, after looking for some time at Dr. H.'s choice paintings, we sat down by Mrs. Hutton's side to see what she calls her pet art treasure—a collection of the finest stereoscopic views that can be obtained of the celebrated natural and artistic wonders of the world. There were nearly a thousand different views, arranged in classes—one of alpine views; one of the most beautiful small sheets of water in different countries; one of English churches and cathedrals; one of the continental ones, both exterior and interior views from different points of observation; one of the most noted public libraries; one of groups of statuary which have won world-wide fame, and one of rooms in the greatest palaces of the world. Mrs. Hutton has taken great pains in her collection. The principal importers have made an arrangement with her by which they send her the best of their foreign views; from them she culls the finest, and over these she goes again, sifting them so thoroughly that nothing but the purest gold is left. I could only look at a hundred and fifty of them that evening, for it is very trying to the eyes. These were the alpine views, some of the English churches and cathedrals, and a few of the continental ones. It seemed most appropriate to me to take the English cathedrals and the alpine views in connection, for my feeling is that there is nothing in art more nearly approaching the sublimity o alpine scenery than the wonderful architecture of these cathedrals. The Continental cathedrals are far inferior in sublimity—they seem to have more of the worldly, less of the heavenly; there is about them that minuteness of detail and frippery that is one distinctive feature of Romanism. But I am criticizing them as if I had really seen them. Both Dr. H. and his wife made the views the more attractive by their comments. The early part of their married life they spent abroad. Mrs. Hutton, perceiving my intense enjoyment of the views, had a package of four hundred of them done up for Henry to bring home with him to look at at our leisure. I have found it difficult to avoid looking at them too long, they are so wonderfully fascinating. Yesterday, while hearing the shouts of boys in the streets, the firing of all kinds of noisy things, from crackers to cannons, I was quietly seated in Henry's study, the dearest room in the house to me, in the bow window, taking a peep into the different English libraries. I was dreaming over those pictures, so that for a time I did not realize where I was. In this package had been placed, by mistake, two Alpine views, and their extreme beauty so struck me that I shall feel all my life as if I must have seen the place, and not the picture. The name has escaped me, but the scene was a deep, deep gorge in the mountains, at the bottom of which was a rolling stream, the bright tips of whose waves were reproduced in the photographs. A wooden pathway, much like a staging,' was built at the side of the gorge, sometimes one side, sometimes the other, according to the shape of the rocks. In one place a sloping wooden roof was built over the pathway, to ward off the dripping of the tiniest imaginable stream, which might be seen hundreds of feet above making its way over the rocks. This dropping upon the heads of pedestrians would have been very damp and disagreeable, but the little amount of water warded off them and falling on the wooden roof, and thus infinitessimally shattered into the finest spray, glistening in the sunlight like golden dust, became a "thing of beauty" which will be to me, at least, "a joy for ever." So it often is with the events of our lives—repulsive in themselves, they may become beautiful recollections, if we meet them and treat them with the right spirit.

This view must have been taken at high noon, for at no other time could the rays of the sun have penetrated into this deep, dark place. As it was, the light was exquisite, all its variations of shadow and light appearing as distinct as they could have been seen by the traveler in his own person. Our own two dozen stereoscopic views are so indifferent when compared with these beautiful ones, and I was once very fond of them. Henry had never been guilty of the poor taste of buying those poor, made-up, painted views, which we so often see, but had bought to the best of his knowledge. We have learned that seventy-five cents spent for one picture, like those of Mrs. Hutton's, are better invested than for three ordinary ones.

There was a portrait in Dr. Hutton's library which attracted and rivetted my attention. There was, too, a man and a woman. The woman's face, though irregular in feature, was so full of womanly sweetness and power that I inquired about it. It was the portrait of Dr. H.'s mother. I have thought a great deal about her since, for the face told a story which should be that, in a greater or less degree, of every woman who is a wife and mother. The portrait was taken when Mrs. Hutton was quite young, but it is full of the promise of wonder-

Digitized by Google

ful qualities as a wife and mother, which promise was amply fulfilled, as nine sons, all good and influential men, now testify.

July 6.—I did not expect, in my devotion to my favorite theory, to have our little home turned into a hospital; but it was so to be. As I was putting away my journal the afternoon of the 4th, I heard a tumult in the hall, which proved to be caused by Henry, who, with the aid of two men, was bringing a boy into the house who had been wounded by his ignorant use of firearms. With true Irish aim, he had contrived to hit himself instead of the object intended, and he was in a sad state. The accident occurred near our house, and it would have been very dangerous to move him, even if any one had known where his home was. Just as Henry had finished dressing his wound, the boy's mother appeared in great excitement, and would have treated us to a series of Milesian wailings had not Henry vetoed the demonstration.

July 8.—My Topsy's sympathies are so enlisted in Jim Mahony's behalf that, for the time being, she seems to have forgotten her beloved babies. She is a capital nurse. Her gentle way of moving about the room, and her intuitive knowledge of what to do for the sick boy, would do credit to a person of better education and experience, and is very surprising to me, when contrasted with her performances, which I find myself incapable of preventing. When she has behaved particularly well, exciting a hope of her becoming eventually quiet and domesticated, she is sure to follow her good behavior by some most objectionable action. She has scaled the roofs of the house and all the outbuildings, is familiar with the tops of the trees, and a few days ago was seen by one of the neighbors hanging from the window of her room, holding fast to the sill with both hands, and with a rope attached to her waist, which, as afterward appeared, was fastened at the other end to her bedstead. I attempted to frighten her in regard to her danger, but do not think I succeeded. I sometimes fear that my theory of "like mistress, like maid," will not bear the test of practice.

July 9.—I have remained at home from church to-day to keep some kind of order in the house. It being a leisure day for the Irish, there has been a concourse of them in sight all day. The boy's mother has the charge of him to-day, and seems grateful for what we have done for her son. A most suspicious number of *cousins* has called to make inquiries, in hopes of coming into the house, but Mrs. Mahony makes a great and apparently an unexpected show of indignation, greeting nearly all the cousins with the same firm "Arrah, an' now do ye think I would be imposin' upon the docther an' his lady by allowin' ye to be overrunnin' the house; and whin, too, I know it's the binnyfishil thing for the bye to be quite." Probably, if the boy were at home, there would be little recollection of the necessity of keeping him "quite."

July 11.—A most unexpected event has occurred. A letter came last evening telling me at the same time of the death of Aunt Betsey in Illinois, and of her having left me the whole of her large property. The only stipulation that she made was that I should use the property as nearly in accordance with her own manner of employing it as possible. By this she meant that I should spend a good portion of the interest of the property in personal charity. I trust that I may assume the responsibility with the right spirit. My love of and respect for good Aunt Betsey will help me to imitate her example. The property is in such a form that we shall be obliged to go to Illinois to attend to it, and shall start as soon as the Irish boy can be removed to his own home. Dr. Moody will take charge of Henry's patients during our absence.

A Dog for a Melancholic Man.—Next to a merry child, we do not know so good and healthful a companion for a melancholic man as a dog. He does not call over the roll of your ails with dolorous intonation, nursing and petting them by recital, nor does he answer you by combatting your splenetic fancies. He just ignores them so innocently that you ignore them too. If, after a convivial evening, you awake with a pound of lead in the epigastric regions, spiders in your eyes, and mephitic vapors coiling through your brain; if the day looks cold and dark and dreary, and you feel half inclined to try the "bare bodkin" remedy, rather than grunt and sweat under a weary life, just draw on your clothes and open the door to your dog. See what a delirious good morning he has for you. How he leaps upon you, and sprinkles you all over with cool, fragrant dew, which he has brushed from lilacs and violet borders! How his eyes flash, and his tail wags like an excited pendulum.—*Ex.*

Digitized by Google

The Various Kinds of Longevity.

BY E. RAY LANKESTER, B. A., OXFORD.

GREAT as is our ignorance with regard to longevity in all that relates to accuracy and detail, yet there are a few patent facts within every one's experience which it is well to consider at once. Firstly, various individuals enjoy various durations of life. That men, cats, mice, bees, and buttercups live for different periods of time, is matter of experience; and not only this, but all men do not live equally long, nor all cats, nor all bees and flowers. Hence every individual has its own longevity, if we understand that term to mean duration of life. On looking a little further, we readily discover that there is a closer agreement as to duration of life (though we can not deal with accurate numbers) between the individuals of the same species than there is between the individuals of different species; and though the individuals of the same species exhibit great variation in their length of life, yet there is a probable duration which characterizes the species, and is the same, therefore, for all the individuals. We thus, then, have *individual* and *specific* longevity. But when we try to form some more definite notion of this "specific longevity," great difficulties have to be encountered.

By "specific longevity" we may mean the *average longevity* of the individuals of a species—that is, the average duration of life of all the individuals born; and had we data for various organisms as we have for some groups of mankind, we should speak of this period as the expectation of life at *birth*, and could assign to it a fixed quantity, as is done for men. On the other hand, a very different term is that which we usually speak of as the "longevity" of this or that race, family, or species. Howsoever ignorant we are of numbers in this matter, though it is even difficult to define what are the limits of the period to which we refer, yet, in speaking of "longevity" of groups of beings, we usually mean the potential longevity—or "lease of life," as Mr. Grindon terms it—and do not allow the average longevity, affected as it is by disease and accident at all periods of life, to enter into our consideration.

The term "mortality" is usually applied to the question of average longevity, and hence, in accordance with general convention, longevity may be understood to refer to potential longevity. Once for all, here it may be pointed out how slightly these quantities can affect each other, though they are to a certain extent related. Mortality has been largely studied in the case of man, and much more is known of it than of longevity in his case; but among animals and plants generally, vastly important as mortality is in regard to the necessities of life and of organisms, there is as little known as in the matter of longevity. That the average longevity of a group of individuals is but slightly related to the potential longevity, appears from these considerations. From enemies preying upon the "young ones," or from disease, or from a severe struggle for food, or from the accidents of dispersion, vast numbers of the individuals of the group may die at a very early age; those, on the other hand, which do survive, may live to a period of time quite unaffected by the conditions which acted on them in early stages of existence. Thus, from great destruction of young, the average longevity may be brought very low, and not indicate directly at all the potential longevity. It is clear that a very high potential longevity will materially raise the average longevity, while a low one will somewhat diminish it; on the other hand, the chances of life may be the better in each individual of the survivors from the fact that the average longevity has been lessened by the destruction of numbers of the weaker and unhealthy among the young. It is clear that the subject of mortality is so distinct from that of longevity that it can not enter largely into consideration on the present occasion.

While we have fixed terms to give us the means of comparing average longevities, what have we that corresponds in the case of potential longevity?

This matter has not been fixed by any authority, even in the case of man, who is indeed the only animal of which there are sufficient facts known to enable one to use in any way such a definite indication of potential longevity for comparison. Statisticians frame tables for various groups and classes of men, in which the probable after-lifetime or expectation of life is calculated for any given age. The expectation

Digitized by Google

of life at birth obviously indicates the average longevity of the group, but at what period of life does the expectation fairly indicate the potential longevity? It might be answered at once that, as a matter of course, the highest age attained by any individual of the group—that is, the greatest individual longevity, is the measure of the potential longevity of the group; but we must remember, in dealing with a large number of cases, not to mistake abnormal or exceptional cases for normal ones, and not to base conclusions for a group on such cases. In the case of man, as noted again below, this may be of less importance, but with the various organisms of the animal and vegetal kingdoms we can not justly say that the longevity proper to a species is indicated by the greatest longevity attained by an individual of the species. In searching for some terms to be used as indicating the potential longevity where statistics are available (and where they are not, guesses and estimations based on the few existing data must take their place), the probable after-lifetime of an individual, when it has attained the average longevity of the species, might be taken arbitrarily as fixing the potential longevity of the species. But it seems better, though less precise, to use the probable after-lifetime of an individual at that age when it has passed some crisis, such as the maturity of the reproductive organs, or other similar crises, as the case may be, for the purpose of giving fixed terms of comparison as to potential longevity. It is, perhaps, scarcely worth while speculating as to what may best serve this purpose, since in no animal or plant are we in a position to make use of any decision on the matter, and in the case of man it will be seen that it is not much wanted. The day may, however, come when sufficient observations will have been made on lower organisms to render such a fixed point of comparison useful.

Potential longevity differs then in different species (as a glance at the statements as to longevity below will fully prove), and agrees within certain limits in individuals of the same species. Why is this? It is, no doubt, because the particular structure and habits of each species in some way require or entail the particular limit or lease of life. But how is this effected? Does the life of a given species receive its limit simply through the operation of the particular or specific external agencies (to which the species is born and specially constructed to meet) on each individual born? Undoubtedly this is so to a large extent. For man may take an animal lower than himself in the scale of life, or a plant, and by his care and attention, by removing the agencies to which the creature is born, and carefully substituting others, may cause it to live much longer than it could possibly do if left to its natural conditions. Thus, man may take a bird, and by providing it with food, and protecting it from competition with its fellows, from accidents and enemies, from the want caused by weakness in old age, protract its life. Parrots, thus, live even one hundred years, and goldfinches twenty-three, which there is good reason to believe is far beyond their length of life when in a "state of nature." So lions have lived in menageries to be forty to sixty years old (Haller), being fed after the loss of their teeth and the blunting of their claws. Insects have been so kept for three or four years; and many plants by attention are made perennial or biennial, whereas in natural conditions they would be annual. It will probably be admitted that man has this power in many cases without further illustration.

Hence we must again qualify or analyze potential longevity as applied to species; for there is one period which is proper to the species in its normal conditions, which it can not by any struggles of its own extend, hedged in as it is by those very conditions in relation to which it has either been created, or by which it has been evolved. There is a second period which is equally proper to a species (as far as experiments tell us), which man can make evident by removing some of the natural conditions and substituting others, which, however, has its limit, beyond which limit no power that is known can extend the life. The first period may be called Normal Potential Longevity, the second Absolute* Potential Longevity.

Man himself, in his civilized form, is continually bringing his intelligence to bear on his own longevity, thus changing conditions as no other organism can, and consequently in his case normal and absolute potential longevity are merged. It is the development of unprecedented and overpowering intelligence which interferes in the case of man, and separates him in this, as in other matters, so greatly from other organisms. His intelligence enables him to take many precautions with advancing years; it leads him to form communities and organizations in which the active and young protect and minister to the aged. This great peculiarity in man, and the more than specific differences of condition which his all-adapting

* Absolute is used for want of a better term; it is only "absolute" within man's experience.

Digitized by Google

brain renders possible in various groups of individuals with less than specific difference of structure, makes it desirable to consider him apart from the rest of the organized world in such a matter as longevity.

When a man exerts the greatest care to protract the life of certain organisms, he yet finds that death will come and limit the period. There is a limit to absolute potential longevity clearly enough in many organisms, and this limit, which may be termed an inherent one, must, of course, act in limiting normal potential longevity. What is it that constitutes this limit, are all organisms subject to it, and how does it become inherent? It appears that in some organisms we can not clearly say from observation that there is such an inherent limit; in fact, their absolute potential longevity appears to be very nearly practically unlimited; but we may suppose that it has a remote limit which is difficult to observe on account of its distant character. Such organisms are fish, mollusks, large crustacea, annelids, many trees and seaweeds. In other organisms, on the contrary, there is distinctly observable a natural inherent limit to life, which is inevitable, however carefully injurious and destructive influences are kept off, which makes its approach felt with the advance of years, in that state which is called "natural decay" or "senility." Men, other mammals and birds, some reptiles, insects, some lower invertebrata, and many plants, exhibit this condition of things very obviously. In some, as insects, and some low worms and protozoa, the action of this "natural decay" is far more powerful than it is in the other cases, and we see these creatures dying clearly under its influence; in others it is less obvious, and hence we may suppose that in the former group, where natural decay appears to play no part, its apparent absence is merely a matter of degree, and that it is simply reduced to a minimum.

That the time of the on-coming of this period of natural decay—*i. e.*, the limit of absolute potential longevity, varies strictly and largely in different species, and proportionately to the normal potential longevity, is difficult of absolute proof in the absence of experiment; but it will probably be admitted from common experience as to ageing, and some facts bearing on it, which it is needless to particularize, are given in the statements below.

What we are then endeavoring to examine in various species of lower animals and in man—namely, normal potential longevity, varies in accordance with two sets of influences, the external agencies, acting directly on individuals, and an inherent limiting agency. To the first, all organisms are severally subject; the second seems to possess a very small power in some. Both these are hereditary influences, as is implied in their truly specific character; the inherent is so by hypothesis, the external agencies are less obviously so, being indirectly inherited by the transmission of structural capacities and necessities involving the same details of life in the offspring as in the parent.

Not less hereditary is that average longevity which was spoken of as constituting the study known as "mortality." It, equally with potential longevity, is a specific character as truly as a tuft of feathers or an additional antennary joint, and is determined by the reciprocal relations of the "environment" and the "organism," and with a constant organism it can not vary, while, if the "environment" is not constant, the organism must become a new species on the evolution hypothesis, or cease to exist on the special-creation hypothesis, being no longer fitted to its conditions. The close relation of the average longevity to the welfare of the species is seen in cases where man has interfered with this quantity, as in game-preserving. Gamekeepers killed "vermin," *i. e.*, hawks, weasels, foxes, etc., which were in the habit of diminishing the average longevity of the grouse by destroying weakly birds. The vermin being destroyed, the average longevity was unduly raised, and as a consequence we had the grouse disease, which threatened the extinction of the species. Other such cases might be actually pointed to or conjectured.*

We have then these three quantities of life—the normal, the absolute, and the average longevity, each one of which, in its unequal distribution, we are entitled to assume, is fitted to the requirements of the specific organism, either by special design, or by the gradual evolution of relations. By inquiring what the correspondences are, we may endeavor to frame some general propositions as to the causes affecting longevity, and thus be the better able to examine the question of man's longevity. It is seldom, on account of the small knowledge available, that the term "absolute potential longevity" will have again to be used.

*Such, for example, are the diseases of domesticated animals, and of civilized man himself. The incapacity of some plants and animals to become established in a new country may be attributed, in many cases, to the absence of some cause—nature's sanatory police—which would check undue average longevity, and thus maintain a healthy stock.

Digitized by Google

The Wooing.

UP among the apple flowers
Bessie whiled the April hours.

O'er her head the pink and white
Wove a diadem of light;

But it told no fairer grace
Than the blushing maiden's face.

Now and then the branches stirred
At the breezes' whispered word.

Now and then, in fragrant showers,
Dropped the petals from the flowers.

Once there came an ampler fall,
With its sweetness showering all;

And, like mimic storm of snow,
Fell the flakes o'er all below.

Down upon her open page
Floated soft the mute message,

And with finger at the place,
Gazed she down, and saw a face—

Saw a face that sent sent a glee
Through her dreaming reverie.

With a smile she tapped the limb,
Leaned, and thus she spake to him:

"Sir, and if it pleaseth thee,
Come up here and sit by me."

Lightly climbed he up the ladder,
Smiling, seated him beside her.

Long they sat there, hand in hand,
Whispering in accents bland—

Whispering things I do not know;
It might be—traffic; I don't know.

Bessie had a fair-haired brother;
Never sister loved such other.

Laughing as the bob'link was he,
Busy as the honied bee;

Roguish as the squirrels gay
That chase the sunbeams all the day.

Digitized by Google

As they sat, there came a sly
Boyish hand and merry eye.

Down in much surprise looked they,
Saw in laughter float away

Flaxen curls and footsteps small,
Dimpled cheek and ladder—all.

Long they sat there, hand in hand,
Whispering in accents bland—

Whispering things I do not know;
It might be—love; perhaps 'twas so.

With a mild and noble mien
Walked the good man, slow, serene;

Like one in a pleasing dream,
Strolled he through the sunset's gleam,

Clasped behind his manly hands,
And anon he stops and stands;

Hears the robins in the trees
As they load the evening breeze

With their melody of song,
Ere the shadows steal along.

And in wonder noticed he—
Ribbons in the apple tree;

Faces, too, which in surprise
Gazed into his sober eyes.

Then his thoughts were backward thrown
O'er the primrose long o'ergrown,

Long o'ergrown by poplars white
And syringa's mellow light.

As the ferns their details throw
O'er the purling brook below,

Thus a vision of the past
O'er his memory's page was cast,

And obedient to the fates:
"Come, my children, supper waits."

Once the moon was new again,
And the lovers questioned: "When?"

And they sought the mother's aid,
"Why should longer be delayed?"

And the mother smiled and said:
"I am ready—thou may'st wed."

Digitized by Google

Then they begged her, "When?" and "Where?"
"When?" she asked, "I do not care;

"Where?"—and at that queried word,
The brother's bird-like voice was heard—

"Where?" and with a laugh quoth he,
"What sayest to the apple tree?"

HOUGHTON.

Hints about Thought.

BY F. B. PERKINS.

TIMES without number has Bacon been quoted, sometimes correctly and sometimes wrongly, as follows, however, and the words are accurate:

"Reading maketh a full man, conference a ready man, writing a correct man."

Very well so far, old friend; now have you nothing to say about Thought?

He has, elsewhere; abundance of it. So have (literally) thousands of other writers. Yet is the just consolation of every new author that new treatment is far more agreeable than new matter. So that, provided even a half-dozen of paragraphs come with freshness and vitality out of one's mind, he need not be troubled because abler men have handled the same subject daily for three thousand years and more.

Three hints about thought are far more likely to do good than three libraries, even if but one out of the three be really practical, and though not one be new.

Practically, it is experience that furnishes thought. It is fortunate that mere common sense, or instinct, if you choose to say so, develops whatever thought is necessary for common life. The farmer, the merchant, the lawyer, find no need of being taught to consider what they want to consider, any more than of being taught to eat what they want to eat. They require to be brought up in decent, good habits—that is all. Metaphysics is a science of mental operations; and perhaps the best book in the world on the subject is one that I possess; first, because it is so short—it is only a little 18mo. of about a hundred pages; and second, because it shows "The *Nullity* of Metaphysics" (*i. e.*, of their received methods). Besides, any body who has studied the history of mental science knows that it is the most nearly barren in proportion to extent and zeal of cultivation of any field of human study. It is a flat sand. Innumerable men have drawn diagrams on it, but the wind has smoothed them, or the next comer has erased them and substituted his own. You can trace the effects of theological systems, and of political ones. Government, fertility, population, have advanced or receded, according to the operations of a creed or a platform. But who can show a ruler, a city, a human being, a tree, a penny, the more or the less, the better or the worse from Des Cartes's laborious treatise of "How to Conduct One's Reason," from Locke's treatise on "The Human Understanding," from Dugald Stewart's "Philosophy of the Human Mind," from Sir William Hamilton's great discovery of "The Quantification of the Predicate?"

Metaphysics are the barren, double-petalled blossoms of the mind. By the necessity of their being, what enables them to be showy prevents them from being useful. They leave neither seed nor fruit.

What is to be of use as regards thought must, I believe, have an ethical character in most cases. Thus, the notions I set out to submit are as follows:

Leaving out the concerns of every man's own daily business, it is worth considering that the chief objects of thought may be called three.

1. An end—to know the truth.
2. First means—by tracing cause and effect.
3. Second means—by comparing and generalizing.

And it is obvious that a search after truth must have a moral quality as well as a mental one. No man of a naturally deceitful character can succeed in such a pursuit, or teach success to others; nobody can point out any such person who ever has. And yet the cheat needs

Digitized by Google

know the truth as much as the honest man. It is in their dealings with it that they differ. One seeks it as a diamond, to possess; the other watches for it as for a snake, to avoid.

Now, presumptuous as it seems, I must suggest that Lord Bacon's proposition is extremely erroneous. Whatever he has said elsewhere about thought, neither the sentence I have quoted, nor the "Essay of Studies" from which it is taken, have any thing about thought in them, except indirectly. And, in the second place, writing does not distinctively make a correct man. Reading is exactly as necessary, conference is exactly as necessary. Each of them trains in what is equally indispensable to correctness.

Reading giveth facts; conference compareth and correcteth judgment; writing classifieth and crystallizeth conclusions; reflection fuseth and rectifieth and judgeth all, and prepareth to continue and renew the usefulness of all the rest. I fear not to compare that recipe with Lord Bacon's, so far as practical usefulness is concerned. Nor am I presumptuous in doing so, any more than I should be in claiming to know a better way to make some experiments in natural science.

In the noble "Essay of Truth," which is the first of the series, the same great man observes, with paradoxical shrewdness: "A mixture of a lie doth ever add pleasure." Is this true? They say that nutriment too concentrated is not healthful; that meal, for instance, extended with mere chopped straw or bran, say to the quantity of twenty pounds, nourishes a horse more than twenty pounds of pure meal. Is falsehood a stimulating bran for the mind?

But how much clearer and higher is that sentence a little further on in the essay: "Truth, which only doth judge itself, teacheth that the inquiry of truth, which is the love-making or wooing of it, the knowledge of truth, which is the presence of it, and the belief of truth, which is the enjoying of it, is the sovereign good of human nature."

Neither the correctness of the thought, nor the profound strength of the similitude twined with it, can be mended, I believe.

For using either of the two means which I suggested, and for attaining their end, no one quality is more necessary than independence.

Let me now try to furnish an instance which shall a little illustrate the incomplete frame of imperfectly stated propositions above laid down.

What is the truth about the French and German war?

Evidently, one needs to know something about the character of the two peoples and of their governments; something of their history; something of human nature at large, and of European history at large, before having the material for an independent, intelligent judgment. That implies not merely the examination of a few books now, but a competent course of historical reading. This will show that the Germans are (as between the two nations) educated, the French not; that the Germans are free (comparing the two always), and the French not; that the Germans have been governed (recently) with a view to their good as a people, the French not. What is probable, now, of two nations, who compare thus, on the point of right and wrong? I answer, the Germans are most likely to be right. As between equal numbers of men, which are likely to be strongest? The Germans.

Thus far the facts are accordingly. But there is little risk in trying a little further. Which of the two people is likely to be able to run a republic? The Germans.

Are the French in a condition to carry on a republic at all? No.

What is their probable near political future? An effort to live as a republic, which will break down after more or less time, and will be succeeded by some form of monarchy.

But many people believe the French Republic would succeed this time?

No. They haven't republicans enough to fill a hackney coach, and amicably agree upon the directions to the driver.

What is a republican? He is *not* merely an individual who is allowed to vote. He is an individual intelligent enough and good enough to be entitled to vote; sufficiently confirmed in self-control to substitute that self-control for a law driven on to him from the outside, like a hoop on a bursting barrel; and, by virtue of his ability to control himself, fit to meddle with the control of others. Republicans are made, not born.

It will take weeks to show whether some of those judgments are right, and years, perhaps, for others. I wonder if any body who reads them will remember them? Taken together, they illustrate the notion of tracing cause and effect (viz., in the result of the past experience of the two nations on their present state); of my notion of comparing and generalizing (viz., in my balance of conclusions about two such nations); and even further, in an attempt to determine a future state of things—that is, to divine a future truth, with reasonableness enough to make it fit for a sensible man's belief.

Digitized by Google

STUDIES IN HYGIENE.

THE SANITARY CONDITION OF SCHOOLS.—It is well known that in many cases our schools are foci of contagion, and the means of spreading contagious diseases. Children are frequently sent to school, not only from families where contagious diseases are present, but actually with disease upon them. No trouble should be spared to prevent this, and if necessary a law should be enacted preventing those who are infected from thus spreading around the destructive diseases. Nor is this all that is required. The schoolrooms should be well ventilated, clean, and not overcrowded. Every school should be placed under the superintendence of the medical officer of health of the district in which it is placed, and he should report periodically to the School Board on the state of the school and on any departure from sanitary rules. Cleanliness should especially be encouraged and insisted on among the children attending the school, and, if no means exist at home, baths and lavatories should be provided at the schools.—*E. L.*

So says a well known English writer on hygiene. The same general principles are quite as applicable in America.

FEWER BORN, BUT MORE SURVIVING.—We look around us and see many invalid or childless women. We say, "The Pilgrim mothers were not like these." Perhaps not, for if so, those who are now called the Pilgrim mothers would have died before reaching that dignity. Is it better for the race that a girl should die of small-pox in childhood than that she should live to be married and have but two children instead of a dozen? We cheat ourselves by this perpetual worship of the pioneer grandmother. How the young bachelors who write dashing articles in the newspapers denounce their "nervous" sisters, for instance, and belabor them with cruel memories of their ancestors. "The great-grandmother of this helpless creature, very likely, was a pioneer in the woods; reared a family of twelve or thirteen children; spun, scrubbed, wove, and cooked; lived to eighty-five, with iron muscles, a broad chest, and keen, clear eyes." But no one can study the genealogies of our older New England families without noticing how many of the aunts and sisters and daughters of th imaginary Amazon died young. I think the may be the same difference between the hous holds of to-day and the Puritan household that there is confessedly between the Americ families and the Irish; fewer children are born but more surviving.—*T. W. H.*

VENTILATION IN LECTURE ROOMS.—The gentleman who introduced Miss Anna E. Dick inson, on the occasion of her recent lecture Steinway Hall, in requesting for her a fair an patient hearing, cited a recent case in whic several of the audience had—improperly, as h thought—left the hall before the completion o the lecture, and reminded his hearers tha Wendell Holmes, after personal examination had once ascertained the cause of a similar phe nomenon to be a full brain. But there are tw sides to this matter, and the hearers, who pay handsomely to be entertained, have rights a important as those of any lecturer. A polite audience will consent to sit quiet, even when uninterested, if they are comfortable. Make them uncomfortable, and there is an end of forbearance. When Senator Sumner delivered his address at Steinway Hall on the 1st inst., it was disgracefully close, and the majority of his hearers, who sat in the body of the hall, were restless, drowsy, and miserable. To sit still for an hour or two, under such circumstances, is simply to feed the mind at the expense of the body. It is a species of mild debauchery, for which one is sure to suffer in the flesh next day. Yet if a man, to relieve his oppressed lungs, goes out, he is uncharitably accused of having a full brain, or of being ill-bred or offended. It should be superfluous, and yet it appears to be necessary, to remind lecturers and lecture-room managers that an essential element of success to their entertainments is the infusion of the pure air of heaven into their halls.—*Tribune.*

PREVENTING SCARLET FEVER.—The prevalence of scarlet fever in England is so great that great attention is being paid to the means by which it is propagated. Among other things the laundry is challenged; and the suggestion of danger in this direction is well worth careful consideration. Clothing is infectious, and the infection may be communi-

Digitized by Google

ol unless the greatest care is taken to disinct, and to keep suspicious clothing from conct with others in the wash, whether at public private laundries.—*Christian Union.*

THE HERALD OF HEALTH has within the past w years published a large number of carefully repared papers on preventing and curing scarlet fever. We call special attention to the one the January number for 1871.

STUDENTS NOW AND THEN.—There are ndoubtedly many moral and physiological ins committed, tending to shorten and weaken life; but the progress of knowledge more than counterbalances them. No man of middle age can look at a class of students from our older colleges without seeing them to be physically superior to the same number of college boys, taken twenty-five years ago. The organization of girls being far more delicate and complicated, the same reform reaches them less promptly, but it reaches them at last. The little girls of the present day eat better food, wear more healthful clothing, and breathe more fresh air than their mothers did. The introduction of india-rubber boots and waterproof cloaks alone has given a fresh lease of life to multitudes of women who otherwise would have been kept housed whenever it so much as sprinkled.

It is desirable, certainly, to venerate our grandmothers, but I am inclined to think, on the whole, that their great granddaughters will be the best.—*T. W. H.*

TOOTH WASH.—The mouth has a temperature of ninety-eight degrees, warmer than is ever experienced in the shade in the latitude of New England. It is well known that if beef, for example, be exposed in the shade during the warmest of our summer days, it will very soon begin to decompose. If we eat beef for dinner, the particles invariably find their way into the spaces between the teeth. Now, if these particles of beef are not removed, they will frequently remain till they are softened by decomposition. In most mouths this process of decomposition is in constant progress. Ought we to be surprised that the gums and teeth against which these decomposing or putrifying masses lie should become subjects of disease? Much has been said *pro* and *con* upon the use of soap with the tooth-brush. My own experience, and the experience of members of my family, is highly favorable to the regular morning and evening use of soap.

Castile or other good soap will answer this purpose. (Whatever is good for the hands and face is good for the teeth.) The slight unpleasant taste which soap has when we begin to use it will be unnoticed. You have observed upon the teeth a yellow deposit, sometimes a black substance near the gums. If you examine either of them with a strong microscope, you will find it all alive with animalculæ. These small animals live, keep house, and raise families of children, and die in your mouths. Nothing that can be safely introduced into the mouth checks them like soap.—*Medical Investigator.*

We would ask the writer of the above if he has examined the deposit on the teeth with a microscope for animalculæ? We do not doubt but living creatures are sometimes found in the tarter of the teeth, but it is far from being general. The importance of cleaning the teeth after each meal, however, is none the less, even if living creatures are never found in the tartar of the teeth.

WOMAN'S WORST ENEMY.—Of the worst foes that woman has ever had to encounter, wine stands at the head. The appetite for strong drink in man has spoiled the lives of more women—ruined more hopes for them, scattered more fortunes for them, brought to them more shame, sorrow, and hardship—than any other evil that lives. The country numbers tens of thousands—nay, hundreds of thousands—of women who are widows to-day, and sit in hopeless weeds, because their husbands have been slain by strong drink. There are hundreds of thousands of homes, scattered over the land, in which women live lives of torture, going through all the changes of suffering that lie between the extremes of fear and despair, because those whom they love, love wine better than they do the women they have sworn to love. There are women by thousands who dread to hear at the door the step that once thrilled them with pleasure, because that step has learned to reel under the influence of the seductive poison. There are women groaning with pain, while we write these words, from bruises and brutalities inflicted by husbands made mad by drink. There can be no exaggeration in any statement made in regard to this matter, because no human imagination can create any thing worse than the truth, and no pen is capable of portraying the truth. The sorrows and the horrors of a wife with a drunken husband, or a mother with a drunken son, are as near the realization of hell as can be reached in this world, at least. The shame, the indignation, the sorrow, the sense of disgrace for

Digitized by Google

herself and her children, the poverty—and not unfrequently the beggary—the fear and the fact of violence, the lingering, life-long struggle and despair of countless women with drunken husbands, are enough to make all women curse wine, and engage unitedly to oppose it everywhere as the worst enemy of their sex.—*Dr. J. G. Holland.*

Overtaxing Children's Brains.—The extent to which over-mental strain is injurious to the young varies according to the kind and character of work. The endeavor to fill the minds of children with artificial information leads to one of two results. Not frequently in the very young it gives rise to direct disease of the brain, to convulsive attacks, or even to epilepsy. In less extreme cases, it causes simple weakness and exhaustion of the mental organs, with irregularity of power. The child may grow up with a memory taxed with technicals, and impressed so forcibly that it is hard to make way for other knowledge, and added to these mischiefs there may be, and often is, the further evil, that the brain, owing to the labor put on it, becomes too fully and easily developed, too firm, and too soon matures, so that it remains throughout manhood always a large child's brain, very wonderful in a child, and equally ridiculous in a man or woman. The development in an excessive degree of one particular faculty is also a common cause of feebleness.—*Dr. Richardson.*

Potatoes Baked *vs.* Boiled.—The object of cooking and preparing food should be that of rendering the articles of diet valuable as nourishment to the organs and tissues of the body. But how few cooks understand the best methods of preparing nourishment that it may be easily digested and subserve its purposes. Take, for instance, potatoes, which are a common article of diet, particularly among the poorer classes. The ordinary method of cooking them is to boil them in water, mash, and prepare for the table. Now the nutritive properties of the potato consist mainly of starch and earthy salts, such as potash, soda, lime, etc. By boiling in water the salts are mostly extracted, as is shown by analysis of the liquid—that each pound of the potato, when boiled until it is soft, yields fifteen or twenty grains of potash, and a small qantity of lime and soda. These salts are essential to the blood in order to maintain it in a healthy condition; so in order to get the full benefit of the potato thus cooked, it would not only have to be eaten, but the broth to be drank. A potato, then, to nutritious, should be baked in a hot oven, eaten as soon as it is soft.—*Dr. Paine.*

Potatoes boiled with care, and taken from pot before they are cracked open, do not very much of their nutritive value, though true that they do lose some. We do not lieve, however, that the loss is so serious as Paine thinks. There are some potatoes t are unfit to eat when boiled, yet when ba they are excellent.

Relative Temperature of the Rig and Left Sides of the Trunk.—Observati have been made by Edward T. Blake, M. B. corroborate, if possible, the views expressed him in a letter written last June. From exp iments on himself and others after exercise, arrived at the following results: 1. The te perature of the two sides of the trunk un usual circumstances—that is, in health and rest, in a temperate climate—is equal. 2. U der certain conditions, as exercise, the temper ture of the left side of the trunk may exce that of the right side. 3. The excess duri exertion, in a cool atmosphere, averages half degree Fahrenheit. 4. The excess reached maximum—about one degree Fahrenheit—du ing exertion in a powerful sun.

Smoking Against One's Will.—To bacco smoke, examined by the microscope, w seen to hold little globules of nicotine twirlin and flitting about in it. The statement is mad by Dr. Sigerson that "some remained on th walls of the mouth; when the smoke is breathe (by novices) more globules are retained in th lungs, and nausea and illness supervene. Thes globules, if found in the air distributed by tobacco smoker, might be taken for germs."

So says an eminent microscopist and hy gienist. It is unfortunate that those who d not wish to smoke can not well help themselves Smokers are not usually so thoughtful of th rights and feelings of others as they should be The inconvenience and suffering they occasio to others is far greater than they imagine Can they not remember the rights of others a well as their own?

A Gigantic Mushroom.—Dr. Wil witsch (The Food Journal) has recently met in Africa with an enormous edible fungus. It is said to be as large as an umbrella, a single one sufficing for the supper of twenty men. The flavor of the flesh is very delicate. In the Præsidium of Bong-Andongo the plant is sold in market at 1*s.* 3*d.* apiece. Persons who ca

Digitized by Google

mushrooms should be careful and choose only those varieties that are not poisonous. Their number is few. Mushrooms have no great nutritive value, nor are they very delicious—still, for variety, they may be useful at times.

A HINT TO WATER-DRINKERS.—Nearly three years ago, Mr. S. Dana Hayes, State Assayer and Chemist of Massachusetts, had occasion to investigate the causes leading to the very rapid corrosion of the metallic ice-water pitchers which were made at that time in immense quantities, and of which large numbers are still in use, though they are being gradually supplanted by those lined with glass or enamel. He was then surprised to find them, to say the least, such a source of danger; and since that time he has seen several cases of lead poisoning attributable to no other cause than the use of water from these metallic pitchers. These pitchers, as is well known, are formed with double walls. The outer case and the side walls are of Britannia metal, and the bottom of German silver or copper soldered to the sides. The whole is more or less thickly electro-plated with silver inside and out. Now, when the inner chamber is filled with "common alkaline, aerated, or other corrosive water," it becomes a mild galvanic battery, increasing in power with usage, the sides being composed of tin, antimony, and copper, and the bottom of copper, or of copper, zinc, and nickel together, while the solder is composed of lead and tin. Of course, in such a state of affairs, the lead of the solder is readily attacked; and the author found a large amount of this metal in water which had been allowed to remain 12 hours in an old pitcher, though the water used, being from the Cochituate, was comparatively pure. One pint of water, after one hour in the pitcher, contained perceptible traces of lead. After four hours it contained 0.35 grains; after twelve hours, 0.80; after twenty-four hours, 1.45 grains. The author draws attention to the fact that this was equivalent to 2.80 grains per gallon, even at the end of four hours, while less than 0.01 grain per gallon has injuriously affected health, and cites this as another proof of what M. Gueneau de Mussy insists upon—namely, "That contact, even mediately, between lead and other metals should be avoided in the construction of all reservoirs destined for the conservation of water for family use.—*American Chemist.*

Our readers who buy pitchers for ice-water should see that they are lined with non-metallic and non-corrosive substances. Glass is best.

SOFT WATER.—This is water that gives a feeling of softness in washing, from the absence of certain mineral substances, which render it rough or hard. Rain water may be taken as a fair example, for, when caught in the open country, it is the purest water that Nature provides. It is not entirely free from foreign matters, however, for, as it falls through the air, it absorbs oxygen, nitrogen, carbonic acid, ammonia, and organic substances, and also washes out any impurities which the atmosphere may happen to contain. Thus, in the vicinity of the ocean the air contains traces of common salt; in the neighborhood of cities, various saline, organic, and gaseous impurities, while dust is raised from the ground and scattered through it by winds. These are all rinsed out of the air by rain. In passing through it, water becomes highly aerated—that is, acquires an atmosphere of its own, which contains from ten to fifteen per cent. more oxygen than ordinary air. This gives to water its agreeable taste.

Soft water, which is free from dissolved mineral matters, makes its way into organized tissues with much more readiness than hard water. It also exerts a more powerful solvent or extractive action, and is thus a better vehicle for conveying alimentary substances into the living system. In culinary operations, where the object is to soften the texture of animal and vegetable compounds, or to extract from them and present in a liquid form some of their valuable parts—as in making soups, broths, stews, or infusions, as tea and coffee—soft water is much to be preferred.

In consequence of its aeration, rain water is both healthy and pleasant as a beverage. The greatest benefits have resulted in many cases from its use, where the spring and well waters were largely impregnated with earthy salts.—*W. J. Youmans, M. D.*

TEA-TASTERS.—The avocation of a tea-taster is to take a sip with a quick inhalation, and thus a small shower of fine tea-drops enters the lungs. On examination, a considerable quantity of tissue from the leaves is found, which aids to tease the lungs. But the real agents of mischief are numerous little drops of essential oil, very plentiful in Assam tea, and are particularly severe. Nausea, derangements of the nerves, and sometimes syncope afflicted them.—*Scientific Review.*

Tea-tasters are, as a rule, short-lived and nervous. Their occupation is at variance with all the laws of health, and their sufferings are proportionate.

Digitized by Google

RECIPES FOR WHOLESOME COOKING.

PIES.

PIES, as commonly made, are any thing but wholesome; they form inferior kinds of food. Made as they should be, they are both wholesome and delicious. The best of all pies is made from the apple. The crust should be thin, the fruit good pie-apples, and plenty of them, put between the crust. Where the two crusts meet on the edge of the dish, care should be taken to have the apples pressed out, so that there shall not be a wide strip of thick crust with no apples near them. An apple pie should be eaten just after it is cool. If eaten while hot, it is apt to go down only half masticated, and the effect of the heat on the tongue tends to destroy the finer sense of taste. After an apple pie is one day old it begins to grow stale, unless it is kept with great care. Soyer, the famous London pie-maker, thinks that if all the spoilt pies made in London on one single Sunday were placed in a row beside a railway, it would take an express train an hour to pass them in review. In cities many pies are spoilt every day, mainly because badly made. Whoever will induce bakers to improve their methods of making them, will be a public benefactor. The usual price for a piece of pie in a New York restaurant is ten cents. They could be afforded for half that price, at a profit, too, if there were no spoiled pies.

PIE-CRUST.—In Mrs. M. M. Jones's excellent "Hygienic Cook Book," are a large number of recipes for making pies and pie-crust. We extract two of the recipes for the latter.

POTATO PIE-CRUST.—Boil one quart dry, mealy potatoes. The moment they are done mash them, and sift through a collander. Stir thoroughly together one cup of graham flour and one cup of white flour, then add the potatoes, rubbing them evenly through the flour in the same manner as the shortening in common pie-crust. Have ready one cup of corn-meal; pour over it one and one-third cups of boiling water, stirring it till all the meal is wet, then add it to the potatoes and flour, mixing only till thoroughly incorporated together. No more flour should be added. The molding-board should be well covered with dry flour, however, as it is slightly difficult to roll out. It should be rolled very thin, and baked in a moderate oven.

It is very essential that the above conditions should all be complied with. Bear in mind that the potatoes must be *hot*, and mixed immediately with the flour; the water be poured, while *boiling*, upon the corn-meal, and the whole mixed together very quickly and baked immediately. Inattention to any of these requisites will be quite apt to insure a failure.

CREAM PIE-CRUST.—Take equal quantities of graham flour, white flour, and Indian meal; rub evenly together, and wet with very thin sweet cream. It should be rolled thin and baked in an oven as hot as for common pie-crust.

This makes excellent pastry if properly baked. Many patients have said to us they did not see how they could ever again relish the pastry in common use (this is so much sweeter and more palatable, to say nothing of its wholesomeness). It is more generally relished than the potato crust.

Mrs. Jones gives the following method for making

SOUR APPLE PIE.—Take nice tart apples—spitzenbergs are best, although pippins, greenings, russets, etc., are excellent; slice them; fill the under-crust an inch thick; sprinkle sugar over them; add a spoonful or two of water; cover with a thin crust, and bake three-fourths of an hour in a moderate oven.

A Health Cook Book published in London gives the following recipe for

APPLE PIE.—Peel and cut about two pounds of apples, sharp ones being the best for the purpose; cut each into four pieces, removing the cores; then cut each quarter into two or three pieces, according to the size. Put half of them into a pie-dish, slightly press them down; put over them two ounces of brown sugar; put in the remaining apples; then add another two ounces of sugar, making the apples form a kind of dome, the center being two inches higher than the sides; add a small wine-glass of water; cover the top with paste, and bake in a moderate oven from half to three-quarters of an hour.

The recipe which follows is for making a species of apple pie, or apple cake, as it is sometimes called:

APPLE CAKES.—Mix unbolted wheat or rye-meal with cold water, making a dough or batter soft enough to nearly level itself. If shortening is desired, use sweet cream or butter. Fill a rather deep pie-plate about a third full of the batter, and sprinkle over a little sugar. Wash, quarter, and core tart apples, and place as many in the batter (skin side up) as it will hold. They may be pressed down and leveled with a stiff spoon. Over the top sprinkle some sugar, and bake till nicely brown.

This cake is both wholesomely nutritious and delicious. Children and grown folks can eat of it freely without danger of injury.

We purpose in THE HERALD OF HEALTH for 1871 to devote considerable space to recipes for wholesome food, and we invite our friends everywhere to send us those which they know to be good, that we may place them before our large circle of readers.

Digitized by Google

EDITORIAL DEPARTMENT.



NEW YORK, FEBRUARY, 1871.

WATER.

"To the days of the aged it addeth length;
To the might of the strong it addeth strength;
It freshens the heart, it brightens the sight;
'Tis like quaffing a goblet of morning light."

☞ THE PUBLISHERS *do not hold themselves as indorsing every article which may appear in* THE HERALD. *They will allow the largest liberty of expression, believing that by so doing this magazine will prove to be more useful and acceptable to its patrons.*

☞ *Exchanges are at liberty to copy from this magazine by giving due credit to* THE HERALD OF HEALTH AND JOURNAL OF PHYSICAL CULTURE.

TOPICS OF THE MONTH.

BY M. L. HOLBROOK, M. D., EDITOR.

THE BEST GOVERNED PLACE IN THE WORLD.—There is a paragraph going the rounds of the papers, to the effect that at the Industrial Exhibition in Paris, a few years ago, 20,000 francs were awarded to Vineland, N. J., for being the best governed town in the world. It is claimed that the secret of this good government arises from the fact that no alcoholic drinks are sold, or consumed there. If total abstinence has done so much for the order and peacefulness of Vineland, what would it not do for New York? Is not the experiment worth trying? If it should prove a success here, all the cities and towns on the continent would adopt it. People who drink liquor to any extent rarely get on in the world. The dramsellers' till catches all their surplus earnings. There are manufacturing houses in New York where the workmen get drunk on Saturday night, and Sunday, instead of being spent in moral and intellectual culture, is spent in dissipation. On Monday, and often Tuesday, the men can not work because of their prostrate mental condition. Thus two or three days are lost, beside the loss of earnings which ought to be put in a savings bank to accumulate for investment in a home, and the loss of self-respect, health, and the confidence of friends. The greatest sufferers from drink are the poor; drink keeps them poor They can no more rise with the weight of drinking habits on them than a bird could rise in the air when chained to a rock, or a man can swim with a mill-stone around his neck. With extensive knowledge of those who drink liquor, and those who do not, we have no hesitation in saying that the most temperate people are the most successful in accumulating wealth. In nine instances out of ten we know that the people in New York who can not pay their taxes, their grocers' or board bills, are those who drink. In nine cases out of ten, those who become paupers, thieves, and murderers, drink. In short, drink reduces the wealth, the order, the virtue, the health, the happiness of people, more than all other causes combined.

The example set by Vineland on the question of Temperance, is a royal one. No personal liberty is outraged by the law. Every year the people vote on the subject, and they vote against selling liquor during the coming year, and all peacefully submit to the decision of the majority. In New York this is of course impossible, because the majority is on the other side. The minority submit as gracefully as they can, as in Vineland, except the results are so bad in New York, that Temperance people protest more than they would, if good gov

Digitized by Google

ernment and order resulted from liquor-drinking. The great work to be done in New York, and in all other cities similarly conditioned, is to work to increase the number of Temperance people and a greater interest in the cause. It is a more important subject for agitation than any other. Ordinary politics pales before it. To secure good government is the object of politics. If it can be done most effectually by preventing the sale of liquors, it is a remedy well worth a careful and long-continued trial.

A Meritorious Article.—For numberless years it has been the opprobrium of American cookery that it employed an agent in raising dough that was deleterious to health, and decidedly objectionable to those whose sense of taste is refined and delicate. Saleratus cookery, yellow to the eye and of alkaline taste in the mouth, has long been the target for physicians and hygienists to aim their denunciations at, and deservedly, too. It always takes time, however, to bring about any reform of magnitude, and therefore people have continued to use deleterious alkalies for raising such articles of food as required it, leaving it for the chemist and hygienist to devise something better at their leisure. This has been done by J. Monroe Taylor. His Cream Yeast Baking Powder has been tested by us with great care and used with much satisfaction for over a year at the Hygienic Institute, where a hundred people are fed daily. Our corn gems, and other forms of food made light with it, are the delight of all. Not a particle of alkaline smell or taste is to be found in them; for the article, known as Cream Yeast, is not an alkali, but is made principally from the acids of grapes. It renders shortening almost unnecessary, brittleness and tenderness being secured with half the amount otherwise required. We always intend to use the best and most healthful articles in preparing food for our table, and, unless somebody discovers something better, we shall stick to this. Our kitchen matron says it always produces reliable results. We hope and believe it will speedily take the place of the vile compounds now generally used. W render this tribute freely, as due to a man wh has helped to bring about a reform of gre magnitude, as affecting the health and happ ness of the race.

Miss Garrett.—This accomplishe and wealthy young lady-physician, who reside in London, is deservedly very popular in Eng land, though, like American lady-physician she sometimes meets with opposition and abus She is about twenty-five years of age, has hai as fair as any German maiden, which she wear in neat braids. The abomination of heavy wa terfalls on the back of her head she does no indulge in. Her complexion is clear and beau tiful, her features good, and her expression ex tremely pleasant.

In the sick-room she must prove a blessing She is fond of athletic sports, and so highly es teems the art of swimming, that for six years she made persistent efforts to acquire it. As a member of the school board with Prof. Huxley, her influence will be felt in education. There seem to be some mean spirits in this board, however, for, though Miss Garrett was elected chairman by a large majority, yet, a woman not being eligible to the office, she was prevented from taking the chair. Such is prejudice.

Monopoly by Male Medical Students. An obstacle of a very serious character has been thrown in the way of the women who are studying medicine at the University of Edinburgh. They have been refused admission to the Edinburgh Royal Infirmary, and are thus cut off from the two years' hospital attendance which are indispensable for graduation. This refusal to admit the lady students is flagrantly unjust, and founded on false pretenses; for, as the objections of the five hundred male students to the presence of eight ladies in the wards does not extend to the "mixed audience" of women nurses and women patients, it can not be regarded as other than a subterfuge.

In addition to the ladies' memorial to the

Digitized by Google

managers of the Royal Infirmary, several of the University Professors presented a memorial also to that body on behalf of their lady pupils. They strongly deprecated the exclusion of female students as an act of "practical injustice," and they stated distinctly, that from the experience they had already had of male and female students on the same benches in lectures on Anatomy and Surgery, they find that "in these mixed classes the demeanor of the students is more orderly and quiet, and their application to study more diligent and earnest, than during former sessions when male students alone were present."

The memorials were without effect. The ladies have been excluded by the managers of the Infirmary. No doubt in a few years this proceeding will be viewed in its true light as a base and unmanly monopoly.—*Rebecca Moore.*

As opposition is the life of business, so are the obstacles thrown in the way of woman by the medical schools, nerving them up to greator strength to overcome them.

HYGIENIC HOUSES IN NEW YORK CITY.—I take great pleasure in calling the attention of the readers of The Laws of Life, to this long established Hygienic Institution of Wood & Holbrook, at 15 Laight Street. In company with Miss Austin, and Mr. and Mrs. Johnson, I had, a few weeks since, the opportunity of being there for a few days, and was greatly pleased with the evidences of success of the proprietors in their business. The house, since they took it, is not carried on exclusively as a water-cure or infirmary, but is as well a boarding-house kept in good measure on hygienic principles. The situation for a hygienic boarding-house is perhaps not excelled by any in the city. Central to nearly all the business circuits of the city, it readily accommodates such business men as want to live upon healthful food while in the city.

Growing in popular favor as hygienic ideas are, it is a matter for congratulation to all hygienists that an establishment exists in New York, where they can get well-cooked, yet healthful food, with clean beds and pleasant attention.

Drs. Wood & Holbrook are also owners of THE HERALD OF HEALTH, a very ably conducted and prosperous health journal. They are both comparatively young men, married each to a woman who is in truth a helpmeet to her husband, and are doing great good. Neither the members of my family, nor myself, will soon forget the great kindness shown to us while we were their guests. In the words of Mr. Joseph Jefferson, in his great play of Rip Van Winkle, we all lift our glasses of water and say to Messrs. Wood & Holbrook, "Here's to your health, and the health of your families, and may you all live long and prosper."—*James C. Jackson, M. D.*

A VETERAN IN THE CAUSE.—Mr. A. Morehouse, who has taken THE HERALD OF HEALTH, in all its changes, for twenty years or more, writes thus enthusiastically in renewing his subscription for 1871. Mr. Morehouse fully appreciates the value of a health journal. The monthly visits of such a journal are a constant reminder of the laws of health, and should form a part of the literature of every household quite as much as a political journal, or one devoted to agriculture and horticulture. But to the letter:

"EDITOR OF THE HERALD OF HEALTH—*Dear Sir:* I commenced reading your publication more than twenty years previous to 1871—it was then called The Water-cure Journal. By its teaching I have learned to live without being sick, and I believe it to be one of the best publications I have ever read. I used to be sick a great deal, had some very hard spells, and doctored a great deal; but since I commenced reading your journal I have had no more fevers, nor have I taken any more of what is called medicine. Counting my doctor's bills and the loss of time before I read your journal, it does not cost me half as much to live. I have not taken a dose of medicine for more

Digitized by Google

than twenty years, nor have I been sick a day in the last twenty years, nor have I drank a cup of tea or coffee in twenty years. I am now in my 71st year, and am a farmer, and during the last harvest I worked through the grain and hay harvesting, and did a full hand's work for young men. Some of the young men thought I got along easier than they did. More than half of the time I gathered the sheaves and shocked after the reaper, which I never had a hand do for me, and some of the men said they never saw a person do it before. I will not say any more, as you may think I am bragging.

"Yours truly,

"A. MOREHOUSE."

"TO THE EDITOR OF THE HERALD OF HEALTH—*Dear Sir:* Allow me to inquire through your journal what diet you would prescribe for children from two to ten years of age, of strong mental temperament and slender bodies. I am anxious to know how I can best develop their bodies. My boy of seven years of age takes a number seven hat, and weighs but little over thirty pounds. His general health is much better than it was one year ago. Is there any particular objection to Indian-meal bread or rye bread? I do not like to trouble you, but I am anxious to learn. We do not send him to school now, and keep him out of doors as much as possible in pleasant weather. Why I ask so particularly about corn-meal is this: a phrenologist that lectured here last spring said I ought not to give him corn bread, because it is so heating. He is very fond of it.

"AN ANXIOUS MOTHER."

ANSWER.—Give your children plenty of the best bread and milk. Unleavened wheat-meal bread is excellent. Well made corn-meal bread, rye bread, and oat-meal bread are good. The phrenologist who objected to corn-meal bread did not know very much about bread, we think. Children need abundance of wholesome food. If they can not have it they will be dwarfed and stinted. Good fruit is appropriate, and nuts are not, as many suppose, objectionable.

EDUCATED NURSES.—A late writer in Fraser, discussing the demand for educated women in the sick-room, places the proper maximum price for a skilled nurse at three guineas per day, which is certainly higher than they are at all likely to obtain. "A gentleman who educates his daughter as a nurse," the writer says, "has provided for her future as securely as for that of his son, to whom he has given a profession."

The demand for educated nurses must be much greater in England than in America, or the supply very meager, to allow of such prices as the writer referred to mentions. Three guineas per week is more likely to be the truth. The demand for educated nurses ought greatly to increase. Being more useful than the physician, they will do much to save the lives of the sick, when an ignorant nurse would do harm. Education, however, is not the only qualification needed. Some are good nurses by nature. Healthy and happy themselves, they impart health and happiness to others. As a magnet magnetizes bits of iron with which it comes in contact, so do they magnetize, so to speak, patients for whom they care. If the sick would choose a good nurse, let them do it with reference to natural as well as acquired talent.

A NEW YORK LADY-SURGEON IN PARIS.—Dr. Mary C. Putnam, of New York, is shut up in Paris, and is aiding the cause of France as surgeon. Miss Putnam is the daughter of the well-known publisher of this city. She has been pursuing medical studies abroad for a number of years, and has distinguished herself as a brilliant student and an accomplished woman. If she ever returns to New York, she will be welcomed by hosts of warm and admiring friends.

DIED OF OLD AGE.—In the month of October 309 persons died in San Francisco, California. Of these 107, or over one-third, were under two years of age. In contrast

Digitized by Google

with this excessive mortality of the children is the statement that one person died of old age. There, also, as well as almost everywhere, consumption kills more than any other disease—43 being the number of its victims.

AMOUNT OF WATER NEEDED FOR DAILY USE.—"What amount of water is required daily for the use of an adult person?"

ANSWER—For drinking purposes, from three to five pints. About one-third of this is contained in our food. The balance must be supplied in drink. Women drink less than men, but children, in proportion to their weight, more. In hot weather the amount is more, in cold weather less. In cities the amount required for all purposes usually averages from twenty-five to forty gallons. In New York, where the waste is great, much more is used. In Paris only thirty-one gallons are supplied to each person. It is estimated that in case of scarcity of water four gallons per day would be the least amount that ought to be used, and this would not admit of daily bathing.

While on the subject we may add, that for bathing purposes, the amount of water required varies with the kind of bath. For a full bath in a bathing-tub, a barrel is about the proper amount. For a hand bath six quarts is none too much. For a shower bath five gallons is sufficient, and for a sitz bath three or four gallons may be enough; and for that best of all baths, the Turkish, a barrel of water will be none too much; and even this would have been considered a meager supply by the ancient Romans, who heeded not less than ten barrels per head in their largest baths.

Animals require much water, varying according to size, food used, work done, and other circumstances. A horse requires eight gallons a day. A cow will drink six gallons, a sheep two to three quarts. An ox requires a little more than a cow, a mule a little less than a horse, while an elephant will use up nearly a barrel.

The amount required by sick persons is about double that necessary for well ones.

WHAT IS, AND WHAT CAUSES CONSUMPTION.—It is now an established fact that pulmonary consumption is not primarily a disease of the lungs, but one involving the entire organism of the body, having its origin in defective digestion and the violation of the rules of health in dress, exercise, amusements, etc. In short, every thing that tends to impair the integrity of the body, create debility and disturb the equilibrium of the mental forces, has a corresponding tendency to develop tuberculous or consumptive diseases; hence, reading novels and other fictitious literature that produces a morbid condition of the brain, impairs digestion and tends to develop consumption. So with amusements, theaters, operas, and other places of entertainment that tend to produce a long and continued feverish condition of the mind, withdrawing the vital forces from the digestive and assimilating organs; they weaken the body and develop the disease. A want of proper rest taken at the proper time; occupations that confine persons in a vitiated atmosphere; schools in which the mind is too long kept upon a stretch, and large numbers of children crowded into imperfectly ventilated rooms; the use of pastry, tea, coffee, rich and poisonous confectionery, imperfect dress, too close confinement in-doors, irregular habits, and every other cause that weakens the body and impairs digestion, acts either as an exciting or direct cause of pulmonary consumption.—*Medical Investigator.*

THE HEALTHIEST TOWN IN NEW YORK.—The Cooperstown (N. Y.) Journal publishes a list of the deaths in that town during a year, which is a somewhat remarkable record. It shows that of the 20 persons who have died, 2 being young children, only 7 were under 62 years of age, 10 were 70 or upward, 4 were over 80, and 1 was over 90. The average age of the 20 was 55 years and 1 month; the average age of the 18 adult persons was 66 years and 5 months. The population of the place is 2,000.

Cooperstown may, we think, be considered the healthiest town in New York. If not, we should be glad to know it.

Digitized by Google

How to Treat the Sick.

How to Get the Most Good out of the New Hygienic Treatment.—If I were to say to a seriously sick person, "To get well you must give your mind to it," my advice would doubtless be set down as a piece of gratuitous stupidity by most people, since the general rule is that we behold an incompetent mental condition accompanying complete physical prostration. And that is precisely why so many very sick people can not get well—because they are incapable of giving their minds to it.

But you would see no inconsistency were I to say to the devoted and self-appointed nurse of this sick person, "To get him well you must give your mind to it." Yet, doubtless, under Providence, if nine-tenths of the people who fall ill and die, for lack of proper treatment and good nursing, were to heed the first alarms, which are always sounded a good long while beforehand by the physical system, and in good time give their minds to getting into a healthy natural state again, they would not be reduced to the strait of putting their lives into the hands of the doctor and the nurse. And in a case which is of vital individual importance to you, the will of a third person is never so effective as your own would be.

To do any thing well, you must give your mind to it. People understand perfectly that to learn a language, to engineer a car-load of passengers over a railway, to build a house, or to write a book, you must give your mind to it. But they utterly ignore the application of this great elementary principle to a task which, in proportion, is often as difficult, as delicate, and as complicated as any of these.

The most wonderful machine that was ever created is out of order and needs to be laid up for repairs. In some way, its wonderful motive power has been abused, and it has grown cranky and will not work well. It is good policy to heed the first signs of internal trouble. On with the brakes and run her into some quiet retreat, for an oiling of creaky places, and a general furbishing up, and a leisurely examination of her whole condition. If you are not willing to do this, and if you grudge the time that it takes, you must make up your mind to running off the track at some moment when you least expect it, and certainly to some catastrophe more or less fatal.

There are some people who think that it don't matter how a thing is done, so that the thing is but done; and who have never yet learned that for every thing that is worth doing there is but one way of performance, which is the right way, and that there are no two right ways of doing any one thing. These people will tell you that they have tried the Water-cure on themselves at home, and that there is nothing in it, that it is all a humbug. The truth is, that a successful application of the water treatment requires an amount of experience and a command of appliances not to be compassed by a raw novice, in a private house. The new hygienic treatment is, and professes to be, simpler than the old medical theories; but it is based on principles much more profound than those which have presided over the formation of the materia medica, and it is just about as absurd for any uninformed person to fancy that he can treat with water and electricity, for any serious ailment, with success, as for him to suppose that he could assume the risk of a difficult surgical operation. Indeed, the risk assumed in such cases is very great. An acquaintance of mine had derived great benefit from a season passed in a Water-cure establishment. I believe she was cured there of some painful ailment, and ever after she was enthusiastic in recommending cold wet packs to her friends on the slightest opportunity. One day, going to see a neighbor,

Digitized by Google

she found her flushed and languid, and complaining of dullness about the head; and, delighted to be of use, our amateur doctor at once insisted on being allowed to prepare a cold wet sheet. The sick woman had not been in the habit of using cold water to any great extent, and feebly refused. But at length she was wearied into compliance by her friend's persistency.

The consequence was, that when her husband, who was sent for in a great hurry, came home an hour later, he found her suffering from an acute attack of inflammatory rheumatism; her face red and hot, and her eyes starting almost out of her head. Six months were required to repair the mischief done in one hour by a treatment not adapted to the case and constitution of the patient, and given at a critical period. That this lady should ever afterwards hold all Water-cures in mortal terror, was but a natural result of her experience; yet, doubtless, had the proper Hydropathic treatment been given by an expert, her illness would have been averted and herself greatly benefited.

I am entirely against having people who are not doctors trying to doctor themselves for any serious ailment, and I especially want to discourage any body from trying Water-cure treatment on an extended scale at home, unless they know a good deal about it from experience. If you do not exactly know what to do for yourself, you are just as likely to hit upon the wrong thing to be done as the right thing. You, perhaps, do not even know what is the matter with you, though you fancy you do.

If you are really in a bad state of health, and have decided on water treatment, you should give it the fairest possible trial, as combined with new Hygienic methods, and that you can only do at a good establishment.

I have hinted before that the great secret of getting well is to give your mind to it, while you still possess sufficient vigor to do this; for the furtherance of this end, aside from all medical considerations, it is a wise provision which takes the patient out of the old routine of cares and duties, and breaks the spell which holds his anxious mind chained to his accustomed pursuits, by throwing him among entirely new scenes, and placing upon him new obligations. Indeed this is half the task which is involved in curing a chronic disease. It is impossible to give one's mind entirely to the business of getting well, surrounded by the causes which have induced ill health. The mind is too much accustomed to the tread-mill habits into which it has been forced to be easily coaxed out of them. "I will rest to-morrow; but there is a piece of unfinished work at my elbow which I think I ought to do to-day!" And so it goes on, and to-morrow is like to-day, and one day is but a simile for another. Left to ourselves, we will never take the rest and rightly pursue the treatment which we need, until it is too late to be of any use! And this is what makes a good Hygienic establishment such a capital place for invalids. There you must give your mind to getting well, and your time also; and all temptations to do otherwise is carefully withheld. And this is the great secret of treating chronic disease. If you want to master it you must give your whole strength to the contest.

Abused nature, like a jealous mistress, refuses to share a divided attention. Give her your best endeavors, and she will thrive vigorously.

A man who smokes tobacco, and who pours liquid fire down his throat at intervals, and is given to late hours, must not expect the least benefit from any sort of treatment until he has broken with these three habits. Women need not suppose that they can smuggle in half-bushel chignons and tight corsets, and poisonous cosmetics, and apply them in conjunction with spray douches and full hot baths, with any sort of benefit. You must make your peace with violated Nature, before her chaste handmaidens, the Water-nymphs, can do you any good.

The greatest blessing conferred by the Hygienic routine passed at health institutes, is that it inculcates sound physical habits in the ignorant, and puts the forgetful ones in mind of what they owe to Nature. "Treat her well, and she

Digitized by Google

will treat you well," is the principle on which these establishments are founded. — *Howard Glyndon.*

PAINTER'S CHOLIC.—Being a great sufferer from that dreadful disease, I have thought perhaps a few words about it would not come amiss. Most every one has some remedy that will cure the colic, but after the disease has once got a strong hold of a person I have found there are very few if any of the remedies that will even give relief for the time being. The old idea of drinking whisky and other liquors is all humbug, and many a painter has found when too late that it only made his case worse.

I know of a case, personally, where a man died with the colic just after drinking a lot of whisky. All the medicines the doctors could give him were useless, the whisky benumbed his body, and the consequence was that he died. Drinking milk was recommended to me, and I think if I had commenced when the colic first attacked me it would have saved me much suffering, and perhaps cured it entirely; but I did not commence until after the third "grip." By that time the disease had so firm a hold on me that it was impossible for any thing to have any effect. I drank from one to two quarts of milk per day. Eating plenty of ripe fruit is another good remedy, for it helps to work the *poison* out of the system and keeps the bowels loose at times when you may have or expect a "grip." Thank Heaven, the day has come when carriage painters are no longer obliged to use lead for filling up the wood; and if there is as much painter's colic in carriage-shops as of old, it is now the painter's *own fault.*

Since Valentine & Co. succeeded in making a *Permanent Wood Filling* that answers all the purpose of lead, there is no need to get the painter's colic.—*An Old Painter.*

HEADACHE.—*To the Editor of* THE HERALD OF HEALTH—*Dear Sir:* "I have just been reading a piece in your last issue, called, 'What it Costs to have a Headache,' and in it you say people should know enough of hygiene to be able to avoid headache. If there is any particular mode of living by which headache can be avoided, you would put me and numerous others of your readers under great obligations by publishing it."—*A Subscriber.*

ANSWER.—We can not go into an elaborate answer to our correspondent, but will say,

1. That two-thirds of the headache which women suffer comes from indigestion and an engorged liver. This comes from either eating bad food, too much food, or taking too little good exercise. They either exercise in the open air too little for the food they eat, or eat too much for the exercise they take. As most women now dress, it is almost impossible for them to take such exercise as they need to promote digestion and circulation. Close-fitting clothing about the waist prevents, in the little exercise they take, the ends for which it is intended. Wholesome exercise out of doors and good food are the remedies. Of course, there are other forms of headache, that have other causes. Of these we will not speak here. Men who labor out of doors have little headache, compared with women. Their vigorous exercise prevents the digestive apparatus from becoming clogged and foul.

POISONOUS EFFECTS OF BEE-STINGS—A PREVENTIVE. — *Messrs. Editors:* The poisonous effects of a bee-sting can be prevented, or at least considerably mitigated, by passing over it the pipe of an ordinary trunk key.

The reason is obvious. The pipe acting as an annular compress close to the puncture, forces the poison out. Could not this simple process be extended in its application to the bites of serpents and rabid dogs? The absorption and spread of the virus might thus be prevented, or at least retarded, until a physician could arrive with a more effective remedy.—*Scientific Amer.*

In this department we desire to present practical knowledge. Such of our readers as have valuable information on appropriate topics are respectfully requested to furnish the same.

Digitized by Google

Food for Mirth and Thought.

WALLACE ON THE ORIGIN OF MAN.—Man may have been, indeed I believe must have been, once a homogeneous race; but it was at a period of which we have as yet discovered no remains, at a period so remote in his history that he had not yet acquired that wonderfully developed brain, the organ of the mind, which now, even in his lowest examples, raises him far above the highest brutes; at a period when he had the form but hardly the nature of man, when he neither possessed the human speech nor those sympathetic and moral feelings which in a greater or less degree everywhere now distinguish the race. Just in proportion as these truly human faculties become developed in him would his physical features become fixed and permanent, because the latter would be of less importance to his well-being; he would be kept in harmony with the slowly-changing universe around him by an advance in mind rather than by a change in body. If, therefore, we are of opinion that he was not really man till these higher faculties were fully developed, we may fairly assert that there were many originally distinct races of men; while, if we think that a being closely resembling us in form and structure, but with mental faculties scarcely raised above the brute, must still be considered to have been human, we are fully entitled to maintain the common origin of all mankind.

WHY THEY WENT TO WAR.—A certain king, it is said, sent to another king, saying, "Send me a blue pig with a black tail, or else—" The other, in high dudgeon at the presumed insult, replied, "I have not got one; and if I had—" On this weighty cause they went to war for many years. After a satiety of glories and miseries they finally bethought them that, as their armies and resources were exhausted, and their kingdoms mutually laid waste, it might be well to consult about the preliminaries of peace; but, before this could be concluded, a diplomatic explanation was first needed of the insulting language which formed the ground of the quarrel. "What could you mean," asked the second king of the first, "by saying, 'Send me a blue pig with a black tail, or else—?'" "Why," said the other, "I meant a blue pig with a black tail, or else some other color. But," retorted he, "what could you mean by saying, 'I have not got one; and if I had—?'" "Why, of course, if I had I should have sent it." An explanation which was entirely satisfactory, and peace was concluded accordingly.

The unhappy war now going on between France and Germany, which has caused the death of so many people, and so much horror and anguish, might have been settled by a few kind words. The story of the two kings related above is not only a lesson to other rulers, but also to all. Most of the quarrels between individuals are quite as foolish as the war of the blue pig with a black tail.

A NEW REASON.—Here is a new and excellent reason for not taking tobacco. Mrs. Goss, of Orland, Me., is just dead at the enormous age of 107 years. It is stated in her obituary notice that during her whole life she was especially addicted to the use of "the weed." Now, if it is to be one of the results of nicotian indulgence that its votary *may* live to be 107 years old, a sensible man, rather than run any such risk, will pitch his pipes and his plugs out of the window. Does the reader remember those horrible creatures mentioned in "Gulliver's Travels" who could not die. They became about so old, and there they remained for ever, a nuisance to themselves and to their fellow-creatures. Even Dr. Swift never imagined any thing more horrible.

PUNCH says that in some parts of England the water is so hard that skating on it is kept up all through the summer.

Digitized by Google

ABERNETHY'S DISLIKE OF UNNECESSARY TALK.—People who came to consult this eccentric man took care not to offend him by bootless prating. A lady on one occasion entered his consulting room and put before him an injured finger, without saying a word. In silence Abernethy dressed the wound, when instantly and silently the lady put the usual fee on the table and retired. In a few days she called again and offered her finger for inspection. "Better?" asked the surgeon. "Better," answered the lady, speaking to him for the first time. Not another word followed during the rest of the interview. Three or four similar visits were made, at the last of which the patient held out her finger free from the bandages and perfectly healed. "Well?" was Abernethy's monosyllabic inquiry. "Well," was the lady's equally brief answer. "Upon my soul, madam," exclaimed the delighted surgeon, "you are the most rational woman I ever met with."—*Jeaffreson's Book About Doctors.*

A SINGULAR TRUTH.—It had been well said, that the one great solitary character in the multitude of the people is persecuted and put to death. Five such characters are outlawed, hooted at, and despised. Double their number, make them ten in a thousand, they are passed by and silently neglected. Increase this number, let them be a hundred in a thousand, or one in ten, their power is recognized, but resisted. When they are so far multiplied as to be one in five, their word is listened to with respect; their hour of triumph approaches. But still the process consists in a slow production of individuals, each of whom counts one, and all of whom constitute one, through their allegiance to the same principles and their sympathy with the same ends.—*O. B. Frothingham.*

AN OLD LADY was recently brought as a witness before a bench of magistrates, and when asked to take off her bonnet obstinately refused to do so, saying, "There's no law compelling a woman to take off her bonnet." "Oh," imprudently replied one of the magistrates, "you know the law, do you? Perhaps you would like to come up and sit here, a teach us." "No, I thank you, sir," replied old woman, tartly; "there are old wom enough there now."

A SHORT MEMORY.—A worthy o clergyman in a neighboring town is very a sent-minded and has a short memory. It is common habit with him in the pulpit to forg something, and then, after sitting down, to ri up again, and begin his supplementary remar with the expression, "By the way." A fe Sundays ago he got half through a praye when he hesitated, forgot what he was abou and sat down abruptly, without closing. In minute or two he rose, and pointing his for finger at the amazed congregation, he said "O by the way—Amen!"

DELIRIUMS TREMENDOUS.—A negro wa brought up before the Mayor of Philadelphi a short time since, for stealing chicken "Well, Toby," said his Honor, "what hav you got to say for yourself?" "Nuffin but di boss: I was as crazy as a bedbug when I stol dat 'ar pullet, cos I might have stole de bi rooster, and never done it. Dat shows 'clusively to my mind dat I was laboring under the delir iums tremendous."

POISONING BY WORM LOZENGES.—Dr B. D. Gifford reports to the Boston *Medical an Surgical Journal* a case of poisoning a child thre years old, who had eaten seven "worm loz enges."

Parents who take THE HERALD OF HEALTH avoid these troubles.

"MADAM," said a cross-tempered phy sician to a patient, "if women were admitted t paradise, their tongues would make it purga tory." "And some physicians, if allowed t practice there," replied the lady, "would soo make it a desert."

A PHYSICIAN said of a quack that he was "such an ignoramus that, if he could take a lantern and go down inside his patient, he would not be able to find out what the matter was."

Digitized by Google

ANSWERS TO CORRESPONDENTS.

BY A. L. WOOD, M. D.

Weak Lungs—Position During Sleep.—"When quite young I had a severe attack of bilious fever, which affected one of my lungs. Since then I have enjoyed perfect health, yet the least over-exertion or excitement causes me to puff like a small steam-engine, and partially lose self-control. Does this indicate any unsoundness of the lungs? Is it more healthy to sleep on the side than on the back? Is it not injurious to the ear to have the side of the head pressed down on a pillow?"

Your lungs may not be diseased, but they are weak. They need strengthening and expanding. Take all the out-door exercise you are able to, but avoid over-exertion and excitement. A course of gymnastic training would be an excellent thing for you. If that is not practicable, practice rowing, exercise with Indian clubs or upon a "Home Gymnasium."

For healthy persons the position for sleep is upon the back, for the reason that it allows freer motion of the lungs. It is not so good if one takes late suppers. There are certain diseased conditions of the body in which lying upon the side is the best position. It may or may not be injurious to the ear to have the side of the head pressed down upon a pillow. If the pillow is a feather one it is most assuredly injurious, but if made of some good heat-conducting material, the injury, if any, is very slight indeed.

Horseback Riding.—"Will you, in the columns of your journal, give your views upon horseback riding? Do you think it is good for one who is troubled with determination of blood to the head, fits of dizziness, etc., or will you suggest what is good for such troubles?"

If the patient is strong enough to bear it, then horseback riding will prove beneficial. If not, it will be injurious. The same is true of walking and most other kinds of exercise. For difficulties of this kind exercise is the main dependence for effecting a cure, but it must be of such a character as to be adapted to the strength and condition of the patient. For those who are not strong enough to take much active exercise, the Movement Cure is just the thing, giving them the right kind of exercise, and the right amount, without unduly fatiguing them. For persons who are able to walk two or three miles or more at a time, walking is better than riding. The walking should be done briskly, and not taken at a snail's pace. The diet should be plain and unstimulating, and all reading, study, and mental exertion should be indulged in very sparingly.

Over-Study.—"What is the best treatment for nervous irritation and debility induced by over-study?"

First of all, stop studying and let the brain rest. Secondly, call your muscles into action by such forms of out-door exercise as may be most practicable in your case, and are best suited to your strength and general condition. Exercise as much as you are able every day, but guard against over-doing, and increase the amount of exercise as your strength increases. Live upon a plain, unstimulating diet, drink nothing but water, and avoid all nervous excitement as much as possible. Mental rest, physical exercise, pure air, sunshine, bathing sufficient for cleanliness, and pure water, are your remedies.

Remedy for Cold Feet.—"Please send me a remedy for cold feet. My head is constantly unpleasantly warm. If you can do so it will oblige me, as I have tried the remedies prescribed by my physician, but all to no purpose."

If your feet are cold and your head hot, exercise your feet and legs and let your head rest, thus drawing the excess of blood from the head to the feet, relieving the head, warming the feet, and balancing the circulation. Walking, running, jumping, dancing, skating, or exercising the lower extremities in almost any way, will produce the desired result if the patient has the requisite vitality. Those who

Digitized by Google

are unable to restore the circulation in this way, should at once go to some institution where they can have the Movement Cure treatment applied, for an unbalanced circulation is liable to lead to dangerous congestions, inflammations, and diseases of various kinds.

Tomatoes as Food.—"I was taken all aback by Dio Lewis's opinion of tomatoes, as quoted by The New York Sun recently from his new book. If he is correct, I must empty all my tomato jars into the sewer forthwith. What say you?"

I regard tomatoes as one of the very best articles of food we have, and believe that if every man, woman, and child in this country ate them freely every day in the year, that there would be much less sickness and suffering than there is at present. I have eaten them very freely for many years past, and prescribed them for my patients, and always with good results. I have never yet seen any of the bad effects arising from their use ascribed to them by Dr. Lewis. Instead of telling you to empty your tomato jars into the sewer, I should say put up double the quantity for another year.

Impure Blood.—"A slight burn on my arm, after two weeks of the usual treatment, still looks like an angry sore. Is it not an evidence that my blood is in bad condition? I never before had any trouble with a burn, bruise, or cut; and if it does indicate poison in my blood, then, whatever may be the cause of it, is also chargeable with a like injury to my children, for one of them has had for ten days quite a stubborn SORE on his finger, originating from an ordinary blow; and another has had an angry and troublesome irruption on his thigh; while my baby is distressingly chafed, in spite of the greatest care and a daily bath. This is an entirely new experience with them. We all bathe frequently, and try to maintain a tolerably hygienic diet. Gems, fruit, and vegetables are staples with us. Meat we use sparingly. If our blood has been poisoned by our mode of living, in any particular, I want to know it; and if possible, apply a remedy by a change of mode in that particular. My husband suggests APPLES as a solution of the problem as to the immediate cause. He has just been reading about "Apples and Salt Rheum," in the November number of your journal, which brought home with him this evening. W have all (including baby) been eating ve freely of apples for some time past. But the apples are bringing the poison to the su face, HOW DID IT GET INTO THE SYSTEM?"

There is no question but your blood a that of your children is in an impure con tion, but the cause is not so easy to tell. Y say you TRY to live hygienically. You m and you may not, as you do not tell HOW y live. As far as you mention it is very goo Impure blood is often produced by eating t much of even the best kinds of food, and t consequent imperfect digestion and assimil tion of the same. Especially is this apt to the case when but little out-door exercise taken. Then again, the blood may becom impure from not breathing enough, or fro drinking impure water, etc., etc. Again, eve if you live properly now, you probably hav not always done so, and your blood and sy tem generally may have been in a bad condi tion as a result, and you may also have trans mitted the same to your children. Havin recently adopted a more hygienic mode of liv ing, your system may be rallying to the tas of purifying the blood and establishing a bet ter order of things generally. Try and fin the cause, remove, if possible, persevere i well-doing, and you and your children wil come out all right.

Drugs and Fever.—"I have noticed that persons rallying from a fever treated either by Allopaths or Homeopaths, bloat gen erally, and especially in the bowels. What is the cause of it, and what is the remedy? Does this ever occur in water treatment of a fever?"

The principal and usually the only cause is the drugs given in the treatment of the fever, and consequently it very seldom occurs under water treatment.

Indentation of the Forehead.—"If a permanent indentation is left on the forehead after a fall, does it indicate a fracture of the skull? My baby had a severe fall a couple of months ago, and was ill for a fortnight after. A dent on the forehead remains."

It is not an indication, although both conditions may exist at the same time.

Digitized by Google

NOTICES OF NEW PUBLICATIONS.

EREDITARY GENIUS: An Inquiry into its Laws and Consequences. By Francis Galton, F. R. S. New York: D. Appleton & Co.

It is not long since we published a critique upon "A Physician's Problems," showing the periodicity of delusions, the power of imitation in spreading crime and fanaticisms, as also the propagation of moral disorder by means of hereditary sensuality and drunkenness. It was the dark side of human experience; the startling facts which go to show that the seeds of vice lodged in the human blood will produce their terrible harvest in generations yet to come—that no man or woman can hold fire in the hand and not be burned; not only themselves, but their after progeny, will inherit the burning stigma.

We have now before us a subject more hopeful, of an equally profound philosophy, and of a moral significancy quite as telling, upon a broader basis of observation. Human thought is at last tending in a direction more humanizing and robust than that of Malthus. We hail it as an omen of a better progress to a higher civilization.

In the work before us we see the vail, as it were, breached aside, showing the slow progress of the ages, the retarding elements of the reign of cruelty and oppression which brought about crime, brutality, and human disorder in every shape, producing a race infinitely below the standard which Nature of a right was willing and able to produce. No nation can present a high nationality without some care over the methods of propagation, the laws of which are as certain and as unmistakable as in the lower orders of creation. The farmer breeds from the best stock; the pedigree of a fine horse is carefully preserved, and he is allowed to propagate only from the best blood—best in moral horse-points as well as speed, shape, and endurance. A vicious animal, or a defective one in any way, is turned over to common labor, and not allowed to extend his kind.

How is it with the human race? Suppose the Greeks, a nation which produced a Socrates and a Phidias—types of humanity which no after age has been able to evolve—had been able to preserve themselves intact, and to go on developing continuously all that is beautiful in form, noble in ideas, and grand in art, the world would be infinitely advanced in civilization, in all wholesome modes of life, and we should have become a race founded upon a just and heroic basis—not as we are now, a race besotted, bestial, thieving, and cruel, with only here and there one in a million to show what we ought all to be in intellect, morals, and aspiration. But the morals of the Greeks were too licentious for men like Socrates and Plato to restrain, and, being few in number compared with the neighboring barbarisms, they were soon overwhelmed by intermarriages therewith, and by wars, luxury, and a general foreign influx. The Greek is ranged by our author, and we think justly, as two grades higher than the best Caucassian variety of the present day, while from extensive observation of the Negro, travels in Africa, and historic research, he finds the Negro is two grades lower than the white man of the present day.

We, all of us, even in our own limited circle, have seen families high in intellect, and true and noble in character, affording the promise of a superior race, suddenly thrown back to an inferior type by its members marrying men and women of an altogether discordant, irresponsible and imbecile range of creation, thus not only neutralising their own progress, but that of others, and what we see in families is, in the aggregate, what we see in nations.

The wars of the long, dreary ages have cultivated in men the brutal instincts, and they have come reeking from the battlefield to the household, there to entail their over-stimulated destructiveness in their offspring; more than this, war has destroyed the best physical and moral types, and left only the more inferior to propagate their kind.

We talk much of the benefit which the Roman Catholic Church has conferred upon the world in preserving the archives of learning, and making itself the depository of the more humanizing elements; but we forget in this the injury she has done by enfolding in cloisters and monasteries the gentle, loving, truthful, and intellectual, preventing the propagation of such by her enforced celibacy, and leaving, as wars have done, the inferior, animal masses to people the world.

Again, for centuries religious persecutions prevailed in the Church. We will cite only those of the Low Countries under Philip II., when more than eighty thousand are supposed to have perished by the stake, the ax, and the tortures of the Inquisition; remembering, also, the Massacre of St. Bartholomew contemporary in kind, in which more than sixty thousand were massacred in cold blood, and we see at once how not only the steadfast in character, but the great in mind, were cut off, and prevented from entailing their qualities upon the race.

In this we have spoken only of the thousands and tens of thousands who perished in a single era, and our readers have but to recall the facts of history to perceive the irreparable injury the race must have sustained, from the advent of Christianity down to the more tolerant ages; how the murderous, cruel, vindictive, artful qualities have been left to be engendered, while the nobler elements have been cut off. The poor in body, the low in morals, and the weak in mind have had it all their own way, and have filled the world with their miserable and unfortunate progeny.

We, in our inflated vanity, talk of modern progress as if it were a kind to boast of, when it were well for us not to compare ourselves with each other, but with those specimens of the race who stand like solitary watch-towers lighting the abysses of darkness—Phidias, Socrates, Pericles, Aristotle, Bacon, Shakespeare, Milton—and how immeasurably short do we fall of such a standard!

Our author is not inclined to the opinion that superiority is entailed through the mother, but is disposed to trace it through the stronger masculine element. Divines, he admits, most frequently had pious mothers—that is, divines eminent for zeal and piety, which is a strong and important point gained, as indicating the sure transmission of high moral elements. It is often asserted that superior men like silly women, which is one of the popular errors, as every superior man enjoys the society best and the conversation best of women highly endowed, and it was the combined superiority of father and mother which produced a Bacon.

Digitized by Google

The statistics of our author are of exceeding value as showing how intellect runs in families; that where genius has once appeared it is most likely to appear again; that the intermarriage of gifted families is sure to continue the stock of gifted individuals; that the qualities which go to make up the statesman, the judge, the commander, the literary man and artist, are inheritable, and their reproduction by intermarriage a sure thing.

Beauty runs as an heirloom in some families, intellect in another, and the skill and power of the crack oarsman and wrestler is traceable through the blood of whole families. Such being the acknowledged facts of science, is it not time for intelligent men and women to think upon these things, and live in accordance therewith?

Our author justly repudiates the doctrines of Malthus, which, to avoid a surplus population, recommends that the more intelligent should abstain from marriage, thus leaving the imbecile and vicious, who are actuated by no wise considerations, to fill up the measure of increase.

He inclines to the Pangenesis of Darwin, which would seem to account for anomalous and exceptional cases. Thus a *gemmule* (germ) may have laid dormant through a hundred ancestors, a gemmule for good or for bad, when it may find in a generating pair the exact affinity for development, and suddenly the qualities of some remote progenitor are reproduced. This is a comfortable doctrine for families in which may break out some unexpected moral observation, which would seem to shift the responsibility back into some remote period; it also indicates that we are not so morally free as we like to suppose—no more than we are intellectually great, as modern vanity inculcates. But as the laws of propagation are clear and definable, it is to be hoped that in the course of time, by establishing wholesome affinities, these latent gemmules of an evil tendency may be so held dormant, and neutralized, that they will no more appear to vex and disturb the harmonies of creation, but that all the beastialities of war and crime in every shape shall die out, and place to the reign of justice and truth, love and unive peace.

We must refer our readers to the work itself for reason of the infertility of certain families, and the sequent decay of the English peerages, and for pr also that genius is by no means unproductive.

Springdale Stories. By Mrs. S. B. C. Sa uels. Boston: Lee & Shepard, Publishers. N York: Lee, Shepard, and Dillingham.

The series consists of six illustrated volumes—Ad Nettie's Trial, Herbert, Evie, Johnstone's Farm, and nifellen.

This is a well written series of stories adapted to little folks, and not uninteresting to the larger fol There is a vein of gentle piety pervading the pages, enough of the marvelous to rivet attention. Beginn with the sorrows of Adele, whose state of mind follow her shipwreck and bereavement is described with a si plicity quite touching and natural; the six volumes co tinue to narrate the adventures of the family group each volume in a manner complete in itself. We c cheerfully commend them to our patrons.

Workday Christian; or, the Gospel in th Trades. By Alexander Clark, author of "The Go pel in the Trees," etc.; with an Introductory Not by William Cullen Bryant. Philadelphia: Claxto Remsen, and Haffelfinger.

This is an earnest, quaintly written work that remind one of the old days of John Bunyan, Richard Baxte and "Allen's Alarm," when men had a vital faith i what they wrote and spoke. If people can be brought t read it, good will ensue, morally and mentally, for i abounds with historic incident borrowed from the trade and shows how the true workingman has helped on th true gospel of the world.

THE PUBLISHERS' DEPARTMENT.

Contributors to this Number.

NELSON SIZER,
REV. CHARLES H. BRIGHAM,
DR. LYDIA F. FOWLER,
M. L. EDGEWORTH, M. D.,
MRS. H. C. BIRDSALL,
E. RAY LANKESTER, B. A.,
HOUGHTON,
F. B. PERKINS,
HOWARD GLYNDON,
DR. A. L. WOOD, and
THE EDITOR.

A Good Sewing Machine is given free for a club of 30 subscribers and $60. This premium is very popular. If there is a poor, deserving family in your neighborhood help it to get a good sewing machine by subscribing at once. Perhaps your minister's wife wants one. If so, help her to get it, by helping her to get up a club. The Empire is one of the best sewing machines in use, and we are sure that it will give you good satisfaction.

Facts for the Ladies.—There is on exhibition at the salesroom of Messrs. Wheeler & Wilson, No. 625 Broadway, the first Sewing Machine (No. 1) made by that Company, the present number being 350,000. Let the interested compare the Machine sold in 1851 for $125 with those now offered for $55. The former owner of this Machine gives its history, as follows:

The Machine was finished early in 1851, and I learned its use from Mr. Wilson himself. I was thus, you see, the first to work the Wheeler & Wilson Machine, and learned on the first machine they ever manufactured.

In 1854 I earned with the Machine $295, besides doing my own housework and taking care of my baby. In 185 we came to Davenport, and brought the machine with us. I believe it is the first Machine ever brought to Iowa.

I run that Machine almost constantly for more than fourteen years, on all sorts of work, from the finest dressmaking to the heaviest tailoring. P. E. D.

Errata.—On page 63, first column, twenty-seventh line from top, *nervous* should read *venous*. Page 64, twenty-first line, for *Sardou* read *Sanson*.

Digitized by Google

Notice to Our Correspondents.—

The following hints to correspondents should be observed in writing to us:

1. ALWAYS attach name, Post Office, County, and State to your letter.
2. SEND MONEY by Check on New York, or by Postoffice Money Order. If this is impossible, inclose Bills and register Letter.
3. CANADA AND NEW YORK CITY SUBSCRIBERS should send 12 *cents extra*, with which to prepay postage on subscriptions to THE HERALD OF HEALTH.
4. REMEMBER, if you are entitled to a Premium, to order it when you send the Club, and inform us how it is to be sent.
5. REMEMBER THAT WE NOW GIVE the *Empire Sewing Machine* as a premium. It is guaranteed to give good satisfaction.
6. REMEMBER TO SEND in Clubs early.
7. REMEMBER TO LOOK at our Premium List and Book List, and see exactly what we give and have for sale.
8. REMEMBER that for the names and addresses of 25 persons, either invalids or friends of Temperance and Health Reform, we give Prof. Wilson's book on the Turkish Bath. It contains 72 pages.
9. STAMPS should be sent to prepay postage on letters that require an answer.
10. Those who want a good *Spirometer*, *Parlor Gymnasium*, or *Filter* for making their water clean, will find the prices in another column.
11. INVALIDS from all parts of the country are invited to write to us for our circular, and full particulars as to Treatment or Board in the Hygienic Institution, See advertisement elsewhere.
12. See List of Books elsewhere.

Books C. O. D.—Parties who order books will find it cheaper to send the money with the order, than to order C. O. D., as in this case the cost of collection will be added to the bill. This is considerable, when the money has to be returned from a distant point. Those who order C. O. D., should send one-fourth the value of the order in advance to insure prompt attention.

Caution.—Our friends in writing to us will please be very particular and give Postoffice, County and State with every letter, and not depend on us to remember where they live, though they may have told us a hundred times. Those who think we can turn to our books and find their names and address without trouble, are quite mistaken.

Home Treatment.—Invalids wishing prescriptions for home treatment can have them for Five Dollars. They should send full particulars of their cases. Any person sending five new subscribers to THE HERALD OF HEALTH and Ten Dollars, will, if he does not choose other premiums, be entitled to a prescription for treatment free.

The Address Label.—By this method our subscribers can keep their own accounts as to when their terms of subscription close; for instance, if the printed slip has "De71," or "Je72" added to the name, it signifies that the subscriber's term of subscription expires with the December number of 1871, or the June number of 1872, and so on *et seq.*

Clubs of Twenty-five.—Any person who will send us at one time twenty-five new subscribers to this monthly, shall have them for Twenty-five Dollars. Remember they must be new subscribers, and all be sent at one time.

CLUBBING

WITH OTHER MAGAZINES.

We will send *THE HERALD OF HEALTH* and any one of the following Journals one year for the sum below mentioned. The order and money for both must be sent at the same time.

THE HERALD OF HEALTH, $2 00, and

Atlantic Monthly	$4 00	for $5 00
Harpers' Monthly	4 00	for 5 00
Harpers' Bazar	4 00	for 5 00
Harpers' Weekly	4 00	for 5 00
Phrenological Journal	3 00	for 4 00
Our Young Folks	2 00	for 3 50
New York Tribune	2 00	for 3 35
American Agriculturist	1 50	for 3 00

Cash Clubbing Rates.

1	Subscriber	$ 2 00
4	Subscribers	7 00
10	Subscribers	15 00
25	Subscribers	25 00

Single Numbers, 20 cents.

Address WOOD & HOLBROOK, Publishers,
15 Laight Street, New York.

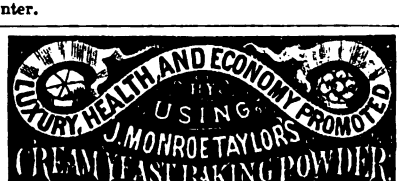
How to Send Money.—In making remittances for subscriptions, always procure a draft on New York, or a *Postoffice Money Order*, if possible. Where neither of these can be procured, send the money, *but in a Registered letter.* The present registration system has been found by the postal authorities to be virtually an absolute protection against losses by mail. *All* Postmasters are obliged to register letters whenever requested to do so.

Job Printing.—We are prepared to execute in neat, substantial styles, various kinds of JOB PRINTING: such as Pamphlets, Circulars, Envelopes, Billheads, Letter-heads, Cards, Labels, Small Handbills, etc., at the same rates as in all first-class New York printing establishments. Stereotype work done to order.

☞ Our friends in the country who wish neat and accurate printing, can rely on first-class work, by sending plainly written and well-prepared manuscripts. For terms, send sample or copy of work, state quality of printing material to be used, and the number of copies wanted, inclosing stamp for reply.

Talks to My Patients.—Mrs. Gleason's book, advertised and noticed elsewhere, is meeting with a good sale. We can supply it to subscribers and agents in any quantity. A good many ladies are selling it with success. We should like to have in every town a good Lady Agent. For particulars of agency, write to the Publishers.

Wanted.—Will our readers please send us brief items of news and experience referring to Health and Physical Culture topics. Make them pointed and practical, and we will publish them for the benefit of others. Do not mix them up with business or personal matters but on separate sheets of paper and in readiness for the Printer.



Digitized by Google

New Premium List for 1871

NOW IS THE TIME TO BEGIN!!

OCTOBER, NOVEMBER, & DECEMBER NUMBERS FRE

TO NEW SUBSCRIBERS!

GRAND PREMIUMS.

For 300 Subscribers and $600

We will give A BRADBURY PIANO, worth $600!

For 100 Subscribers and $200

We will give ONE OF ESTEY'S FIVE-OCTAVE COTTAGE ORGANS, Black Walnut, Double Reed, Harmonic Attachment, and Manual Sub Bass, Three Stops, worth $200!

For 85 Subscribers and $170

We will send ONE OF MASON & HAMLIN'S FIVE-OCTAVE ORGANS, worth $125, with Five Stops, Viola, Diapason, Melodia, Flute, Tremulant, with two sets of Vibrators throughout, and Knee Swell.

For 50 Subscribers and $100

We will give A LADY'S ELEGANT GOLD WATCH AND CHAIN, worth $75.

For 30 Subscribers and $60

We will give A SPLENDID EMPIRE SEWING MACHINE, worth $60. This is as good as any machine in the market, and can not fail to give the best satisfaction.

For 25 Subscribers and $50

We will give A SPLENDID WILSON SEWING MACHINE, half case, worth $50. This is the same style of machine that other Companies sell for $75.

PICTURE PREMIUMS.

For 10 Subscribers and $20

We will send two of Prang's Chromos, entitled "MORNING" and "EVENING;" size of each, 12x18 inches value, $10.

The above pictures are copied from Rosa Bonheur's wonderful paintings known by these names. They are companion-pictures, and ought to go together. No description can do them justice.

For 8 Subscribers and $16

We will give one of Prang's Beautiful Chromos, entitled "STRAWBERRIES AND BASKET;" size, 13x18 inches; value, $7 50.

(This is a large and very handsome picture, quite equal to the original oil painting from which it is copied, which was valued at many hundred dollars.)

For 6 Subscribers and $12

We will give Prang's Splendid Chromo, entitled "THE KIDS' PLAYGROUND;" size, 11x18 in.; value, $6.

(This is also a very handsome gem of art, and will greatly delight any family that may own it.)

For 4 Subscribers and $8

We will give one of Prang's Chromos, entitled "THE BABY; OR, GOING TO THE BATH;" size, 7x10 inches; value, $3.

For 3 Subscribers and $6

We will give one of Prang's Chromos, entitled "PIPE AND NUTCRACKER, valued at $2.

(This is a very popular picture after Landseer, a sufficient recommendation to any work of art.)

☞ If our friends wish to ornament their homes wit beautiful works art, at small expense, these offers pictures will suit them. We guarantee the pictures wi give perfect satisfaction.

BOOK PREMIUMS.

For 60 Subscribers and $120

We will give the NEW AMERICAN ENCYCLOPEDIA in 20 volumes, worth $100!

This great work is a complete library of itself, and fo reference or information ought to be in the hands of every family.

For 15 Subscribers and $30

We will give ONE OF WEBSTER'S PICTORIAL UNABRIDGED DICTIONARIES, Illustrated with 3,000 Cuts, worth $12.

For 10 Subscribers and $20

We will give A BOUND VOLUME OF THE HERALD OF HEALTH for 1867, 1868, and 1869.

3 Subscribers (1 Old, 2 New) and $6

A copy of Prof. Welch's New Book, "MORAL, INTELLECTUAL AND PHYSICAL CULTURE," worth $2 25.

This is a perfect encyclopedia of Gymnastics and Physical Culture.

2 Subscribers (1 Old, 1 New) and $4

A copy of "A WINTER IN FLORIDA," worth $1 50.

Premiums to Each Person in the Club.

There are many persons who would like to send Subscribers to THE HERALD OF HEALTH without thought of personal reward, but for the good they can thus do. To such we make the following enticing offer:

For 25 Subscribers and $50,

All sent at one time, we will give to each THE HERALD OF HEALTH for one year, and a copy of either of the following new works, viz.: "A Winter in Florida;" value, $1 50; "Talks to my Patients," value, $1 50; or, The American Agriculturist for one year, value $1 50; or, if 35 cents be added to each name, The New York Weekly Tribune for one year, valued at $2. Bear in mind that the 25 names and the $50 must all come at one time.

☞ SEE PAGE 95 FOR CLUBBING.

Address WOOD & HOLBROOK,
Nos. 13 & 15 Laight Street, New York.

Digitized by Google

Advertisements.

☞ ADVERTISEMENTS of an appropriate character will be inserted at the following rates: Short advertisements, 10 cents per line; thirteen lines, for three or more insertions without change, 20 per cent. discount; one-half column, $12; one column, $22; one page, $40. All advertisements must be received at this office by the 5th of the month preceding that on which they are to appear.

Are You Going to New York?

If so, and you wish to stop where you can *FEEL AT HOME*, and get *GOOD FOOD HEALTHFULLY PREPARED*, and *PLENTY OF IT*,

Go to the Hygienic Institute,

Nos. 13 *&* 15 *Laight Street.*

Horse Cars pass near the door to all parts of the city, making it a very convenient stopping place for persons visiting New York, either upon business or pleasure. Open at all hours, day and night. Board by the day or week, at reasonable rates. Rooms can be secured in advance by writing. Address

WOOD & HOLBROOK, Proprietors,

Nos. 13 & 15 Laight Street, New York.

Whereas, Intemperance in-duces Insanity, increases Crimes, produces Pauperism, and is the source of Sickness, Sins, and Sorrows innumerable, therefore

Resolved, That we earnestly entreat and respectfully request all Preachers and Publishers to so present to the people the Christian Duty of Temperance in the fourth week in June, and in the fourth week in December, as to aid in checking the social usages which lead to the desecration of the Fourth of July and New-Year's Day. And we hereby petition Congress, in behalf of the District of Columbia and the Territories under its jurisdiction, and the several State Legislatures, in behalf of their several States, to enact suitable laws prohibiting the sale of intoxicating liquors on Sundays, Election Days, the Fourth of July, and all other Holidays.

For blank Petitions for general circulation send a stamped envelope, with your own address on it, to Rev. WM. W. WILLIAMS, Williams College, Williamstown, Mass.

"Amer. School Inst.," founded 1855, *Is a reliable and practical Educational Bureau*

To aid those who want well-qualified Teachers;
To represent Teachers who seek positions;
To *give* parents information of good Schools;
To sell, rent, and exchange School Properties.

Sixteen years have *proved* it efficient in securing "THE RIGHT TEACHER FOR THE RIGHT PLACE."

J. W. SCHERMERHORN, A. M., Actuary,
Xf-11t 14 *Bond Street, New York.*

See Book Advertisements, read them carefully, and then ask yourself if you can use your money to better advantage than to purchase. read, and become possessed of information highly important to your well being for ever.
WOOD & HOLBROOK, 15 Laight St., N. Y.

American Educational Monthly.

"For all who have Children to Educate, or school taxes to pay."

CONTENTS FOR JANUARY, 1871—VOL. VIII.

A Japanese School —*Frontispiece.*
Schools in Japan.
Geography a Civilizer.
Law on Corporal Punishment.
Schools of the French Peasantry.
Eminent Educators Deceased.
Fiction an Educator.
English Literature.
What Knowledge is of Most Worth.
Teaching Public School—Rhymes.
Education in Germany.
An Empire without Inhabitants.
The Log School-House—Illustrated.
Is the Higher Education Growing Unpopular?
"The Sons of Pestalozzi."
Something About Ink.
How Marbles are Made.
Of What Sponges Consist.
Educational Intelligence:
The Indians; Texas.
Chicago; Decatur; Turkey
Correspondence.
Current Publications:
Hart's Rhetoric.
Smith's Pretentious Book Title.
Scott's New History.
U. S. Commissioner.
American Educational Annual.
College Catalogues.
Scientific.
Miscellanea.
An Old Scholar—Illustrated.
Smile Whenever you Can—Music.

Price 20 Cts.....or $2 per Ann.
WITH VALUABLE PREMIUMS.

J. W. SCHERMERHORN & CO.,
PUBLISHERS,
Xf-2t 14 Bond Street, New York.

$5.60 IN GOLD.—A Present Of the splendid Steel Engraving Evangeline (Price $5.60 in gold) to subscribers for the **Illustrated Excelsior Magazine.** The Illustrations ALONE are worth many times its cost, and the magazine REDUCED from **$2 50** to **$1 00** a year, is now one of the CHEAPEST in the world. Contains BEAUTIFUL STORIES, SPLENDID PICTURES, INTERESTING PUZZLES AND ROBUSES, CUTS OF LADIES' PATTERNS, NEWS, &C. &C. We will send the Magazine one year, also this splendid Steel Engraving, on receipt of the regular subscription price, $1 00, and 8 cents for postage. Sample copies, FREE. Address the Publisher, C. L. VAN ALLEN, 171 Broadway, New York. Xf-4t

THE ELMIRA WATER CURE WILL be re-opened May 1st for the reception of patients, being under the general care of Dr. S. O Gleason and Mrs. R. B. Gleason, M. D., assisted by Miss L. Z. Brooks. Address for Circular, with Stamp, S. O. GLEASON, M. D., Water Cure, Elmira, New York. my-tf

Vegetarian Board.—Wanted by the advertiser, in the early Spring, Board and Lodging, with a Horticulturist, Fruit-farmer, Nurseryman, or Florist of Hygienic persuasion. Address HEWSON BROWN, "Herald of Health" Office, 15 Laight Street, New York. f-1t*

Digitized by Google

COLGATE & CO.

RECOMMEND THEIR NEW

"RONDELETIA" Toilet Soap.

Sold by Dealers in Perfumery and Fancy Goods and First-class Grocers.

THE MUSICAL WORLD.

The *Best*, *Cheapest*, and *Most Popular* Musical Monthly published. 20 pages of Beautiful New Music and Original reading matter in each number. $1 a year; specimen copies, 10 cents. Address S. BRAINARD & SONS, Cleveland, O.

WHY that angry look and frown?
WHY that wet, bedrabbled gown?
BLESS your heart! Why, don't you know
WINDOWS and Mirrors can't be thoroughly cleaned without using ENOCH MORGAN'S SONS' SAPOLIO.

J. J. H. GREGORY'S
SEED CATALOGUE.

Having in former years introduced to the public many new and rare vegetables, I am again prepared to supply Vegetable and Flower Seed of the purest quality. My Annual Catalogue, which abounds in fine engravings, contains not only numerous novelties, but all the standard vegetables of the farm and garden (over one hundred of which I grow on my three seed farms), and a carefully selected list of flower seed. Catalogues free to all.

All my seed is sold under three warrants—
1st: *That all money sent shall reach me.*
2d: *That all seed ordered shall reach the purchaser.*
3d: *That my seeds shall be fresh, and true to name.*

JAMES J. H. GREGORY, Marblehead, Mass.



THEA-NECTAR
IS A PURE
BLACK TEA

with the Green Tea Flavor. Warranted to suit all tastes. For sale everywhere. And for sale wholesale only by the *Great Atlantic and Pacific Tea Co.*, 8 Church St., New York. P. O. Box 5506. Send for Thea-Nectar Circular.

DOOLEY'S YEAST POWDER
THE BEST
TRY IT. SOLD BY GROCERS.



"VENTRILOQUISTS' GUIDE," a new, complete and easy guide by which any one may become a perfect Ventriloquist. It is the best and largest work on the subject ever published. Written by a revived Ventriloquist. Gives ... explanations, ... startling tricks and a "musical gift" that ... ART easily learned by any one with proper instruction. This unique and wonderful ... book tells how ... magic and ... the Magic Whistle. How to perfectly imitate every animal; the various ... instructions birds; to imitate bees, flies, &c., &c. ... for ALL the wonderful Ventriloquial performances of Herrmann, Houdin, Heiser, Blitz, and Harrington; also of the "Mocking Bird," and other imitations as given by various Minstrels. It is the only ORIGINAL book of the kind ever published in America, and while a scientific treatise is written in plain English, easily understood by any boy, it contains numerous scenes in Ventriloquism, etc. A new and neat volume. Price 25 Cents, six for $1, post free. Address, HUNTER & CO., Publishers, Hinsdale, N. H.

REDUCTION OF PRICES

TO CONFORM TO
REDUCTION of DUTIES.
GREAT SAVING TO CONSUMERS
BY GETTING UP CLUBS.

☞ Send for our New Price List, and a Club Form will accompany it, containing full directions—making a large saving to consumers and remunerative to club-organizers.

The Great American Tea Co.
31 & 32 Vesey Street,
P. O. Box 5643. NEW YORK



A Trial Trip. 3 Months for 30 Cents

Do you love Fruits, Flowers, Gardening, Designs Cottages, Ornamental Trees, Shrubs, and Embellishments of Home Grounds? Take a trial trip for three months or a year with

THE HORTICULTURIST

Every one who has a Garden should take it.
Every Lady who loves Flowers should take it.
Every Lover of Rural Architecture should take it.
Every Fruit Grower should take it.

It is the oldest, ablest, and best illustrated Journal of Horticulture, Gardening, and Rural Taste in America.

☞ Send stamp for Illustrated Prospectus and Premium List of Valuable Books, Lilies, Gladiolus, etc.

Specimen Copies only Ten Cents.

HENRY T. WILLIAMS, Proprietor,
5 Beekman St., New York.

☞ *GET UP A CLUB. PRICES REDUCED.* ☜
2 Copies, $3 50. 3 Copies, $5. 5 Copies, $7 50.

PREMIUMS.

To every Trial Trip Subscriber a choice Engraving—"Gathering Fruits and Flowers."
For a club of Five Trial Trip Subscribers a Fine Japan Lily.
For a New Subscriber, or a club, a choice of a valuable Lily, Grapevine or Book. See Premium List. Xj2

Empire Shuttle Sewing Machine

Patented Feb. 14, 1860, and Sept. 18, 1866.

Received the First Prize at the Great Fair of the American Institute, in New York, Oct. 26, 1867, and highest premium for the Best Manufacturing Machine at the Paris Exposition, July, 1867.

No. 1, FAMILY MACHINE.

This machine is constructed on a new principle of mechanism, possessing many rare and valuable improvements, having been examined by the most profound experts, and pronounced to be simplicity and perfection combined.

The following are the principal objections urged against Sewing Machines:

1. Excessive fatigue to the operator.
2. Liability to get out of order.
3. Expense, trouble, and loss of time in repairing.
4. Incapacity to sew every description of material.
5. Disagreeable noise while in operation.

The Empire Sewing Machine is exempt from all these objections. Address the EMPIRE SEWING MACHINE CO., 294 Bowery, N. Y.

For 35 Subscribers and $70,

to THE HERALD OF HEALTH, we will send an Empire Sewing Machine worth $60.

WOOD & HOLBROOK,
f-tf 15 Laight Street, New York

Digitized by Google

THE LITTLE CHIEF.

The Best Illustrated Magazine for Boys and Girls

WHAT IS THE LITTLE CHIEF?

AN ORIGINAL MONTHLY MAGAZINE of sixteen double-column pages, containing Stories, Biographies, Travels, Poems, Dialogues, Declamations, Studies in History, Geography, Botany, and Physiology; Rebuses, Charades, Puzzles, etc.

Every thing THE LITTLE CHIEF offers its readers shall be of sterling good sense, healthy in tone, and full of interest.

THE CHIEF aspires to be a leader of young people in the cultivation of their morals, manners, and minds.

THE CHIEF aims to combine instruction and amusement, pleasure and profit—to develop, encourage, elevate, and strengthen all good and generous impulses.

THE CHIEF will constantly, and regardless of expense, call to his aid such writers as will present the best thoughts in the most attractive and entertaining style.

THE CHIEF hopes to brighten many faces, cheer many hearts, gladden many homes, purify many thoughts, strengthen many hands—in short, make his readers everywhere better and braver for the fight of Right against Wrong.

THE CHOICEST WRITERS!

FOR NOTHING!

FOUR MONTHS.

Send at Once for Our List of Splendid Premiums!

To all New Subscribers sending us 75 cents before December 1, we will send THE CHIEF SIXTEEN MONTHS, beginning September, 1870.

Xj-2t Address SHORTRIDGE & BUTTON, No. 10 Martindale's Block, Indianapolis, Ind.

TOBACCO AND ITS EFFECTS,

Being

A PRIZE ESSAY,

Showing that the use of Tobacco is a physical, mental, moral, and social evil. By Henry Gibbons, M. D, Editor Pacific Medical and Surgical Journal.

CONTENTS.

I.....Tobacco. Its Nature and Properties.
II.....Effects on the Body.
III.....Effects on the Mind.
IV.....Moral Effects.
V.....Social Effects.
VI.....What Good does it Do?
VII.....Conclusion.

☞ Price, by mail, 20 cents. Address

WOOD & HOLBROOK,
No. 15 Laight Street, New York.

BOOT AND SHOE STORE, No. 415

Canal Street. Ladies', Gentlemen's, Boys', Misses' and Children's Boots, Shoes and Rubbers, in all their varieties, always on hand. Work made to order, and Repairing done on the shortest notice and reasonable terms.

DAVID WALKER,
n-1y No. 415 Canal, corner Sullivan Street.

COLBY WRINGERS! Best and Cheapest! Try it! Children's Carriages, Sleds, Sleighs, and Velocipedes. COLBY BROTHERS & CO., 508 Broadway, N.Y. jy9t



A CHICAGO WEEKLY OF CHOICE, STIRRING, AND ELEVATING LITERATURE for old and young. A friend to all true religion and reform. Not sectarian in religion or politics. A paper for the people. Should be in every family in the land. Contains sermons of London's great preacher, C. H. Spurgeon. Contains latest news and market reports up to time of going to press. One of the cheapest and liveliest papers published. Only One Dollar a year; Six Months, 50 cts.; Three Months, 25 cts. Publisher of Game of "SOCIETY, OR THE SOCIAL CONFLICT BETWEEN GOOD AND EVIL." Address

Xn-6t E. C. EGGLESTON, Editor Life Boat.

HYGIENIC.

Dr. Jenkins' Institution, Binghamton, is now open for patients and a few boarders. The best facilities are afforded for the treatment of all forms of Chronic Diseases. Special treatment given to women by Mrs. Jenkins. Address E. S. JENKINS, M. D., or MRS. L. A. JENKINS, M. D., Binghamton, New York. jy-tf

CAUTION.

All persons are hereby cautioned against infringing my Letters Patent for Improvements in Sewing Machines, extended for seven years by Act of Congress, dated July 14, 1870. All infringers will be prosecuted according to law JOHN BACHELDER. n-5t

A MODEL HOUSE! Convenience, beauty, and economy combined! Descriptive circulars, free to all.

A HEALTHY HOUSE! Eight page description, with price list of plans, views, etc., for 25 cents.

A RADICAL REFORM in House Architecture! Address GEO J. COLBY, Architect, Waterbury, Vt jy tt

Digitized by Google

INSTITUTE DEPARTMENT.

☞ In this Department we purpose giving, from month to month, a description of the various agencies we employ in the treatment of disease, the reasons why we use them, their effects in different diseases, occasional reports cases, and various items of interest in regard to the institution.

We Never Give Poisonous Drugs!



Poisons Never Cure Disease!

THE NEW YORK HYGIENIC INSTITUTE,

Nos. 13 & 15 LAIGHT STREET, NEW YORK CITY.

A. L. WOOD, M. D., Physician.

The objects of this institution, which has been in successful operation for more than twenty years, are two-fold, viz. 1. The treatment and cure of the sick without poisoning them, by Hygienic agencies alone.
2. To furnish a pleasant, genial Home to friends of Hygiene throughout the world, whenever they visit this city.

CURE DEPARTMENT.

Thousands of invalids have been successfully treated at this institution during the past twenty years, and its fame extends wherever the English language is spoken. Its appliances for the treatment of disease without the use of poisonous drugs are the most extensive and complete of any institute in America. They comprise the celebrated

Turkish Baths, Electric Baths, Vapor Baths, Swedish Movement Cure,

MACHINE VIBRATIONS, the varied and extensive resources of the WATER CURE, LIFTING CURE, MAGNETISM, Healthful Food, a Pleasant Home, etc., etc. Particular attention is given to the treatment of all forms of CHRONIC DISEASE, especially of Rheumatism, Gout, Dyspepsia, Constipation, Torpidity of the Liver, Weak Lungs and Incipient Consumption, Paralysis, Poor Circulation, General Debility, Curvature of the Spine, Scrofula, Diseases of the Skin, Uterine Weaknesses and Displacements, Spermatorrhœa, etc. Any one wishing further information should ☞ *SEND FOR A CIRCULAR,* ☜ containing further particulars, terms, etc., which will be sent free by return mail.

BOARDING DEPARTMENT.

We are open at all hours of the day and night for the reception of boarders and patients. Our location is convenient of access *from* the Railroad depots and Steamboat landings, and *to* the business part of the city. Street cars pass near the doors to all parts of the city, making it a very convenient stopping place for persons visiting the city upon business or pleasure. Our table is supplied with the BEST KINDS OF FOOD, HEALTHFULLY PREPARED, AND PLENTY OF IT. In these respects it is unequaled. Come and see, and learn how to live healthfully at home. Terms reasonable.

Drs. WOOD & HOLBROOK, Proprietors.

Digitized by Google



THE "SILVER TONGUE"

ORGANS AND MELODEONS

Have been manufactured in steadily increasing numbers since the birth of the first Perfect Melodeon from the genius of Jeremiah Carhart and the Establishment, in 1846, of the celebrated firm of

CARHART & NEEDHAM.

Having all the original excellencies of the CARHART reed construction, and every improvement which he elaborated during his life; having the exclusive benefit of E. P. NEEDHAM's valuable Organ Patents, and of others whereof the right has been secured to the "SILVER TONGUE" House, they stand as the

REPRESENTATIVE ORGANS OF AMERICA,

Manufactured by a Firm which is indefatigable in experimental efforts toward improvement and on the *qui vive* for every novelty in its line, whatever be the origin thereof, the "Silver Tongues" present the

NEWEST and most EXCELLENT CONSTRUCTION,

made of the most scrupulously selected material, under the personal and systematic supervision of Mr. E. P. NEEDHAM—the joint founder, with Mr. CARHART, of the business—by picked workmen of peculiar qualifications and experiences, they continue, from year to year, their reputations, in point of workmanship, as the

WORLD'S BEST,

Having distanced every rival with whom they have competed; having been honored with highest awards and medels wherever exhibited; and being the subject of the most flattering testimonials from musicians of renowned talent and culture, they are, as might be expected, the

Most Universal Approved Instruments of their Class,

Produced, as they necessarily are, in immense numbers, by the single firm having control of their manufacture, who take every advantage of the numberless ways of economizing, which such a large business affords, the "Silver Tongue" Instruments are *among the lowest priced* and, in point of fact, the

CHEAPEST IN THE MARKET.

A Magazine for Fifty Cents!

The finest Magazine for Organ-players is *The Silver Tongue and Organist's Repertory.* Only 50 cents a year. The music in each number is worth a dollar. Send for a sample copy. Elegant premiums are offered to clubs!

Illustrated descriptions of the Silver Tongue, with price-list, will be mailed to any one desiring full information, by

E. P. NEEDHAM & SON,
(late Carhart & Needham),
Publishers of "THE SILVER TONGUE AND ORGANIST'S REPERTORY."
143, 145, *and* 147 *East* 23*d Street, New York City.*

N. B.—Send for the "SILVER TONGUE ALBUM," mailed post-paid, to any address, on application. je-1yeom

1871.

THE

National Standard.

Published every Saturday.

An Independent Reform and Literary Journal.

AARON M. POWELL, EDITOR.

WENDELL PHILLIPS, LYDIA MARIA CHILD, REV. JOHN T. SARGENT, HON. GEORGE W. JULIAN, FREDERICK DOUGLASS, MARY GREW, JULIA WARD HOWE, LOUISA M. ALCOTT, COL. T. W. HIGGINSON, and others, contributors.

Mr. Phillips's articles alone are worth many times the subscription price for the year.

THE NATIONAL STANDARD

will be radical in its treatment of public questions; independent in its political relations; will seek to eradicate the spirit of caste; to secure equal rights for women; to promote the welfare of the laborer; to extend civilization and ultimate citizenship to the Indian; to obtain justice for the oppressed everywhere; to strengthen the cause of Temperance; of Education; and to promote practical, unsectarian religion, and all that makes for peace and a true civilization.

Subscription price, per year, $3 00. To Clubs of Five, $3 50; to Clubs of Ten, $2 00. Single copies, Six Cents. A Liberal Premium List. The Standard offers superior inducements to Advertisers.

Specimen numbers sent free.

THE NATIONAL STANDARD, $3 00.

☞ Now is the Time to Subscribe. ☜

Address A. M. POWELL,
Editor of The National Standard,
Xj-3t P. O. Box 1418, New York.

Digitized by Google

MORAL,

Intellectual, and Physical Culture;

OR, THE PHILOSOPHY OF TRUE LIVING.

BY PROF. F. G. WELCH, Superintendent of Physical Culture in Yale College.

Letter from Dr. Dio Lewis, Boston, Mass.

Messrs. Wood & Holbrook: Gentlemen—This book, full of Prof. Welch's singular purity and earnestness, is not only an admirable guide in Physical Culture, but most fruitful of suggestion in the mental and moral spheres.

Prof. Welch is playing an important part in America's attempt to give place and dignity to physical education. He deserves well of his countrymen, and has already secured recognition as an active force in the great revolution now in progress.

I watch his labors with the liveliest interest, and shall continue to rejoice that we have in the van a leader so wise, just, and enthusiastic. Yours truly, DIO LEWIS.

From the State Temperance Journal of Commerce.

In these days of so much trashy literature, it is refreshing to see a book that teaches something of practical importance. The one before us promises to be of much usefulness, as it abounds in matter that will put the reader to thinking concerning those things which are of the utmost importance to all. It treats, first: Of all that pertains to the subject of Physical Culture, Secondly: All that is necessary to know concerning the House we live in. Thirdly, The Culture of the Mental and Moral. It contains beside, the complete Dio Lewis System of Musical or Parlor Gymnastics, with many suggestions, additions and improvements. Here are four volumes in one. Its subjects, too little heeded, too long neglected, are of vital importance, and needful to all. It contains many valuable hints of health, the means of guarding against sickness, the proper articles of food, all about our physical structure, and the care of the body; in a word, "True Living." It is noble in its purpose and counsel. None can read it without becoming higher, nobler and better. It is therefore worthy a place in every family. It occupies a new field, and will have an extensive circulation. The College Courant says of it, "There is sufficient useful and acceptable information in Parts III and IV to stock a new department in any newspaper or magazine, for months."

It has received the highest encomiums from the Press generally throughout the country, and many letters commendatory from several presidents and professors of colleges and many leading educational men.

The book contains about 450 pages, is handsomely bound in cloth, and just such a book as should be in the hand of every man and woman in the land. PRICE $2; when sent by mail $2 25.

☞ *Copies sent to any address by mail on receipt of the price. Address*

WOOD & HOLBROOK,
Nos. 13 & 15 Laight Street, New York.

Spirometer for Strengthening the Lungs.



A FIRST-CLASS SPIROMETER, with which to enlarge and strengthen the lungs, we are now able to supply the public. It is so arranged that the person using it can measure the capacity of the lungs for air in cubic inches with each test, thus showing their strength and the amount of increase. The value of the careful daily use of such an instrument for those who have Weak Lungs or Incipient Consumption is very great. The inventor of this instrument cured himself of Consumption by its use as have many others, and we have no hesitation in saying that, if rightly used,

IT WILL DO MORE

TO PREVENT

AND CURE

THIS DISEASE

Than all the Medicines of the World.

Every Physician, Student, Sedentary Person, Professional Man, and Family should have one. They are light and portable, and any body can use them.

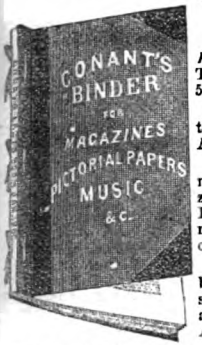
Sent only by Express. Price, $10. For sale by

WOOD & HOLBROOK,
Nos 13 & 15 Laight Street, New York.

Digitized by Google

Conant's Binder,

OR BOOK COVERS FOR PERIODICALS.



Adapted to the *Atlantic, Harpers', Putnam's,* and THE HERALD OF HEALTH, 50 cts.

MUSIC SIZE.—Adapted to the various Publishers' *Sheet Music*.....$1 00

A cheap and durable method of Binding Magazines, Papers and Music. Extremely simple. New numbers can be added as received.

We can recommend it as being just the thing for preserving Magazines perfect and clean.—*Gardener's Monthly.*

This is a useful invention, by which a Periodical is inserted in a moment between two durable covers. Various sizes are made. A good thing.—*New York Tribune.*

Conant's Binder is one of the best and cheapest contrivances for keeping Periodicals in good condition that we have ever seen, and it meets a want that has long been felt in every reading family. It is strong and durable, and is designed either for a Temporary or Permanent Binder."—*Dedham Gazette.*

WOOD & HOLBROOK,
oc-tf 15 Laight Street, New York.

Another New Work!

THE IDENTIFICATION
OF THE
ARTISAN AND ARTIST,
THE
Proper Object of American Education.

Illustrated by

A Lecture of Cardinal Wiseman,

On the Relation of the Arts of Design with the Arts of Production. Addressed to American Workingmen and Educators, with an Essay on Froebel's Reform of Primary Education,

BY ELIZABETH P. PEABODY.

This is a very instructive and valuable pamphlet. Price by mail, 25 cents.

WOOD & HOLBROOK, Publishers,
15 Laight Street, New York.

"Bradbury Piano."

☞ From personal acquaintance with this firm we can indorse them as worthy of the fullest confidence of the Christian public. We are using the Bradbury Pianos in our families, and they give entire satisfaction.

Persons at a distance need feel no hesitation in sending for their illustrated price list, and ordering from it.

MRS. U. S GRANT, Washington, D. C.
S. P. CHASE, Chief-Justice, Washington, D. C.
D. D. PORTER, Vice-Admiral, U. S. Navy.
M SIMPSON, Bishop M.E. Church, Philadelphia.
S. HAWK, St. Nicholas Hotel, New York.
THEODORE TILTON, editor of The Independent.

The best manufactured; warranted for six years Pianos to let, and rent applied if purchased; monthly installments received for the same. Old pianos taken in exchange. Second-hand pianos at great bargains, from $50 to $200. Send for illustrated Price List.

F. G. SMITH & CO.,
late Sup't for and successor to Wm. B. Bradbury,
m-ly 427 Broome Street, New York.

List of Articles for Sale by

WOOD & HOLBROOK, No. 15 Laight Street, New York.

BACON'S HOME GYMNASIUM, with book of explanation and 100 cuts, $10.

———Trapeze Adjustment, with 32 illustrations, $3 50.

———Swing Adjustment, for children, $1 50.

Each part sold separately. The whole, $15.

This is the most valuable piece of Gymnastic apparatus for home use ever invented. Any one can use it. For weak chests, backs, and sides its use is the best remedy known. A half hour's use of it daily would prevent and cure many cases of dyspepsia and consumption.

SYRINGES.—The best styles in market. Usual style, by mail, $5. For children, with Eye and Ear Douche for sores, etc., $2. The Spray Syringe, $3. The Trade supplied.

BOUND VOLUMES.—We still have a few Bound Volumes for 1863, 1864, 1867, 1868 and 1869 for sale, postpaid, by mail, for $3 Soon it will be impossible to obtain them.

HERALD OF HEALTH COVERS—so that every one can bind their numbers and preserve them neatly. 50 cents.

BREAD PANS—for making light, aerated Bread without soda, saleratus, yeast, or other poisonous compounds. Only by Express, $1 25.

HAND MILLS—for cracking Wheat, making Rusk, Hominy, etc. By Express, $3.

BEST GRAHAM CRACKERS—per barrel, $10 Half barrel -38 lbs., $6.

ELECTRIC MACHINES—Kidder's, best Manufactured, $20 to $22.

FILTERS.—Kedzie's, Family Size, $10 50.

Hygienic Home Water Cure,

637 California Street,
SAN FRANCISCO, Cal.

This is by far the most extensive and complete Health Institute on the Pacific Coast, based strictly on the Hygienic principles of treatment.

Dr. Smith has built and arranged the Home with special reference to its supplying the place in San Francisco that the Laight Street House and Hygienic Institute furnishes to the friends of Health Reform in New York city. The Medical Department is ample for the cure of all who may desire hospitalities, and the Boarding Department is well arranged for the accommodation of the friends of Hygiene throughout the coast. All are cordially invited to visit our healthful Home.

BARLOW J. SMITH, M. D.,
Consulting Physician.
R. S. MACBETH, M. D.,
aug-tf Attending Physician.

WOOD'S HOUSEHOLD MAGAZINE contains in every number one complete prize story valued at $100. Forty pages of other matter. Yearly, $1. Sold by Newsdealers at 10 cts. per copy. Splendid Premiums. $500 cash to be awarded for prize clubs. Specimen copy free. Address S. S. WOOD, Newburgh, N. Y. n tf

D. H. PRIME, *Printer, at the Hygienic Institute, N. Y.*

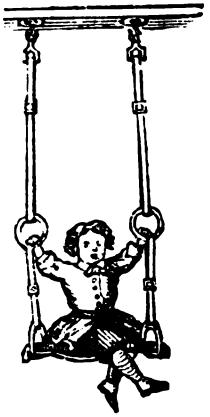
Digitized by Google

BACON'S PATENT HOME GYMNASIUM.

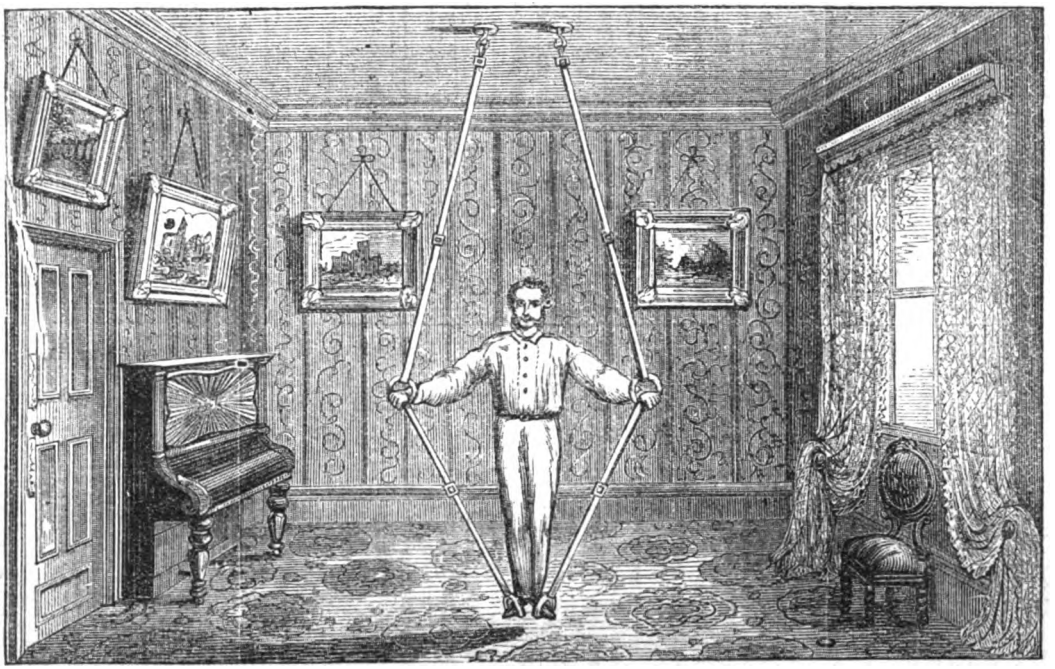
PRICE, $10.

$1 50

EXTRA.

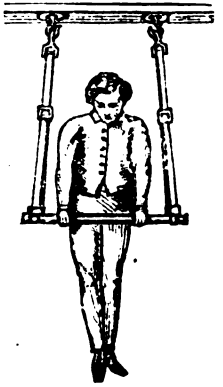


The Gymnasium adapted as a SWING.



$3 50

EXTRA.



The Gymnasium adapted as a TRAPEZE.

NO HOME SHOULD BE WITHOUT ONE!

For Sale by

WOOD & HOLBROOK, 13 & 15 Laight Street, New York.

Digitized by Google

WHAT THE DOCTORS, THE PEOPLE, AND PRESS SAY

ABOUT MRS. DR. GLEASON'S

TALKS TO MY PATIENTS.

From P. H. Hayes, M. D., *of Watkins, Mass.*

I have just laid down Mrs. Dr. Gleason's new work, and I am impatient to take up my pen in praise of it. The book is true to its title, and full of strong points and good counsels. But its chiefest charm for me is that the writer so well understands the so frequent connection of a troubled spirit with broken health, and that from the fountain of her own warm Christian heart, and from her experience as physician, wife, and mother, she knows so well how to

> "Minister to a mind diseased,
> Pluck from the memory a rooted sorrow, and
> Cleanse the stuffed bosom of that perilous stuff
> Which weighs upon the heart."

From Mrs. Sarah R. A. Dolley, M. D., *Rochester, N. Y.*

The title, "Talks to My Patients," might indicate to some that the interest of this pleasant and instructive volume was confined to the patients of its author; but while the needs of these may have suggested the "Talks" which come to make the book, no physician will read it without thinking of scores who would be benefited by its perusal; and no mother will read it who will not thereafter be better prepared to lovingly and understandingly guard and cure for the physical and moral well-being of her children. I have set it circulating among my patients.

From Mrs. Dr. Winslow, *Washington, D. C.*

Never was a book more truly named. In reading it, I see the author before me and hear her voice. It does me good, and it will do every one good for whom it was written. What a happy thought it was for the author to diffuse herself in such a quiet, modest way over the hearts and lives of those she had previously blessed!

From Mrs. Dr. Sales, *Elmira, N. Y.*

I am glad Mrs. Gleason has written "Talks to My Patients." It is a worthy offspring, and will go forth and a blessed work where her voice can never be heard. I would rather have written that book than been queen of the greatest empire on this small globe of ours!

From Rev. Joseph Smith, *Grand Rapids, Mich.*

It is a book admirable for its brevity and sense. It is the best on such subjects that has ever met my eye. I believe it will do very much good. We are glad to see the author's hand and soul on every page, and to feel that she has written, in Christian love, on a theme which is really sacred, but is made so much a medium of quackery.

From Mrs. Stanley, *of the Female College, Elmira, N. Y.*

I believe it to be the book above all others to put into the hands of young mothers and maidens, to help and to guide them in regard to those topics and functions peculiar to woman. I hope and believe the book may find a large sale, for it is worthy of an extensive circulation, and I shall hope to bear a small part from year to year in recommending it to my friends.

It is a compend of motherly and womanly hints, which should be accessible to all of the female sex, whether maidens or matrons.—*Boston Cultivator.*

A book that contains much new and valuable information; no nonsense in it.—*San Francisco Alta California.*

A book we can safely recommend.—*Arthur's Magazine.*

From Elizabeth Oakes Smith, *the well-known Authoress*

I would gladly see this work in the hands of every young mother in the land; it would serve to give her confidence in herself and in the divine provisions of Nature. She would be saved from that weak and senseless fear which embitters the life of the young wife and mother, and leads her to adopt courses destructive to her peace of mind and detrimental to her health.

The full, gracious womanhood of the author is apparent throughout, not unmixed with a cheerful humor quite refreshing upon such subjects. She is evidently familiar with the pen, and uses it with ease. She is sufficiently scientific, but not technically so, and her book may be cited as proof that women never undertake any thing they are unable to accomplish. I am proud to say that such women honor the profession; they are fast driving from its ranks those unprincipled charlatans who cater to the weakness and wickedness of woman, and render marriage a barren and dishonored relation.

From The Evening Mail, New York City.

We know of no book which, in its way, deserves heartier commendation. This is said to be the first medical work issued in America from the pen of a woman; may all that follow be as good! Modest in its assumptions, it does not pretend that physicians are unnecessary, but it teaches what are the causes of many diseases, and how they and the physicians may be avoided. It so avoids the two extremes of mock delicacy and pandersome detail with such good sense, that we could wish it put into the hands of every American girl and woman.

From The Liberal Christian, New York City.

After reading the whole of this book, we pronounce it the most admirable and excellent that we have ever seen of its class. It is written for women. The style is pleasant and readable, and it is full of wise counsels and suggestions regarding the very things in which so many people most need assistance. It is a safe book for young people to read, for any body, indeed, and this can be said of very few books devoted to such subjects. There is not a sentence in it that can be perverted, or misused, so as to do any harm. We wish the book could be read in every household in our country.

From Harper's Magazine, New York City.

Mrs. Gleason is able to say something to wives and to mothers which no man could say. There can be no difference of opinion about the value of the practical suggestions she affords, which are characterized by sound philosophy and clear, good, sterling common sense. We wish the chapter, "Confidential to Mothers," might be published as a tract and sent to every mother in the land.

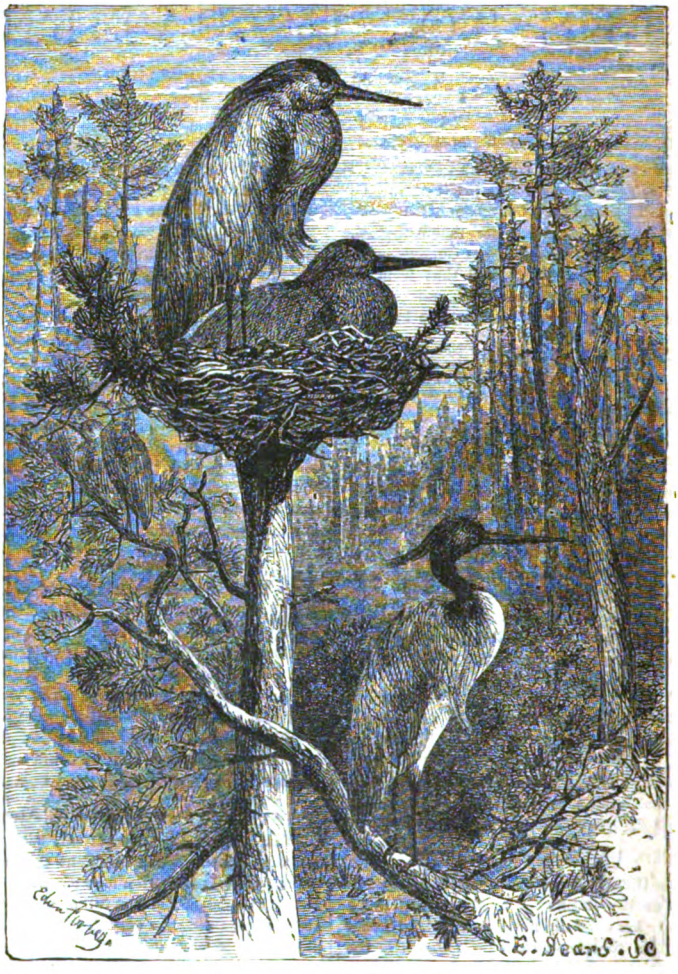
This book is like the familiar conversation of some wise, experienced friend, who has gathered young girls, young wives, and young mothers to her side, and is telling them all about the grave mystery of their organization and how to care for themselves.—*Elmira Advertiser.*

This book treats in a thorough yet delicate manner of all the troubles, cares, and diseases of women. We do not hesitate to say it is the best book of its class we have yet seen.—*Gody's Lady's Book.*

Address WOOD & HOLBROOK, Publishers,

PRICE BY MAIL, POSTPAID, $1 50. 13 & 15 Laight Street New York

FOURTH EDITION—REVISED AND IMPROVED



THE HOME OF THE HERON.

A WINTER IN FLORIDA.

BY LEDYARD BILL.

With Illustrations by Forbes, comprising views of the old city of St. Augustine, and the Natural Scenery and objects in Eastern Florida. The following newspaper extract is one of the many encomiums it has received from the press.

"He justifies the predictions of the climate, saying that it is so delightful that no disease can experience it without favorable effect. To the consumptive, who has not fallen too far within the grasp of this inexorable malady, it offers a safe harbor from the severe winters of the North."

"Americans should know their own country. We believe it will be found that we have under our flag every degree of climate desirable. When we have advanced a little farther into the science of knowing our bodies and their disabilities, we shall know where to find the climate that will best suit each case. There is no sense or humanity in having a wretched sufferer remain in a climate that feeds and sustains his disease. Let our physicians seek out the localities that will best assist each patient, and let the many sufferers be told where they may live a life that is something more than a living death.

"We welcome this book for giving us knowledge of another locality before little known."

Price, $1 25.

WOOD & HOLBROOK, Publishers,

13 & 15 LAIGHT STREET, NEW YORK.

Digitized by Google

2 GAL 139 1

BOSTON MEDICAL LIBRARY ASSOCIATION
JUL 23 1894

OLD SERIES—VOL. 55. NEW SERIES—VOL. 17

MARCH, 1871.

HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE

ADVOCATES

A Higher Type of Manhood—Physical, Intellectual, and Moral.

TO EDITORS. HERALD OF HEALTH AND PHYSICAL PERFECTION.—To Publishers of HERALD OF HEALTH, which is a new style of chapbook, entitled "Physical Perfection; or, Hints To-ward Human Beauty," containing 300 pages and 100 Illustrations, worth 1.50—to each subscriber for 1871 who sends 20 cents extra to prepay the post-age. Send at once. Address WOOD & HOLBROOK, 15 Laight Street, New York.

CONTENTS FOR MARCH, 1871.

GENERAL ARTICLES: Page

Temperance and Religion—*Rev. J. C. Holbrook* 97
The Education of Daughters—A Word to Parents—*Mrs. R. B. Gleason, M. D.* 100
Why Doctors Die Prematurely—*Bennet* 103
Schoolhouses—*Rev. Chas. H. Brigham* .. 105
Theories Put in Practice, or Diary of a Physician's Wife—*Mrs. H. C. Birdsall* 110
Arguing—*F. B. Perkins* 113
Inherent Death—*E. Ray Lankester, B. A.* 115
Lifting Exercise—*Lewis G. Janes* 119
The Two Sussex Lads (A Poem) 121
Height and Weight 122
Studies in Hygiene 125
Recipes for Wholesome Cooking 128

EDITORIAL DEPARTMENT:

The Energy of Old Men 129
Railroad Horrors—A New Faculty Needed—Announcement 130

Happiness, etc.—Wake of Life 131
Narrowness and Blindness—Loss of Power 132
Young Doctors—Death of Alice Cary—Rain Water, etc. 133
Whisky—How Water Gets Foul—Drugged Liquor, etc. 134

HOW TO TREAT THE SICK:

Healing Ulcers by Transplantation—In-growing Toe Nails 135
Cure for Rheumatism—Vaccination, etc. 136
To Prevent Snoring—Cure of Stammering—Remedies for Poison by Ivy. 137

FOOD FOR MIRTH AND THOUGHT 138

ANSWERS TO CORRESPONDENTS:

Torpidity of Liver and Constipation—Effect of Alcohol upon Longevity ... 140
About Fretting—Chapped Hands and Lips—Copper Cooking Utensils, etc. 141

NEW YORK:

WOOD & HOLBROOK, PUBLISHERS, 13 & 15 LAIGHT ST.

GENERAL AGENTS—AMERICAN NEWS CO. . . NEW YORK NEWS CO.

$2 per Annum. Single Copy, 20 Cents.

Digitized by Google

THE BEST IS THE CHEAPEST.

THE PREMIUM SANFORD CORN.

A new and distinct variety, a cross of Dent with Flint, which is the result of hybridization and careful selection of seed for a number of years, selecting seed of the earliest ripening, and from stalks growing two or more ears; believing that like produces like. By perseverance in this course it has continued to improve from year to year. In nearly every locality where tested the past season it has ripened from two to four weeks earlier, and produced from one-third to double the quantity of other corn. The claims made in its favor are sustained by the most convincing and disinterested testimony (neither "bogus or bought") from honest Farmers, having no "ax to grind," only to give the benefit of their experience to others. *Read the testimony*, which is sufficient to warrant every Farmer in giving it a trial.

These facts warrant every Farmer in giving it a trial.

Farmers, procure your seed from "HEADQUARTERS." Get the genuine. Large quantities are being offered which is impure. Beware of the spurious.

READ THE TESTIMONY.

PLEASANT RIDGE STOCK FARM,
PITTSFIELD, MASS., *Dec.* 28, 1870.

S. B. FANNING—*Dear Sir:* The Sanford Corn grew rapidly, with immense foliage, the leaves being very long and wide. Many of the stalks produced four large ears, two-thirds had three ears on them. There was but little unsound corn, and most of the ears were filled out to the top. It has been seen by many who have been here from the West and all have said that it was the finest corn they ever saw. The small cob and large proportion of grain attracted their attention. We have not shelled all of it, but it is safe in saying, that there is one hundred and ten bushels (shelled corn) per acre; and we have made up our minds that it is easier and cheaper to raise one hundred bushels of "Sanford Corn" than forty of the "Tillotson," or any other variety grown here.

It has been the admiration of all, and we have often been offered 50 cents an ear for seed.

J. H. CROOK & SON.

RICHVIEW, Ill., *Aug.* 28, 1870.

The Sanford Corn *is early;* having become scared, while my Dent Corn planted the same day is scarcely silked out.

WILLIAM E. THOMAS.

Office of T. A. THOMPSON, Co. School Sup't,
PLAINVIEW, Wabashaw Co., Minn.

S. B. FANNING: I am sure that all that has been claimed for the Sanford Corn is true concerning it. I believe, all who engage in its culture will fully realize their expectations. I have tried feeding it in connection with the Yellow Dent, and my hogs would select and eat it all and leave the Dent. I can recommend it to all.

T. A. THOMPSON.

MINNEQUA, PA.

MR. FANNING: The corn you sent me last Spring surpassed any thing I ever saw in the corn line. I planted on the 22d of May one-eighth of an acre, gave it the same cultivation as my other corn. It grew more rapidly, came up more even, produced as much again and better fodder, proved earlier, and yielded twenty-five bushels of corn in the ear from the one-eighth of an acre. I shelled three bushels of ears and got two of shelled corn, which I sold readily at the rate of $16 per bushel. All who saw the corn while growing, after harvested or cut up (which was on August 25th), spoke for seed. Several stalks had on four good ears. I can highly recommend it to all corn-growers.

THOS. E. DE RIESE.

BAMBERG, S. C.

S. B. FANNING—*Dear Sir:* I planted the Sanford Corn you sent me on light, sandy soil. It grows the fastest of any corn I ever saw. Each stalk produced from three to four ears. I believe it will make three or four times as much as any other corn I ever saw. It is from three to four weeks earlier than any corn I ever saw.

WM. S. BAMBERG.

JANESVILLE, Wis.

S. B. FANNING: The quart of Sanford Corn was planted on the 14th of May. It was over a week in coming up on account of the drought. It grew very rapidly, and on the first of September was fully matured. I find it very productive. Ears from twelve to fourteen inches in length and filled to the top of the cob. Many of the stalks producing *two* and *three* large ears.

DR. S. N. SMITH.

Send stamp for Circular giving full description, History, and Testimony. One Quart by mail, post paid 75 cents; Two Quarts, $1.25; One Peck, by Express, $2; Half Bushel, $3; One Bushel, $5.

Address

S. B. FANNING,
JAMESPORT, N. Y.

(See Cut of this variety on Third Page of Cover.)

Digitized by Google

THE HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE.

VOL. 17, No. 3.] NEW YORK, MARCH, 1871. [NEW SERIES.

PUBLISHED MONTHLY BY WOOD & HOLBROOK, 13 & 15 LAIGHT STREET.

A NEW DISCUSSION OF TEMPERANCE PROBLEMS;

COMPRISED IN A SERIES OF TWELVE ESSAYS CONTRIBUTED BY OUR BEST THINKERS AND WRITERS.

No. V.—TEMPERANCE AND RELIGION.

BY REV. J. C. HOLBROOK, D. D.

THE bearings of the Temperance movement of our age are far more extensive and important than many persons suppose. There is scarcely any interest of man that is not affected by it, whether temporal or spiritual. Its relations to health, both of body and mind, and to general prosperity have often been clearly set forth, but its connection with religion has not been so frequently and fully dwelt upon. In this brief paper I propose to present some thoughts on the latter topic.

Long and careful observation has served to convince most thoughtful religious men that the use of intoxicating drinks is one of the most serious hindrances to the progress of the Gospel in our land. In so far as it results in actual drunkenness, it shuts men out of the kingdom of Heaven. Religion and intemperance are utterly incompatible with each other. Where one exists the other can not, in the same individual.

Of all the vices to which men are addicted, there is none more degrading and dehumanizing than drunkenness. The Bible condemns it as sternly as any in the whole category of immoralities. Drunkards are therein classed with thieves, idolators and adulterers, and it is expressly declared that they can not inherit the kingdom of God. Christians are warned not to keep company with them, no, "not so much as to eat."

In connection with the injunction of the Apostle Paul in Ephesians v: 18, to be "filled with the spirit," there is a caution not to be drunk with wine, showing that to be under the influence of alcohol is totally incompatible with being under divine influences. The pure spirit of God will not come into the soul, or dwell where this demon is. There is something offensive and abhorrent to Him in the condition of one who has yielded himself up to the appetite for strong drink, including wine.

In I Corinthians x: 21, the same Apostle calls the inebriating cup "the cup of devils," because the heathen in their worship poured out libations of wine to their false and abominable gods, and drank to their honor, under the impression that they were pleased with the intox-

Digitized by Google

icating draught, and he warns Christians against its use, declaring, "Ye can not drink of the cup of the Lord and the cup of devils." Not only is the use of alcoholic liquors to the extent of drunkenness offensive to God, but it is also *to any degree*. It shuts one out from all communion and fellowship with Him.

But besides this, such use is a barrier and hindrance to the operation of the gospel in the soul. Alcoholic liquors are used as a beverage for the sake of their effects on the brain, which is the seat of their influence. And *all* such influence is intoxication to a greater or less extent, proportioned to the amount taken into the system. As far as they affect the brain, they derange the mental faculties, deaden the moral sensibilities, inflame the baser passions, warp the reason and judgment, enfeeble the will, and so far unfit the man for all the great duties and responsibilities of life.

What is intoxication? It is poisoning with alcohol—whether in gin, rum, whisky, or wine. The word "intoxicate" is derived from Latin and Greek terms, used to designate the poison in which daggers and arrows were anciently dipped, in order to render their wounds fatal. When the poison of alcohol (and all leading chemists and toxicologists class alcohol among the poisons) is taken into the system it seizes upon the brain and, as already said, to the extent in which it is imbibed it disqualifies it for service. Truth can not then be properly weighed, duty estimated, or any great moral question clearly decided.

In this condition a man is no proper subject for the gospel, for if ever there is demanded a clear head and a free exercise of the mental powers, it is in the consideration of all the great truths of religion and the momentous questions connected with the eternal interests of the soul. Hence all experience proves that there is no class in the community which is so difficult to reach with the gospel, and to bring under its power, as those who are habitual drinkers, even to what is usually called a moderate extent.

And there seems to be among such persons an instinctive sense of the incongruity of the habit of drinking with a genuine religious experience, for there is often witnessed a most desperate struggle in their case, under religious awakening, between conscience and appetite, the one prompting to the abandonment of the cup, and the other pleading for continued indulgence, the result being conversion or non-conversion, according as one or the other triumphs; not unfrequently, too, when men are thus religiously awakened and desire to shake off their impressions and resist the operations the Holy Spirit through the truth, they are s resorting to the intoxicating cup for that pu pose, and usually with complete success. Fa in great numbers might be cited in corrobor tion of this. There is nothing more effecti for "quenching the spirit," and deadening t moral and religious feelings of the soul th this.

Of all the instances, too, of backsliding a apostacy in our churches, a large majority a caused by the use of intoxicating drinks. So years ago Rev. Dr. Lyman Beecher said of R Dr. Nettleton, that he had "served God wi more self-denial and consistency, and wisdo and success, than almost any man living; I r gard him as one of the greatest benefactors G has given to this nation, and among the mo efficient instruments of introducing the glory the latter day." Dr. N. was extensively e gaged in labors in revivals of religion, and w the means of the conversion of thousands. a letter addressed to Dr. Beecher, which wa published, Dr. N. said: "I have kept a list those who have professed religion in the reviva in which I have participated, and have watche them with anxious solicitude and made parti ular inquiry about their spiritual welfare, opportunity presented. . . . . *The sin of intem perance has caused more trouble, and none more di honor to the cause of Christ, than* ANY OTHER VI THAT CAN BE NAMED. Few, if any, excommun cations have taken place for any crime exce intemperance.

"Now, my brother, what shall be done? do not ask what shall be done to reclaim tho who have so grievously offended. *For these, fear, nothing ordinarily can be done.* Their ca is almost hopeless. My inquiry is, What sha be done to prevent the future disgrace of t cause of Christ? The only evidence of repen ance in such a case is a continued course of e tire abstinence from intoxicating drink of ever kind.

"From what I have seen I do believe that n class of persons are more likely to be deceive with false hopes than are such as have been i the habit of drinking freely, though not to i toxication. *If, while under conviction, a perso allows himself to sip a little to raise his sinkin spirits, he is sure to grieve away the Spirit of God* I could fill sheets with the relation of facts.

"I think we may set it down as a probabl sign of a false conversion if the individual a lows himself to *take a single drop*. Every tim he tastes he is putting fire to tinder and pow der."

Digitized by Google

We are taught to pray, "Keep back thy servant from *presumptuous* sins." And who sins presumptuously if he does not, whether in the Church or out of it, who in this day, and amid the light that shines upon the danger of the use of alcoholic beverages to any extent, allows himself to indulge in the practice?

But our subject is not exhausted when we have shown how antagonistic is the use of intoxicating drinks to the work of God and the *direct* operations of the gospel in the soul; we must also consider the influence of drinking-habits on the general morals of the community. They are often, if not almost always, associated with and promotive of gambling, Sabbath-breaking, and other immoralities that are opposed to religion and hinder its progress and disincline men to the means of grace. What an immense flood of crimes and evils flows from this source, which obstruct the progress of religion! Sweep away all the hindrances that have their origin in drinking-habits, and create an entirely temperate community, and how comparatively easy would be the work of building up churches and establishing and maintaining religious institutions, and bringing the masses under the influence of the gospel.

What a monstrous perversion and waste, also of the pecuniary resources of society, is involved in the use of intoxicating drinks which, if devoted to religious purposes and enterprises would speedily give the gospel to every creature. What could not be accomplished in the way of building churches, supporting ministers, and sending out missionaries, if the sum total of what is spent for alcoholic liquors in the United States were devoted to that purpose? Give me this, and I will sustain every existing missionary, Bible, and tract society among us, supply every settlement in our land with a church edifice and a preacher of the gospel, and have a handsome surplus left to multiply instrumentalities for the spread of the gospel, and the intellectual and moral elevation of mankind. Men talk of being taxed to maintain religious institutions; why, vastly more is wasted on intoxicating drinks in this country, annually, than all our religious and educational expenses.

Take what view we will, then, of the effects of the use of intoxicating drinks on religion, we see that they are evil, and only evil continually; there is not an iota of counterbalancing good. Hence we see the justice of the remark of the writer of the first number of this series of articles on Temperance Problems, that "the great body of those who stand for the cause of Temperance are the enlightened, cultivated, conscientious; and the great body of those who stand against that cause are the unenlightened, the uncultured, the careless." It is just what we ought to expect.

It is noteworthy that the great mass of the ministers in this country, as well as of the members of our Protestant churches, are the open advocates of the Temperance cause, and practice upon its principles. This fact speaks volumes in respect to the importance and value of this great reform, and affords presumptive evidence that it is intimately connected with the religious prosperity of society. And the more we study the subject philosophically, and in the light of observation, the more we shall see the propriety of the designation given to Temperance of "the handmaid of religion." It has been frequently noticed that a powerful Temperance reformation in a community has proved to be the John the Baptist of a wide-spread revival of religion.

When we think how extensive is the use of intoxicating drinks, and what a mighty obstacle it is to the moral and religious as well as the intellectual and physical elevation of society, is it strange that those who are most in earnest in the work of this world's renovation and the salvation of men, are also ardent friends of the Temperance cause? Would it not be stranger if they were not? That any Christian, not to say philanthropist, can be indifferent to the advancement of this cause, and fail to array himself in the ranks of its friends, is among the strange inconsistencies that we so often see. Whether or not we can say that the triumph of the principles of the Temperance Reform will be the triumph of Religion, it is certain that Religion can never prevail until the use of intoxicating liquors is banished from society.

DRAWBACKS TO HEALTH OF TEACHERS.—With the vile atmosphere of the schoolroom constantly pouring over the lining membranes of the nasal cavities, surging about the linings of the throat and the vocal organs, diving down the bronchial tubes, and deluging the lungs, what wonder the teacher first suffers from vitiated blood, then from clogged membranes, and, lastly, from catarrh, bronchitis, dyspepsia, and, perhaps, pulmonary consumption. It is next to impossible, that the more nervous and susceptible constitutions should not sooner or later succumb to the baneful influence of so complete and omnipresent a cause of physical depravation.—*Schoolmaster.*

Digitized by Google

The Education of Daughters.—A Word to Parents.

BY MRS. E. B. GLEASON, M. D.

WITHIN the last quarter of a century our land has been dotted with seminaries and colleges for the education of our daughters, and now come the questions which the friends of the cause must face.

Is the plan of study usually pursued the one best suited to the prospective wants of the pupil? Is it advisable for a growing girl, with a delicate organization, to undertake the full college course, and add also the ornamental branches?

As I had long looked with ardent longing for an enlarged course of study for young ladies, I am watching with intense interest its results. Meeting with so many chronic invalids among those who have had the best educational advantages, I have grown anxious on the "school question," and visited many of our best institutions to ascertain whether homes or schools were at fault, that we have so many invalid daughters. I am very sorry to find that hosts of sick girls are sent to our best schools, expecting that they will learn the art of healthy living along with the other arts and sciences. Parents expect good scholars to be made out of very poor material, and that, too, in an incredibly short time. I am surprised at the home-pressure on delicate girls, urging them to do double duty that they may enter an advanced class, and thus graduate early, when the young lady is better fitted for an infirmary than an institution of learning. An absent daughter is a great social privation to parents, sometimes also a pecuniary tax which they can ill afford; hence the propensity to "hurry up," which is so hazardous to mind and body.

Uneducated parents are often over-earnest for the education of their daughters. They have no conception of a college course, of the amount of mental labor it requires, or that delicate girls unable to work are unable to think consecutively, or profitably, for any length of time. Such remind one of the ignorant woman who called to inquire how her boy was coming on at school. Being told "not very well," she asked "why?" "He lacks capacity," replied the teacher. "Indade, sir, and why didn't ye tell me that afore, and I would have bought him one!"

"Money can't make me well and strong like other children," said little Paul to Dombey, his father. So, schools well endowed and well kept can not give good health and great scholarship to sickly girls in a short time, even though rich parents are ready to meet the bills, and the best of professors are untiring in their efforts. Hence, let us cease complaining of our schools when we send girls young and sickly, and they come home less in mind and less in muscle than we expected.

The first great fault in their training is the insane haste to have them learn every thing while young. By this means, their education *is* literally finished early—the intellectual force and flash being burned out, used up hopelessly. Of those thus crowded many die early, some are left permanent invalids, and others still retain their physical power but fail mentally. The bright scholars become not only dull as years advance, but sometimes positively imbecile, or as we say, weak-minded. Of all these classes I have seen many very sad instances.

The peculiar phases of mental and physical derangement induced by over-study while young are presented more at length in "Talks to My Patients," and hence I will not now dwell upon them. Suffice it to say, our girls are not mature enough in mind or body to endure the labor of a college course till they are eighteen or twenty years of age. Remember, that I do *not* say that they can not learn the appointed lesson, or that they may not graduate with honor even before that age, but it will be at the expense of mind or body, which will show itself in after years. Their womanhood will not be as strong, as complete, as enduring as it would have been if they had had less study in early girlhood. Not only is their health almost invariably impaired, but what they learn when thus over-crowded is evanescent. Many a young woman, during the days of invalidism which succeed her school course says, "I'm forgetting all that I learned."

During school examination young ladies will recite so much and so well as to amaze men of sound learning who listen, but the pale lip and wasted muscles, which give now and then an involuntary twitch, show that the system has been over-taxed, and graduation closes usually her career in science and literature. The brain is

Digitized by Google

too weary for close, substantial reading, back too weak for piano practice, no taste nor strength for domestic work; so she takes to easy chairs, light literature, social life, and worsted work, unless in lack of friends to give support she is driven to the school-room to earn a living, which is "a hard road to travel" for a worn-out student. The objection comes, that if our daughters are not sent away to school early marriage will interfere with their proper education. Be it so, they had much better enter upon their new life with good health, and good home-training, *without* the college course than with it, and lacking the first two acquirements. It is impossible for girls to graduate at eighteen or twenty, have the freedom necessary for a good physical development, learn well home duties, and take a complete college course, to which has been added art studies. Something must be neglected, and it is usually health and housekeeping, the two most important elements to make a contented wife and happy home. Every thing in its order—first the physical, and those activities which favor muscular development. There is a time for all things, and the time to develop muscle and learn those forms of handicraft which depend on them is before the twentieth year. After that it is developed slowly and imperfectly. All deem important the early muscular education of the fingers for the piano, even so the tact, dispatch, and strength of fiber needed for domestic work should be developed when the body is growing. If delayed, dislike and debility make it irksome. If the first lessons in household work are postponed until after graduation, we shall conclude that our girls have learned "all kinds of sense except common sense," and that, however well their heads are furnished, their hands are very useless and their backs too weak for any useful work. I do not mean that much manual labor and close mental work can go on simultaneously. We should not expect our girls to be able to do much at home while in school. Therefore, during their growing stage there should be school life and home life, alternating from year to year, as the state of health and state of head indicates. But the girls say, "Let me finish my school course, then I will learn housework," and add by way of argument, that it will be easier to learn now than later, that they can pass a better examination by continuous study, all of which is, to some extent, true. But nothing pays which impairs health in the acquiring. This turning all the life force to mental culture unbalances a system which has a body and brain. Hence growing years should be divided between the development of the one and the other.

There is reason to hope that if our educational plan included more years, it would delay marriage till the mental and physical maturity of womanhood was more perfectly accomplished, and thus bless the land with better wives and better mothers. If the young lady completes the full college course, and also music and painting, and has given good attention to home culture, and taken good care of her health, she should feel that she has done well if she receives her diploma at twenty-two to twenty-four years of age, according to her health, early advantages, and power of endurance. Very few can do all this, and do it well, before that age.

But some one says, "Our sons go to college young, and get through earlier than this." Yes, and how do they come out? Many of them miserable invalids, others know little more that is good and much more that is bad than when they entered. They often lose for lack of good home care what is of more value than all the Presidents and Professors can give. But I am not writing of the sons, but merely wish to shut off invidious comparison between the sexes. Both need constant guidance during their most impressible ages. Boys in some respects require more and receive less than girls. Our sons suffer more from vicious habits, and our daughters from those that are unhealthful. Boys are trusted more at large, but the community calls for continued supervision of our girls, and hence the confinement must be close, too close for the best development of the young, who ought to enjoy childish freedom, like lambs at liberty to run in the home pasture under a shepherd's eye, where they can be gathered into the family fold about "nightfall." The general regulations for college students as to hours of rising, retiring, and exercise can not be elastic enough to meet the needs of sensitive, sickly, delicate girls. The effort made to adjust the rules and the exceptions in a large school so as to meet the wants of the younger and weaker members makes the work of supervision, of giving permissions, very burdensome for those who have the oversight Teachers are worn in the effort to do double duty, that of acting as teacher and mother to many who ought still to be in the home nest.

"But," says one, "if my daughter is at home she will go out in society too early, she will keep late hours, and eat what she ought not to, and if I put her in school she will be restrained and held to regular habits." And so you shirk the care and responsibility of guiding your ex-

Digitized by Google

citable and wayward child on to some worn-out teacher, who has already more of that class than she can well manage.

Another says, "If my girl stays at home, what shall she do? I don't want her on the street, and we keep so many servants there is nothing for her to do in-doors." All I can say to this is, that every girl should do domestic work till she can do it well, and that her mother should teach her the art of housekeeping.

In all our larger schools are gathered many young girls who are not ready for the position, but for whom there seems no better place—motherless girls, those unhappy with their second mother, and those whom their own mother can not manage. Of the many belonging to these classes, I have seen many sick, sad faces among girls fourteen or fifteen years of age, who had been in a boarding-school for three or four years, and who counted the years they must remain before they could graduate as convicts number the years of imprisonment. They had no love for study, no health for study, and were weary with the monotony of their lives. There is no drudgery so irksome as mental work, when there is lack of taste and strength to accomplish it well. Those who take kindly to boarding-school life at an early age, lose their love for quiet home life, and seldom regain it. Those who can not have proper home care at this age should find a place in small family schools, where there can be as much of home freedom and home feeling as possible. To be sure, there are educational advantages in a large school which can not be had in a small one, but this will not make amends for the nervous excitability and consequent exhaustion induced by the presence of so many persons. Besides this, the individual motherly supervision, the quiet home sense, is lost. As to those wild and wayward girls who worry teachers, and lead pupils astray, and necessitate rules and regulations too stringent for the general good, they need a place of their own.

A President of one of our colleges said, half playfully but very wisely, that the Protestant churches needed what was equivalent to a Catholic convent for this class, or a sort of "House of Refuge," for girls who would not do well at home, and who were ringleaders of mischief at college. Certain I am that the system of espionage often practised in our large schools has an unpleasant effect on the watcher and the watched.

If parents felt more their personal responsibility, and would keep their children under good home guidance till they were well established in health, mature in mind, and needed the aid of presidents and professors, our high schools could then do their appropriate work, and not have their enthusiasm exhausted in nursing, watching, and governing. I have been annoyed, amazed, and amused at the variety of work parents require of their teachers. As a sample, a city mother takes her daughter to college and amid the varied attentions which she wants her to receive, asks that the lady principal will try to have her daughter converted, and see that she curls her hair every morning, adding that her father is very particular about her hair, as he likes to see her in curls, and that she (the mother) feels very sorry that Clara is not a Christian. The desire for outward and inward adorning was all expressed at the same time, and in the same tone.

Let parents look well after the spiritual and physical training of their children, and accept such helps for the mental as their location affords, until the general habits are well established, and then we have a foundation and superstructure to which colleges can add gifts and graces.

THAT ONE DROP.—For two years past I have been laboring to save an inebriate. After several relapses he became perfectly sober and gave hope of permanent reform. His wife remarked, "If he falls again, it will kill me." Things went on smoothly several months. That once darkened home had become once more a sunny spot. But one day the reformed man met an old friend, who invited him to dinner. At the table wine was furnished, and the entertainer pressed the reformed inebriate to take a glass with him. He knew the man's former habits. The unhappy man swallowed one glass, and it unchained the demon in a moment. From that hour to this my poor friend has hardly seen a sober day, and nothing but a miracle of God's grace will ever lift him from the bottomless pit into which one treacherous glass of champagne hurled him in an instant. In this case it is not difficult to decide who was the greatest sinner. The man who urges a reformed inebriate to touch a drop of intoxicating liquors deserves to be imprisoned for ten years at hard labor. He is not a safe person to run at large, for where is the moral difference of assassination with a knife, and assassination with a "social glass" of poison?—*Dr. Cuyler.*

THE man who possesses good health is always rich.

Digitized by Google

Why Doctors Die Prematurely.

BY J. HENRY BENNET, M. D.

THE following paper, by Dr. Bennet of the Royal Free Hospital, London, from The Lancet, though specially referring to medical men, contains practical hints for all hard workers in advanced years. Men ought to work well when young and in their prime, and after forty-five or fifty years of age take active life more leisurely, cultivate the higher and better faculties, and live so as to prolong life to a good and wholesome old age.—ED. H. OF H.]

IT is admitted by all statisticians that medical men are a short-lived race—indeed, that the standard of mortality in their case is that of unhealthy trades. Why should it be so? As a rule, medical men are well-fed, well-clothed, well-housed members of the community; and the occasional risk incurred in ministering to contagious diseases scarcely accounts for the shortness of their lives, for their premature age, sickness, and death.

Such thoughts have often crossed my mind of late years. When a man has passed his fiftieth year, his contemporaries and companions begin to drop off around him in great numbers, in every class of life; but in our profession the mortality is evidently greater than in other professions. This mortality is also evidently greatest among its most intelligent and most eminent members—a fact which appears to me to contain within itself the key to the question I have put. May it not be that such men succumb and disappear from our ranks *because* they have been great workers, and consequently successful in their generation?

If it is so, if the most valuable lives in our profession are constantly brought to a premature close through the overstraining of vital powers which success brings, would it not be well if the positive danger to life of great success, were more generally enforced and recognised? Our lectures and class-books teem with warnings respecting the dangers of sloth, of inactivity, of mental stagnation. May not a few words of warning be added on the dangers of work and success? If so, they will not come inappropriately from one who failed physically, years ago, through overstraining of mind and body—from one whose recovery has been principally due to his having seen the error of his ways, before it was too late, and to his having accepted and followed the laws of Physiology and Hygiene, formerly ignored, as they are nearly always ignored by the whole tribe of mind and body workers.

The peculiar feature of the medical profession is, on the one hand, that work increases with age, and, on the other, that the public do not consent to look upon aging medical men as veterans, but exact from them to the end the labor of youth. In all other professions, as age advances and renown and prosperity increase, assistance, relief, come naturally. The barrister has his junior counsel who prepare his briefs, the solicitor his head clerks, the vicar his curates, the colonel his staff of officers, the merchant or banker his junior partners and clerks; but the successful physician or surgeon must stand all alone, whatever his age, and do his work entirely himself as long as he practises. Thus, after the age of forty and fifty, the hours of positive work increase very rapidly, instead of diminishing. An officer of fifty or sixty years of age, after seeing thirty or forty years' service, is considered to have gained a claim to repose for the rest of his days. Even a missionary, after less than thirty years' labor in the cause of religion, is pensioned off, and thought to be entitled to honorable rest for the remainder of his life. But a medical man of fifty or sixty, after thirty or forty years' labor in the cause of health and life, is still called on by public opinion to work like a young man. If he does not rush night and day, not only to assuage real disease, but at the voice of vain fears and caprice, if he transfers night-work, and gratuitous or ill-paid attendances into the hands of his uniors, he is considered hard-hearted, mercenary, devoid of Christian and Samaritan feeling; in a word, public opinion makes it difficult for him to withdraw into the "Arcopagus" of science, to become a deliberative and not a militant member of the profession. Nor is the public altogether to be blamed, because it is only by raising his fees that the medical practitioner can erect the barrier which is to defend him from the burden of work he is no longer able to bear. Thus, to many of the thoughtless it appears as if he merely wished to get a larger remuneration for his services, although his real wish is merely to eliminate, to keep at bay, many of those who would wish to employ him

Digitized by Google

The only means at his disposal to diminish work brings on him an odium he too often has not the courage to incur; so he works on, old and feeble, responding to every call, until at last death closes the scene, prematurely.

Between forty and fifty, a man of average constitution is quite equal to success and to the hard labor that it entails in any branch of the profession, to work by day and by night, to care and responsibility; although the weak ones succumb, as did Dr. Todd, Dr. Brinton, and many others I could name. But when fifty is reached and passed, the human economy begins to decline. The hair becomes gray, the sight fails, the gums abandon the teeth, adeps is deposited in unwelcome regions, and many other signs of nutritive deterioration show themselves. No doubt nutritive power is diminished in the entire economy, and the tendency to morbid nutritive conditions steadily increases.

This is just the time when the labors of the successful practitioner increase to the greatest possible extent; and as the brain is the last to give way in the intellectual man, he works on under mental and nervous pressure. By sixty, or thereabouts, the climax is often reached. The overstrained organization ceases to respond to the mental stimulus, and death ensues through some form of nutritive aberration, which has been slowly but surely progressing. Such was the case with our recently mourned brethren, Simpson and Nunneley, the one fifty-eight, the other sixty-one.

Can this sad expenditure of life among the worthiest of our profession be arrested, be avoided? I think myself that it might, if we would cease to live as if we were immortal, as if the diseases we saw daily did not pertain to us; if we would listen to the teachings of physiology, and discard the miserable vanity of thinking that we are exceptions to the general rule, and that at fifty or sixty we are as young and strong as at thirty or forty. To accept this lesson, however, we must analyze ourselves, and if we find ourselves wanting in vital power, thrust aside the scarlet cloak of nerve stimulants—alcohol, coffee, tea, by means of which, I believe, it is that efforts inconsistent with real vital and nutritive power are made by workers in general, and by medical men among the number.

A man who meets age or debility, or want of constitutional power by alcoholic stimulants, even in moderation, by coffee and tea, conceals his real nutritive condition from himself. When both the nervous and muscular systems are exhausted, and want repairing by legitimate nutrition—by beef, mutton, bread, and rest, a man may galvanize his economy by nerve stimulants so as to be equal to nearly any thing up to the last. But the process is a destructive one, exhausts vital power, impairs healthy nutrition, and lays the foundation for morbid organic changes.

By alcoholic stimulants, constantly repeated whenever exhaustion supervenes, the power of work may be supported until within a few days or hours of death, as we constantly see in the lower classes of life. Tea and coffee have nearly as great an apparent nerve-stimulating, strength-supporting power. Let any one who doubts it take a cup of strong tea or coffee when exhausted from want of food and from physical fatigue. The craving for nutritive elements to repair waste, and the sense of fatigue, both disappear in ten minutes, and a couple of hours' more abstinence and work are easily borne. But what have we done? The physical organization wanted repair, wanted the elements of nutrition, the nervous system rest, and we do worse than give them a stone, for we flog them, we galvanize them into continued action.

Night-work is principally done on such stimulation. The student, the writer, young or old, who retires to his study in the evening to work, does so on tea or coffee. The tired brain wants sleep; it is galvanized into intellectual labor. Is it surprising that morbid organic conditions should occur in the long run?—for we must recollect that the nervous system rules over all organic and nutritive changes, normal and abnormal.

Every June a *conversazione* takes place at the College of Physicians, which is usually attended by most of the medical and surgical celebrities of the day. This meeting gives an admirable opportunity, year after year, for watching the ravages of time and work. The young physicians and surgeons, as also those who have acquired reputation but as yet little practice, are more or less pink and rosy; their nutrition is mostly good. But it is far different with the heads of the profession, with the men above fifty, on whose shoulders rests the weight of London consulting practice, and who are making large, often very large incomes; they are mostly pale, or sallow, or anemic. As I walk among them I feel like Cassandra at the siege of Troy, and mentally prophesy evil—fatty hearts, atheromatous deposits in the arteries, degeneration of tissue, as the probable result of lives passed in contempt of the laws of hygiene and physiology.

What, then, is to be done to avoid the evils of

Digitized by Google

overwork in advancing age? Many of our brethren can not help themselves. They are like soldiers in battle: the *res angusta domi* offer an insuperable impediment. They can not rest; they must go on. But many, on the other hand, could increase their chances of life, if they would by despising riches, by throwing their less remunerative practice into the hands of their juniors, by giving up public appointments, by limiting their labors to what their real, undisguised, unassisted mental powers would enable them to do; and, finally, by retiring from the field of action before life has been used up by work to the last dregs. What if they do retire on a pittance compared to previous gains? Does not the colonel, the admiral, retire on half-pay, and constantly live to extreme old age as the reward?

What applies to our medical brethren applies to all; and it is our duty to lay, nakedly and sternly, these facts before erring patients. Is it not very evident that we have recently lost our most distinguished literary man, Charles Dickens, at the early age of fifty-eight, from continued overstraining of the nervous system?—in his case altogether without cause or excuse. On his return from America, he wrote that his readings during his tour in the States had much wearied and injured him. The constant traveling, the excitement of the meetings, the dinners, the receptions, had been too much for him. Had he then been made to understand that he was working against age and impaired vital power—risking his life, in a word—he might have taken rest, and been with us now. But he continued the same labors, the same excitement, and died from brain disease, regretted by a nation, prematurely.

Schoolhouses.

BY REV. CHARLES H. BRIGHAM.

THE change from schoolhouses of the old style to schoolhouses of the new style has come almost within a single generation. The old district schoolhouse is now as much a relic as the spinning-wheel and the "tin kitchen," and a score of other implements which were necessaries of life in the homes of our grandfathers. A few specimens remain at the corners of the cross-roads, and a few towns which civilization has left aside in its march, hold to the old pattern in their school architecture; but in almost every place, city or village, in the East or the West, the new "temple of science" has other form and proportion than the small, bare room, which was once quite sufficient. It is not perfectly demonstrated that, in all particulars, the new schoolhouse has improved the old schoolhouse. The old schoolhouse was usually ugly, but its ugliness was on a small scale, and not the gaunt, staring, grotesque ugliness of so many of the new brick monstrosities. It was not uglier, either than the houses of the village or the farms around it, and matched these fairly in shape and color. The old schoolhouse had loose joints, cracks in the window-sills, holes in the floors, leaks in the roof, and often a smoky chimney. But this very looseness of structure allowed free ventilation, and the pupils were not confined in a poisonous atmosphere. The old schoolhouse had a narrow area within, and no spare room for elbows, but it had with this ample play-room without, on the hillside and in the pasture. If the benches and seats were hard and unpainted, they gave more license to experiments in wood carving, and joined art to mischief. The "District School as it was" had genuine merits, and some characteristics which we can not afford to lose. It had no carbonic oxide to breathe, no high stairs to climb, no water-pipes to freeze and burst, no echoes to try the voice and ear, and "no danger in case of fire." It was easy to get in to, easy to get out of, and quite as easy, on the whole, to sit in for three or six hours, as the schoolhouse "with all the modern improvements."

The modern schoolhouse, doubtless, has many "improvements." It is more imposing in appearance, and more consistent with the dignity of its office. The old schoolhouse always gave the lie to the swelling phrases in which education was exalted as the chief of human interests. It would seem that if education is as important, as momentous, as high and noble, as are traffic and religion, the symbol of education, the schoolhouse, ought to illustrate that nobility and be as big as the warehouse or as the "meeting-house." They could not make the

Digitized by Google

teacher an equal of the tradesman or the parson, while he had to ply his work in a room of fifteen feet square, instead of a two-story store, or a long hall with galleries and a steeple. The modern schoolhouse vindicates in its bulk and volume, and tiers of windows, and probably its cupola above all, commanding a view of all the roofs, of house and store and church together—vindicates in this the honor of its function; it has a right to the metaphors of royalty. An ordinary teacher can take comfort and respect himself more in his calling when every one has to look up to him in his place of labour. A schoolhouse which is as large as a church or a factory will naturally in the minds of men and women be classed with the church and factory, as a chief public possession, and will magnify the office which it holds. Big schoolhouses have been both cause and effect in the improvement of the profession of teaching. They have grown from the grand words which have been poured out in public addresses, and they have opened fresh supplies of this flowing rhetoric. In the old schoolhouses the teachers could never come together, there was no room for them, and they could only feel the disgrace of their calling. But in the great halls of the new schoolhouses the teachers can take courage, as they congratulate one another, and see in what pleasant places their lines have fallen. The modern schoolhouse has made education a "cause," and teaching a "profession."

But in its details of convenience the modern schoolhouse excels especially the ancient structure. It has rooms of various sizes for study and for recitation, and ante-rooms and closets in addition. It has blackboards upon the walls, to illustrate all the branches taught, from the simplest orthography to the mysteries of the calculus. It has patent desks and patent seats, combining lightness and strength, and glossy in their shining. It has registers in the walls and in the floors, to carry off the noxious gases, and others to let in heat from subterranean fires. There is a clock above the teacher's desk, to mark the hours and beguile the weariness of tired students. There are maps of all kinds and sizes, outline maps, maps of towns and counties and States and hemispheres and of the globe, maps of physical and of civil geography, maps terrestrial and maps celestial. In one room there is a library, stocked with books of reference and of useful knowledge. In another room there is a cabinet of natural history, fragments of stones, pressed leaves and flowers, impaled bugs and butterflies, a few stuffed birds and rodents, and possibly fossils of extinct races; or a cabinet of materials and instrumen to prove by example the doctrines of chemistr and physics. Photographs and engravings intervals pleasantly join art to science in th school-room, and even busts are permitted upo their brackets. A piano or cabinet organ direct the music, and there are seats of honor fo guests who may come. The better class modern schoolhouses provide not only for th ordinary needs, but even for the caprices, teachers and pupils. Comparatively few of th homes are better supplied. There is hardly any thing to suggest the pursuit of knowledg under difficulties, so constantly taught in th aspect, atmosphere, and appliances of the old district school.

Yet with all this multiplication of conveniences and contrivances, the new schoolhouse fails to satisfy those who would train the body along with the mind, and care for the health and safety of the children and youths who are gathered in these great educational nurseries. The long staircases of the three-story and four-story schoolhouses are not beautiful to one who considers the risk of fire and the danger of panic. The clean varnished patent desks and chairs only hold their occupants in constrained attitudes, and hinder freedom. The air that comes up from the cellar often comes loaded with the impurity which cast-iron and fossil coal have given it, and takes in the crowded rooms additional impurity. The dust is not so readily purged away as in the old schoolhouse, and it lies on the edge of blackboards, on desks and sills, on cornices, and floats in the sunbeams which glance in through the tall windows—dust of many kinds, too, of chalk and of cloth, as well as the dust of the highway. When the great schoolhouse is in the streets of an industrious city, where children most crowd its rooms, its very height exposes it more to the smoke from the factories, and the grime of soot is added to the common dust. For this schoolhouse, too, the rattle of carts upon the pavement, so jarring to the nerves, is the substitute for the hum of insects, which used to lull the urchins of the ancient school in the warm summer days. In most cases, moreover, the inner convenience of the new school building is gained at the expense of the outer play-ground, and those who have such nice seats to sit in, shaped to the frame, have no room to run in when they are released. The old schoolhouse, at any rate, could never be mistaken for a prison, which the new might often be, in the silent order of its discipline, so well adapted to its massive proportions, and its hard granite walls.

Digitized by Google

The new schoolhouses, on the whole, are an improvement upon the old, and we should not wish to restore anywhere in city or country the style of the old cross-road building, with its rickety windows, its hard seats, its narrow area, and its lack of conveniences. The progress which has been made under the leading of Horace Mann and his followers is real progress. But there is room for improvement yet, and schoolhouses are by no means what they ought to be. The new buildings—grand, stately, palatial, as they are, with all their fixtures, and all their display, do not "realise the ideal," or satisfy the physiologists. There is danger to the spine in those shining seats with their cast-iron frames. And especially in the infant schools is the confinement in those small arm-chairs a doubtful gain from the freedom of the ancient benches, on which the infants could tumble and roll, in defiance of rules. The new schoolhouses do not at all fit to the *kindergarten* idea, which, as we said in the last essay of this series, is the idea which is growing in favour. They have not expurgated from schoolhouses the feeling of a place of penance, from which escape is a hope and a joy. The model schoolhouse will get rid wholly of this penitentiary sense, and be no more a trial to patience than the house in which the family live. That phrase which is coming into use and which adventurers in education are swift to adopt, of a *family school*, suggests the type of building of the schoolhouse of the future. The question of this ideal building will determine in large measure the question of the duty and work of the "coming woman" and the "coming man," now so much debated. "Will the coming boy and the coming girl go to school in such houses as those that stand now so proudly in the streets and on the hills?"

What are the "indispensable requisites," if we may use such tautology, of a good, commodious, and healthy schoolhouse, which shall not only be up with the times, but shall be right from the sanitary "standpoint?"—(we must beg pardon of Mr. Richard Grant White for using that convenient German word).

1. In the first place, such a schoolhouse will have *plenty of room around it*, will stand upon a lot that is large enough to give ample room for the sport of children in their half hour or quarter hour of freedom. Its area will not be bounded by a few square feet around the tall walls, with a high fence of board or iron to mark the inexorable limit. The more scholars it contains, the more space for play is needed around the building. This rule of size is practically inverted, and is made in many cases to read, "the larger the building, the smaller its play-ground." A schoolhouse that holds twenty children gives them "all out-doors" to run in; they may take to the road or leap the low fences, or chase squirrels in the wood. Their play-ground stretches as far as they can hear the sound of the bell which calls them back. A schoolhouse that holds a thousand children, on the contrary, must turn them out in sections into pens as narrow as the cattle-pens by the stations of the Western railways. The "recess" of one of these great city schools is a melancholy sight to one who has been accustomed to the free sport of children around the country schoolhouse. A fair calculation would allow at least as the play-ground to a child as many feet as a man ought to have in his work. For a school of a hundred pupils half an acre is little enough, and when the number of pupils is doubled or trebled or quadrupled, the full acre is not an extravagant allowance. Four or five acres would be better still. A small schoolhouse in a large ground pleases the eye much more truly than a ponderous building that nearly fills the lot on which it stands.

It may be said that in the larger cities so much space can not be spared for school purposes, and that a lot of an acre or half an acre in size would cost a sum altogether beyond the means of the tax-payers. Where land is sold by the square foot it is idle to talk about *acres* for school purposes. To this argument we have no answer except to say, that the amount squandered annually in the larger cities upon useless officers, and foolish junketings, and unlawful appropriations, would purchase all the land necessary to give every schoolhouse a square of its own. In the smaller cities and villages, this ample space around the schoolhouse can be secured without any unreasonable outlay. A schoolhouse on a lot of a hundred feet square in any town of less than 20,000 inhabitants is an evidence of public meanness, hardly less than the meanness of a town of which we once heard, where the schoolhouse was built by the side of the graveyard, because that was public property and might be used without charge. Even if the land costs more than the building, it is better to get it and to hold it for its purpose. A church lot, where the building is only used for an hour or two on Sunday, and there is no expectation of sport in the intervals of worship, need not be very large, not larger than the needs of light and air require; but a school lot ought to be to the building which it incloses what the piazza of St. Peter's is to the Basilica; and it would be well also if it had the colon-

Digitized by Google

nades, in provision for rainy weather. The best blessing to the children will be that which is given to them in the open air, and not under the roofs—just as the successor of St. Peter gives Apostolic Benediction to the company under the sky, and not merely to the cardinals and bishops around the Baldachino. Plenty of play-ground free from fences and obstructions, and not curtailed by any prim landscape gardening, or lawns tabooed to flying feet, is the first requsite of a model schoolhouse.

2. Next we mention as essential to a good schoolhouse, *a well deep enough and capacious enough to insure a constant and unfailing supply of water*. Where there is an aqueduct, as in a few of the larger cities, such a well is not necessary, but the *water* ought always to be accessible and always abundant, enough to meet every need of thirst or cleanliness. A schoolhouse is poorly furnished that has no sink or basin, though it may have rods of blackboard. Water in every story of the house and in all the dressing-rooms, is just as important as the maps upon the walls, or the hooks for shawls and cloaks. The means of meeting physical thirst must be at hand as much as the means of meeting the thirst for knowledge. One of the luxuries of the old district schoolhouse was its pail by the door, which it was such pleasure to the urchins to fill from the neighboring well. How many of the new schoolhouses are chary of this bounty the summer visitor knows to his sorrow, after he has toiled upon the long stairway, and reached, half fainting, those sky parlours of instruction. We heard it once given as a reason for not carrying water into the schoolhouse, that so much of it was spilled in using, and that a dry floor could not be kept where there was an active flow from pump or pipe. But the fresh water is worth more than the dry floor, and it helps the activity of blood and brain in the discharge of school duties. There was a school in one of our cities which gained popularity because there was a confectioner's shop on the ground floor, with a soda fountain, where the pupils passing up and down could solace themselves with lollipops and foaming sarsaparilla. That style is good, at least as far as plenty of water, which costs nothing, and makes the hands clean and the voice clear to speak and answer.

3. In connection with this second essential of a good schoolhouse we may mention a third, that *the outbuildings be ample in number, easily reached and without exposure, and be kept pure from nuisances*. Every wise Superintendent of Schools will visit the outbuildings, before he decides that the school is what it ought to No apparatus of outbuildings is suitable wh mephitic odours hang in the air, or where th is not sure means of removing or purifying cretions. In some cases the "closets" of school are within the building, for the sake convenience and neatness, but it is doubtful much is gained by that arrangement. It safer to separate them from the halls and inn rooms, and to bring them nearer to the pla ground. The fault is usually that there are t few of them, and that they are not well co structed. Material that can not well be defac is better in their construction. A large propo tion of the vicious habits and vicious langua of school children, which so vex and mortif anxious parents, is learned in the associatio and practices of these outbuildings and from th legends and figures on their doors and walls This is an evil that escapes rebuke too ofte from the prudery which avoids allusion to an thing that is disgusting in connection with th methods of education, yet it is one of the worst most obstinate, and most insidious of all th evils which beset the union of children in larg companies. Where the outbuildings are vil and filthy, either by what they show to the eye or to the other senses, it is vain to hop that moral lessons from the teacher's desk will have much influence. The varnish of spotless seats and wainscots in the rooms above will be fatally tarnished by the obscene blots, which are remembered as long as the lessons.

4. *Broad door-ways, broad staircases, and wide and airy entrance-halls* are another essential part of a commodious schoolhouse. A cottage door, which opens inward, and a steep stair-way, on which only one or two children can step abreast, are absurd in a building which pretends to be convenient. The staircase should be wide enough to allow as many abreast upon it as can sit on a line in the seats of the school-room, and should be long enough to obviate the danger of falling. The halls should have room enough for easy movement, without crowding or jostling. A good schoolhouse will have quite as many facilities for ingress and egress as a theatre or a custom-house. Parsimony in this matter is disastrous in the end. We saw it once proposed after an accident in a New York schoolhouse by which many lives were lost, that cranes should be fastened above all the windows, with pulleys and baskets attached, so that, in case of fire or panic, the children might be lowered from the windows, and not exposed to the rush and trampling of crowds upon the stairway. Such a proposition, carried out, might

Digitized by Google

give a fine Scriptural and ecclesiastical finish to the fortresses of juvenile learning, suggesting at once the tower of the Cologne Cathedral, and the escape of Paul from Damascus. But, on the whole, a schoolhouse with wide interior passages will be more economical and more pleasing to the eye than one which is garnished with such bulkheads above the windows, and such swinging baskets. The basket apparatus will better fit that time which some see in the near future, when to man shall be given the kingdom of the air as of the earth, and schools shall travel in balloons, studying the wonders of earth and sea and sky in a panoramic way, as the car is wafted onward. The schoolhouse is not yet ready to be fashioned in that transcendental shape. A full quarter of the building ought to be in its halls and passages.

5. And then the good schoolhouse will have *plenty of light*. There will be in it no dark rooms, no rooms which will be used for study, where even on the darkest day of winter the eye is strained to read the page or to trace the demonstration on the blackboard, no rooms which need in school hours any artificial light. There can not well be too many windows in a school-room for needs both of light and of air. In the colour of the walls and the arrangement of the desks, indeed, there should be relief from the glare of light, which might injure the eyes and in the bright days of summer there will be comfort in blinds and shades. But a schoolhouse which is imperfectly lighted, which can take from the sun only so much of his rays as might come into a Fifth-avenue drawing-room, shrouded in upholstery, or a Gothic Cathedral with painted windows, is an outrage upon common sense. An architect who should propose to put stained glass into the windows of a school-room, even if this should celebrate the virtues of its martyrs, would probably be dismissed for his presumption. Yet his folly would be no worse than that of a building committee who should lessen the number of windows in order to get more wall room for blackboard; as did a committee that we knew. A school building ought to be so placed that it can be lighted from all sides, and that its central passages can be lighted from the roof. It ought never to be in a block, or to be wedged in between dwelling-houses or warehouses. If there are school-rooms on all its sides and corners, every side ought to be a front. It ought to have no look of a baron's castle or an artist's studio.

6. Of course *good ventilation* is a necessity in a commodious schoolhouse. All the other conveniences are nullified if the air is not fit to breathe, if it is left to stagnate or can only be changed by the letting in of cold draughts from open windows. Perhaps the right way of ventilating schoolhouses as of ventilating churches and dwelling-houses and railway-cars has not yet been revealed. Let the best way be tried that is already known. Why should not every large schoolhouse have a fan in the cellar, which might be moved by air heated from the furnace or by the steam which is generated in the boiler? That no perfect apparatus has yet been found is no excuse for neglecting ventilation altogether, especially when double windows almost hermetically seal the school-rooms.

7. And finally, in the furniture of the school-room, *there should be provision for ease of posture and freedom of motion*, there should be room for the body as well as for the head and the hands, and the feet should not be fastened in any place, as if the pupil were set in the stocks. We are happily beyond the time when the test of industry was in steady bending over the text book, and when the rod rewarded with stripes the unfortunate wight who should lift his head and look around. If lessons are only faithfully learned, the pupils in the school-room may be indulged in that attitude of relief which was once the infallible proof of "idleness." The desks should be so constructed that this privilege of the present generation may be fairly enjoyed. Every scholar should have room for back and elbows and legs and feet, and should be able to change his position without interfering with neighbors on either side. All the light gymnastics of Dio Lewis or the heavy gymnastics of the athletes, practised in the short moments of "recess," will not make up the want of freedom for limb and muscle in the hour of sedentary study. There is a snare in this shapely and glossy furniture, when it is another form of the straight jacket and the pillory.

LEAD PIPES AND WATER.—In the city of Aberdeen the supply of water amounts to 1,000,000 gallons daily. It is distributed to the houses in lead pipes. Chemical examination of the water showed that there was in each gallon of water rom one-twentieth to one-hundredth of a grain of lead. During 17 years no case of lead poisoning has been known to be caused by this small amount of lead. Galvanized iron, and lead pipe lined with tin, are both condemned by the best authorities. Two metals in juxtaposition are both oxidized when brought in contact with water by the galvanic action.

Digitized by Google

THEORIES PUT IN PRACTICE;
Or, Extracts from the Diary of a Physician's Wife.

EDITED BY MRS. H. C. BIRDSALL.

WEDNESDAY, *July* 19.

THIS afternoon and evening I attended the Sewing Society at Mrs. Bowers. There were several elderly ladies present, who seemed quite prominent in the affairs of the Society. They constantly addressed each other as "girls," and with as much spirit as if they were in reality girls.

At first I was amused by it, but afterward I felt that there was something touching about it, too; for the oldest may be young in feeling, and may *ever* be young in God's sight. Sewing Societies are almost proverbial for being "schools of scandal," but I am sure the most particular man could have found no fault with this one. In the evening a good many young people came in, and it was very pleasant to see the genial, cordial spirit among them. There were no *tête-â-têtes*, no dividing into cliques, apparently no flirtations; and this is certainly a little unusual and remarkable among twenty to thirty young men and women. To-morrow we shall start on our Western journey.

August 26.—We reached ——— on Thursday, and I was so tired that I have done little but rest since then. Our journey out was a delightful one, as we went slowly, and with frequent stops at places of interest. We were hastened in our return by Dr. Moody, who received a sudden call home. About the same time news came to Henry of a legacy, to which he must pay immediate attention. We seem to be in the way of legacies, though Henry's is in not quite so pleasant a form as mine, a not very agreeable Aunt having fallen to his lot. She has lately lost her husband, and is left with very small means. She will be without a home, unless we take compassion upon her. Henry left the matter entirely to me for decision, telling me plainly the peculiarities of his Aunt Sarah. I have given my consent, and she will be with us some time next week.

During our absence I lent our Topsy to a friend, who has a number of children, and her report of Eliza's behavior with the children, and her management of them is so favorable, that the thought has come to me that, perhaps, I am doing an injustice to the girl in keeping her in a position she is not calculated for.

Sunday, August 27.—This is our last Sunda alone, and I can not help regretting it, for ou Sundays have been such peaceful, happy days but it may be better for us to have somethin to keep us from self-absorption and selfishness.

Henry and I have been talking about Eliz and our conclusion is, that it is just as mistake to keep a servant girl in a wrong position as i is to start a person of superior intelligence i a course of life not suited to his tastes.

About all I can get directly from Eliza i talking with her is her oft-repeated saying: " does like chillen wonderful, mum." I have de cided to let her go when I find a really goo place for her, and when I suit myself with an other girl.

Tuesday, 29th.—Aunt Sarah made her appearance to-day, and what an appearance it was She came in the noon stage from Plympton Station, and it seemed as if all her possessions would never be unloaded. There were three trunks, one with an ancient round top, in the condition of the head of Uncle Ned, so well known to lovers of negro minstrelsy; four bags of different shapes and sizes, two bandboxes, a large basket containing the homeliest and greenest-eyed of yellow cats, another one filled with jellies and preserves left from Aunt Sarah's housekeeping, two umbrellas and a parasol, a cane which she keeps to remember her deceased husband by, a large shawl, a modern traveling-bag, and a bottle of brandy in her hand. The last-mentioned she declared that she can never be without, as she is greatly troubled with a "goneness at the stomach." After these things were landed in safety, a huge Boston rocker was handed down, which Aunt Sarah considers as necessary to her comfort as any of her possessions.

My heart sinks within me at the thought of constant companionship with this woman. She is tall and large, and walks with a short quick step, which is at the same time ponderous, making all the floors creak. Her head and face are round and fleshy, and she has small, pale blue eyes that look particularly cold and prying. She said very little at dinner, but I often found her small eyes fixed upon me, and from this and some peculiar noises in her throat, something between a cough and a groan, I imagined that

Digitized by Google

she was not altogether pleased with something. But I must try not to imagine—I am very apt to do it—and I know from my own experience, and from observation of others, that it is a very unprofitable employment.

Wednesday, 30th.—It is like a breath of fresh air to get away from our legacy to sit alone for a time. I have been with Aunt Sarah all day, and I know that if we do get along it will be with constant self-repression and control upon my part. Her views upon all subjects are so different from mine that we can never harmonize, and I shall save much valuable time in not striving for that which can never be. What I must strive for are good nature, cheerfulness, a firm stand in my own position, but at the same time leniency toward the views so contrary to mine. Each day I must start out with my armor on, but must try to take all the comfort of its protection without any of the discomfort of its control.

Friday, September 8.—Mrs. Venner, the wife of an intimate friend of Henry, is very sick, and I have spent most of my time during the last week in her sick-room. Mrs. Venner's sister and sister-in-law live with the family, but although they are very anxious to take good care of their sister they do not succeed. The sister is one of those weak, incompetent persons, who have apparently not an idea of what is right and proper to do for the sick. The sister-in-law in her undirected energy represents the other extreme. She considers herself the most efficient of nurses, and is continually recurring to her skill. She never sits still, but bustles about, shakes up pillows, changes the position of furniture, and creaks round the room in a concentrated effort to keep still. When she can find nothing else to do she plies the sick one with reiterated requests to endeavor to think of something that she would like to eat or drink, or to have done for her. It required a little bit of management to work myself in as occasional nurse, but Mr. Venner and Henry kindly assisted. I wait under the plea of relieving them from their continued watching, and Mr. Venner induced his sister to leave his wife to my care by telling her that the children were suffering from want of attention, and that nobody could see to them as well as she. The spice of praise worked like a charm in turning the current of her energies.

I have done my very best in practising my theories about nursing, and I have the satisfaction of feeling that I have been a comfort to Mrs. Venner. I have a great deal to learn yet about the art of nursing, and this I can best do by practising upon every opportunity.

Saturday, the 9th.—Aunt Sarah is not at all chary of her blame for my conduct in spending so much time at Mrs. Venner's. Last night, at the supper-table, she said, "Well, Henry, I am glad that *Ann* (she will persist in calling me *Ann*, a name never before applied to me) is going to spend a little time at home. My Good Book tells me that wives should be 'keepers at home.'" Henry replied by explaining this in the simple, natural way, and then said, "Aunt Sarah, don't you remember that our Good Book also gives us the best of examples of going about and healing the sick, and doing all kinds of good?" "I am afraid, Henry," she answered, "that you haven't recovered from your habit of perverting Scripture—any person who reads his Testament knows that Jesus Christ's habit of going about to heal the sick, and in other good works, was not intended for the imitation of women who have houses and families to attend to—else what should the Apostle Paul have been inspired to give this direction for?" Henry made no reply, at which I was a little surprised, for it looked almost like an abandonment of his position, but he afterward explained it to me. He said that Aunt Sarah knew him so well that she understood that he held to his first position firmly. An answer would have provoked her to an interminable discussion of that blind, one-sided kind to which she has been used from her youth up. Henry's father formerly lived in Littleton, the place from which Aunt Sarah came, and he says that he, when quite a little boy, often used to draw near the group of men gathered round the stoves in the old church, of a winter's morning, and listen to their repeated discussion of truths that were so plain as to need no argument.

His father never joined in these talks, and at home both his father and mother accustomed him to such a clear, decided way of accepting plain truths, that he learned soon to perceive how mistakenly these men often set up their individual opinions as authority in matters which they did not understand.

Thursday, September 14.—I have let Eliza go to Cousin Emma, and I am supplied with an Irish girl by the name of Madge. She came to me recommended by a farmer's wife, who has found her good help. I already think her an original among the gems of the Emerald Isle. I expected her the day that Eliza left, but she

Digitized by Google

did not come for two days after. The first notice of her advent was the sound of vigorous scrubbing in the kitchen. Going to see what it meant, I found Madge just arrived, her shawl laid aside, but her bonnet still on, scrubbing the three kitchen tables by turns. The only reason I could think of for so energetic a beginning of her labors was that she was affected with the feeling, that so many people have, of not knowing what to do with their hands in unusual circumstances. Aunt Sarah looks with favor upon Madge, for so far the latter pays the most respectful attention to her moral precepts. Our Topsy generally showed her teeth and tossed her head with a significant air, and followed up the advice by some comical performance, which seemed to convince Aunt Sarah that Eliza could not by any manner of means be one of the elect. Every Sunday I gave Eliza such religious instruction as I thought suited to her capacity, and I believe that the girl sincerely wished and tried to do right. Aunt Sarah's uniform, cold way of approaching people will never answer for all. The better we understand character in its variety the better we can accommodate our instructions, religious or otherwise, to those with whom we deal, and the greater influence we may have.

Sunday, September 17.—How thankful I ought to be, and I think I am, that my husband is thoroughly high-principled. I have been thinking about it a great deal for the last few days, and particularly to-day, in the quiet of my own room. Lightwood, for a country place, is a very trying one for young men, for there is one person here who exerts a powerful and bad influence over them. He is a lawyer, of fine talent, and a very fascinating, entertaining person. He is possessed of that rare gift, for which I know no better name than magnetic influence. I have seen the gift in a good man, and its effect was wonderful in drawing others up to a love of the good and beautiful—but it has the most pernicious effect when used by a man like Mr. Corning. He speaks with the most measured and polished respect of Christianity, but his daily life shows that he does not believe what he says. Seven of the best young men of the place he has led away into his habits of *refined carousal*. Four of the young men are married. Not one of them would be seen in the low grogshops of the village, but their example has undoubtedly had a great influence in leading young men of inferior intellect and position into the latter places. One of the young men, who is married, holds a respon ble position in the Lightwood Bank, but l habits are so interfering with the proper di charge of his duties, that he has received two three admonitions, and, quite lately, a noti that further misconduct will procure his di charge. Henry is frequently begged to joi these young men in their wine and card partie but he invariably refuses, plainly giving th reason that he is strictly temperate and intends t be all his life. Then Henry is so honest, hon est according to a woman's ideas, which, i seems to me, are generally more right tha men's.

Tuesday, September 19.—I spent part of th morning with Miss Margaret Stanton, who ha been quite sick. I met there a very peculia doctor, and his more peculiar wife. The doctor I had seen once before. One day last summer Henry had a call to Milburn, a place ten miles distant, and I went with him. Just before reaching the village we were surprised by the sight of a man rushing in haste from the gate of a pretty place and waving a large paper in his hand. He came directly toward us, and Henry stopped the buggy. The man, still waving the paper, said, "Doctor, doctor, here's my diploma—look at it—take it right in your hand and examine it. There, now, you see, I'm a regular practitioner—the prejudice against me has no foundation,' etc. etc. etc.

Henry looked over the paper, and said that it seemed satisfactory. The man, a singular, wild-looking individual, was ready to enter into a long conversation upon his own merits and qualifications, but Henry drove on. It seems that he is a man of one idea in regard to disease. All his patients have liver disease, and all are treated alike by him, with one "sovereign remedy for all the ills that flesh is heir to," a remedy concocted by himself and kept on hand by the gallon. The remainder of our drive was enlivened by the most absurd anecdotes of this man and his wife, many of them so extravagant that I was quite suspicious that Henry was manufacturing some of them. Since the interview of this morning, however, I am prepared for believing almost any thing about them. Miss Stanton sent for this doctor in the first place, but he being ill, she employed Dr. Andrews, who soon brought her to a convalescent state. While I was with her this morning we were surprised by the entrance of this erratic doctor, much wrapped up and escorted by his wife. Just nodding to Miss Stanton, she marched the doctor to a lounge, and said,

Digitized by Google

Lie down there now, and keep still." He obeyed, and she went on, "Now, I'll go and attend to the horse, and"—with a threatening shake of the head—"don't you get up nor speak while I am gone." I gazed in mute astonishment, but I was to see and hear more remarkable things. When the woman returned she settled into business at once by saying, "Well, Margaret, how are you feeling? I was very sorry the Doctor couldn't come to you when you sent for him, and it is at the risk of his life that he comes now." "Yes," piped up a voice from the lounge, "at the risk of my life. I have been a great sufferer, and no consideration but a wish to attend you in your illness would have induced me to come out now." His wife impatiently broke in, "You keep still. Now Margaret, what did Dr. Andrews do for you?"

Miss Stanton gave the course of treatment in a few words, and added, "It worked like a charm, and I'm mendin' very fast." The Doctor's wife, with a mournful expression, said, "Margaret, you're wofully mistaken; you have a dangerous attack of liver disease, and you ought to have your knees and soles of your feet rubbed with salt before each meal, and take the Doctor's liver panacea once an hour. Isn't that what she should do, Doctor?" "Exactly, my dear," squeaked the Doctor; "your judgment is unfailing. Miss Margaret is in a dangerous state, and her only hope is in a change of physicians. You can tell her what I am willing to do for her."

"Well, Margaret," rejoined the wife, "the Doctor feels such an interest in you that he is willing to sacrifice his own health to take charge of your case. Turn away Dr. Andrews, and the Doctor will commence at once the only course to save you."

Knowing Miss Stanton's confidence in this Doctor, I was afraid she would yield to the double solicitations, but was so pleased with her answer, "Dr. Andrews done well 'nuff for me; I'm sorry the Doctor couldn't come, but I'm suited with the way I've got up, and I don't 'spect to make no changes," that I could have jumped up and hugged the old lady for her firmness. Thinking I had heard enough I took my departure, and spent my time while going home in wondering whether the practice of my pet theory would involve my being any thing like this woman. The result of my pondering was, that the cases are so different as to require no comparison. I have never had a thought of interfering with Henry's medical practice, but of following up his treatment with those little womanly attentions which no man can give—and this not in every case, but when it seems perfectly right and proper.

Arguing.

BY F. B. PERKINS.

THE use of arguing is to find out how far we agree.

This is a direct contradiction to the prevailing practice in arguing, which is, between ladies and gentlemen generally, about the same as between a couple of attorneys in court—a strife to beat the other side in this particular case, irrespective of principle. It is a lawsuit in which the combatant is at once client, lawyer, and judge. The natural result is, that each side always awards itself the verdict, and the parties are exactly where they were when they began, only more so.

Brute force is close behind the justest judge—and an immeasurable shame it is to the thin varnish that calls itself Christian civilization. But not a verdict, nor a decision, nor a sentence in the United States would be worth a cent were it not for the Sheriff and his posse, who step right up to any recusant, fists clenched, club lifted, or pistol cocked. They knock him down, they smash his door, they seize his goods, they drag him off and lock him into a hole between stone walls. No violence, no justice!

Now, there is no sheriff in conversation. Hence the void verdicts of ordinary argument. The parties in interest are each man his own sheriff, too, as well as judge; and if, to use a legal phrase, either party attempts to "levy execution," it is a breach of the peace; for in such cases execution issues, if at all, against the body.

The United States is, theoretically, the best place for fair argument. The theory of this country is, that it uses the least of mere compelling law, and accomplishes the most by the

Digitized by Google

superior supplementing method of intelligent self-control. But fact and theory do not correspond in this point. Good manners is, up to the present date of human progress, a more powerful promoter of fair argument than free institutions. Well-educated Europeans, as a general thing, are fairer arguers than Americans.

Did any plaintiff or defendant ever become convinced that he was wrong, because the suit went against him? No, indeed. Much less, then, when there is no tribunal with power. If litigants are unconvinced, far more arguers.

Arguing, as usually managed, amounts only to stiffening one's convictions by defending them against the mistaken views of another. I shall soon forget the funny example of this definition once afforded me by an excellent lady who had written a book. She asked me to read it, and we had thereupon a conversation nearly as follows (the book was argumentative):

I.—What for?

She.—I want you to note your objections to the argument.

I.—But don't you think you're right?

She.—Yes. I *know* I am.

I.—Well,—of course. But now, just suppose—for the sake of the present argument, merely—that you were wrong, and suppose I could construct an actual proof—a demonstration—of it. Would it convince you?

She.—(*With some hesitation, but squarely at last.*) No, it wouldn't!

I.—Well then, for goodness' sake, what's the use of my reading it and noting my objections?

She.—*I want to show how mistaken they are, and thus strengthen my argument.*

I didn't do it.

I began by saying that the use of arguing is to find out how far we agree. That is the first use. If we know that, we shall not need any controversy to know how far we differ—*that* follows of itself. But suppose we find out that up to a certain point we go on together, and all at once there is a fork in the road, and one of us takes one road and the other the other?

At this point stop arguing, and *compare views;* or else talk about something else. Two people usually have diverging beliefs on many points, and reasons which are satisfactory to each mind for its own belief. He who loves to learn can always find instruction in comparing his own views with those of another. Almost any one enjoys stating his beliefs, and his reasons for them. And, after your interlocutor has done this, in answer to your inquiries and observations, if he doesn't want to hear yours,—why he gives you his values free, instead of exacting a compensation, and you have the best of the bargain.

A very good rule for arguing is, to talk from the same state of mind as if you were seeking counsel. Seeking counsel, as I look at it, is not, however, the holding up an empty bag on one hand and the emptying into it of "solid chunks of wisdom" on the other. It is the vivifying contact of two minds, more likely to result in the striking out of a valuable suggestion from one or the other of them, than the solitary brooding of one alone. I have frequently been applied to for advice, and have frequently been helpful to the applicant. Not because I had the dose he wanted, all labeled and ready like a quack medicine in a vial, by any means. My way is to sit down with the applicant and talk the matter over. If some useful suggestion does not come out of an earnest talk, where both parties are kindly, and where one wants help and the other wants to give it—why, they must be a couple of cabbage-heads; and I don't propose to admit this to be the fact where my head is one of them.

This way of arguing will prevent irritation, and therefore it includes the obvious rule, Keep your temper.

It will prevent the very common proceeding of trying to trip up your adversary, by taking advantage of some error or imperfection in his statements. To take such an advantage in business would be scorned by any fair man, but it is seldom thought unfair in arguing. Yet the trick is just as petty in one case as in the other.

It will prevent personalities, and the excusable anger which they cause.

It will prevent quibbling on words—another fruitful cause of excusable anger in argument.

For my own part, I greatly enjoy the process of comparing my opinions with those of other people, but I abhor what is usually called arguing, and never intentionally get into it. My experience is that my views may be changed after deliberate reflection on a new idea, suggested in the course of a comparison of views with another. But I don't think I ever had a good hard "argument" with any body, without being hardened in my own belief and feeling that my adversary was an ill-tempered ass. This is not a good thing.

THE man who has a clear conscience is rich.

Digitized by Google

Inherent Death.

BY E. RAY LANKESTER, B. A., OXFORD.

LET us now parenthetically inquire as to this inherent cause of death—this something in the organism which, more clearly than the other structures and properties of the organisms, limits life. We say, "more clearly," for it is impossible to regard what was ascribed to "external agencies," without remembering that they have their correlatives in the organism itself.

How is it that absolute potential longevity is made to have a limit by heredity? How is it that natural decay is hereditary as to time and effect? The whole subject of the hereditary transmission of specific characters has been recently treated of by Mr. Darwin in his volumes on "Animals and Plants under Domestication," and the ingenious theory of Pangenesis started to explain and collect all these phenomena under one head. Though Mr. Darwin does not allude especially to senility, he mentions at length periodic developments agreeing as to the time of their appearance in both parent and offspring. The theory of Pangenesis is thus stated: "I assume that cells before their conversion into completely passive or 'formed material,' throw off minute granules or atoms, which circulate freely throughout the system, and when *supplied with proper nutriment multiply* by self-division, subsequently becoming developed into cells like those from which they were derived. They are supposed to be transmitted from the parents to the offspring, and are generally developed in the generation which immediately succeeds, but are often transmitted in a dormant state during many generations, and are then developed. Their development is supposed to depend on their union with other partially developed cells or gemmules which precede them in the regular course of growth. Gemmules are supposed to be thrown off by every cell or unit, not only during the adult state, but during all the stages of development." (Darwin, loc. cit. vol. ii, p. 374.)

We may use this theory to explain the hereditary character of senility. The gemmules, "when supplied with proper nutriment, multiply." As long as there is nutriment for them they will continue to be produced, but when the superabundance of nutriment ceases, which, as we shall see, is soon after growth is quite completed, their production ceases; they are thus limited in number, and, being called upon in repair and reproduction, are gradually exhausted. But it is not necessary to have recourse to the pangenetic gemmules, which are only considered by Mr. Darwin as provisional hypotheses. The physiological units of Mr. Herbert Spencer, which he describes as follows,* will suffice as an assumption; or, indeed, we need go no further in explicitness than is involved in the assumption of "a matter of life." What we have to explain is why Mr. Spencer's units, or the "matter of life," should be limited in quantity in various organisms, so that life terminates at different periods, even when two species compared appear to have been subjected to the same external agencies. The old writers distinguished the "*vires in posse*" and the "*vires in actu*." The aged, they said, had not, as the young, this under-stratum of "*vires in posse*" to call upon in cases of exhaustion. "We must never forget to insist," says M. Reveillé Parise, "upon this fundamental principle, that the unknown force of life, *vis abdita quædam*, diminishes more and more with the progress of age." "*Ex viribus vivimus*," said Galen. A young man is commonly said to overtax his strength and to injure his *constitution* by great expenditure of force when young. The common idea expressed in these various statements of opinion is that a store of life-force or life-material exists, which the young accumulate, which increases up to a certain amount, but which ceases to do so at some period, and thenceforward dwindles. Professor Huxley has well expressed this in terms of life-material, in a lecture delivered at Edinburgh in January, 1869. "At any rate," says Professor Huxley, "the matter of life is a veritable *peau de chagrin*, and for

* Mr. Spencer, after describing the organic "polarity" seen in the phenomena of repair and development, says, "If then this organic polarity can be possessed neither by the chemical units nor the morphological units, we must conceive it as possessed by certain intermediate units, which we may term *physiological*. There seems no alternative but to suppose that the chemical units combine into units immensely more complex than themselves, complex as they are; and that in each organism, the psychological units produced by this further compounding of highly compound atoms, have a more or less distinctive character. We must conclude that in each case some slight difference in their mutual play of forces produces a difference in the form which the aggregate of them assumes"

Digitized by Google

every vital act it is somewhat the smaller. All work implies waste, and the work of life results directly or indirectly in the waste of protoplasm." Is there any direct evidence of the existence of such a store of force or material as is evidently usually supposed to exist in organisms? If we look at the question from the point of view of force it makes little difference, for force implies matter in a particular condition. It could not be maintained that one organism might possess a greater store of vital force or life-power than another, without there being some *material* representative of that force. Hence we must—whether taking force or matter as our text—look for some matter in the young which disappears in the old. Protoplasm, the physiological basis of life, which no doubt is the same thing as that which Dr. Beale terms "germinal matter," is a matter which by its increase or accumulation in an organism must increase its power—in fact, its amount of life; and, conversely, when diminished, the amount of life must be diminished. It is from the changes of this germinal matter that the formed tissues result, that repair is effected, force evolved, nutriment elaborated, secretion manufactured; and it is a matter of observation that this germinal matter is more abundant in young than it is in aged organisms. The numerous preparations of tissues, and their description by Dr. Beale, the result of his carmine process, clearly demonstrate this, and it is on all hands admitted. The quotation which follows from Mr. Paget is a fair description of that diminution of repairing power to which we shall have to refer, while Dr. Marshall Hall has largely detailed the decline of the vital powers in old age:

"Some people, as they grow old, seem only to wither and dry up; sharp-featured, shriveled, and spinous old folk, yet withal wiry and tough, clinging to life, and letting death have them, as it were, by small instalments slowly paid. Such are the 'lean and slippered pantaloons,' and their 'shrunk shanks' declare the pervading atrophy. Others, women more often than men, as old and as ill-nourished as these, yet make a far different appearance. With these the first sign of old age is that they grow fat; and this abides with them till, it may be, in a last illness, sharper than old age, they are robbed even of their fat. These too, when old age sets in, become pursy, short-winded, pot-bellied, pale, and flabby; their skin hangs not in wrinkles but in rolls; and their voice, instead of rising 'towards childish treble,' becomes gruff and husky."

The germinal matter which abounds more in youth than age, obviously embraces Mr. Spencer's physiological units, thus accounting for and correlating its power of general and special repair. It also must include Mr. Darwin's gemmules, and must be immensely called upon therefore in reproduction, far more largely, perhaps, than is represented by the more bulk of the generative products. Mr. Spencer recognizes this, and alludes to the shrinking and diminution of the germinal matter in advancing life in the following passage: "Protoplasm, which has become specialized tissue, can not be again generalized and afterward transformed into something else, and hence the progress of structure in an organism, by diminishing the unstructured part, diminishes the amount available for making offspring; or, we may add, for carrying on the work of life. This same store of living matter is called upon and reduced in cases of great expenditure of force, such as are greater than the contemporaneous power of assimilation can supply; and it seems not improbable that this germinal matter may be the store from which Professor Parkes supposed a muscle to draw a supply of nitrogenous aliment in the absence of nitrogenous food, and when only carbo-hydrates and hydro-carbons had been supplied. This is consistent with what is known of the great danger of excessive exertion, especially in the absence of abundant nutriment.

The ovum is composed, in its very earliest stages, of nothing but this protoplasm. As development and growth advance it gives rise to the formed tissues, increasing itself also in bulk. But the germinal matter never increases at the same rate as the whole organism; it is always diminishing relatively to the whole, though increasing absolutely as long as growth continues. This gives us some insight into the way in which the change in the vitality of youth and age occurs.

But there is a more important action than this. What is it that limits growth? what gives the limit to size? Mr. Herbert Spencer ("Principles of Biology," vol. i, p. 128) very fully enters into this matter, and clearly shows that *expenditure* (expenditure which uses the matter of life, and prevents its accumulation) increases more rapidly than growth; there is not a direct agreement between the increase of the one and of the other. This appears from the following considerations. It is demonstrable that the excess of absorbed over expended nutriment must, other things being equal, become less as the size of the animal becomes

Digitized by Google

greater. In similarly shaped bodies the masses vary as the cubes of the dimensions, whereas the strengths vary as the squares of the dimensions. "Supposing a creature which a year ago was one foot high has now become two feet high, what are the necessary concomitant changes that have taken place in it? It is eight times as heavy, but the muscles and bones have increased their power only in proportion to the areas of their cross sections; hence they are severally but four times as strong as they were. Thus, while the creature has doubled in height, and while its ability to overcome forces has quadrupled, the forces it has to overcome have *grown eight times as great*. Hence, to raise its body through a given space its muscles have to be contracted with twice the intensity, at a double cost of matter expended." Mr. Spencer shows that the same relation is true for the absorbing surface, which has only increased fourfold, and for the circulation of nutriment, which has to be transmitted to an enlarged periphery. Thus, then, the period of growth must be limited; thus a period must be reached when the germinal or living matter is no longer accumulated but is destroyed; thus the inherent cause of death has a structural existence. The apparent absence of inherent decay in many trees, in fish, in some reptiles, is alluded to by Mr. Spencer. He attributes it, as we have done above, to their exceedingly small expenditure; trees and plants generally exhibiting no personal expenditure at all, while fish and cold-blooded inert reptiles show very little indeed. Mr. Spencer also remarks that a strict inductive confirmation of the law of increase of expenditure and of growth must not be expected, since the bodies compared, *e. g.* fish and mammal, are not of the same density or chemical constitution entirely.

Another circumstance coöperates with the arrival of a period of balance between the expenditure and the accumulation (and depends on that period) to influence the natural termination of life. The condition of equilibrium between expenditure and nutrition, growth having ceased, might be maintained for an indefinite time were it not that precisely at this period a new form of expenditure, involving a very severe tax, sets in—namely, reproduction. It is when a stationary condition has been reached that we may anticipate from general laws new adjustments of the whole aggregate; while the changes of the more adaptable state of *growth* were in course, while concrete shape was being built up, discrete shapes were less likely so to be; and hence it is, when growth has ceased, or nearly so, that reproduction sets in.

The effect of this additional tax is to start the organism more rapidly down the incline toward the termination of the road of life, the length of time occupied in the downward run depending no doubt on the height of the hill which has been mounted, and on the friction, inclination, and additional acceleration, if any, of the descending body. An accident on the way may bring the imaginary rider over some precipice to the bottom of the course at once, and it is little likely that he will succeed in avoiding the many dangerous corners and pitfalls, which increase toward the end of the road, and finally expend the full amount of impulse in traversing the whole course.

Some organisms may continue to grow and produce young throughout their life; but the earlier reproduction is commenced, and the more rapidly it is carried on the sooner must the increase of the organism's bulk be stopped, and so waste and death ensue. Fish, mollusks, and trees are the extreme cases of this protracted period, which was explained as due to small personal expenditure. A test of the superabundance of the matter of life is seen in the reproduction of lost parts which Salamandroid Amphibians, and also Crustacea, exhibit during a considerable period of life, though it may be questioned if they possess it after their last moult, if they ever have a *last* moult. Salamanders and Crustacea belong to the same category as fish.

A second lot of organisms die at once upon the setting-in of reproduction by the rapid abstraction of the matter of life contained in the eggs and sperm. The Protozoa are typical of this group, for in them the formed matter of the organism is all that remains after reproduction, the entire mass of the germinal or living matter being used in reproduction. Hence there is no after-life, no down-hill run. It is the same with insects and with annual plants; so much of the living matter is taken that they have not power to recover the loss; even assimilation is stayed. The animals of the former group of small expenditure could recover their generative loss, not being called upon simultaneously in other directions.

A third group have the procreative subtraction coming on late. It checks growth and finally stops it, but it is so moderate as to leave the organism enough living matter to go on with, and life ceases only when the living matter is so far reduced as to be unable to keep the existing structures in adequate repair, or pro-

Digitized by Google

vide sufficient material for the necessary outlays of force. Such cases are presented by mammals, birds, and possibly some trees and shrubs.

It may not be out of place here briefly to state how death may be brought about by mechanical causes and external agencies in those organisms whose period of natural decay is very remote. There is of course the chance of accident, which is greater in a long life than a short one. But there are two examples of self-adjusting, or rather self-destroying tendency in the organism, to which allusion may be made. Trees, increasing in size as they grow older, expose a larger surface to the wind, while the roots can not penetrate beyond the limited soil; they thus are more liable to get blown over year by year. Again, increasing as they do, and being stationary in their position, they encroach on each other's area, and exhaust the limits of the soil and space by their united action, what is enough for one not being enough for five or six. In the case of animals, the same mechanical limit appears; where the food is diffused and taken in numerous but small mouthfuls (*i. e.* as in herbivorous and scavenger animals, not prædaceous animals), five small mouths will be more efficient in supporting five pounds of an animal than one big one. It is thus that the Maori fly is expelled by the smaller European house-fly. It is thus that large fish, large mollusks, large crustacea of species with diffuse food receive a limit to their life. The greater danger of all kinds involved in increased *surface* also tends to limit life in such organisms.

We have yet to ask how the exact or approximate period of natural death comes to differ in various species by heredity. We have seen how it is possible for a limit to be inherited, but how does the period so limited come to be an hereditary quantity characterizing species? How is it that it varies in animals which commence life and carry it on under very much the same conditions? The specific accidents, actions, wear and tear to which different species are severally subjected are not sufficient alone to account for the fixity of the period, though their influence is important. There is something additional, some more direct cause than these, and we must look for it in the quantitative limitation of the germinal matter itself, varying in species. If it were not so, how can we account for the fact that a cow and a sheep, which start from ova so exactly identical in form and size, composed probably of equal amounts of germinal matter or protoplasm, subject as they develop to the same external influences, living perhaps side by side in the same field, yet differ in their inherited term of life, which appears to be, as nearly as can be guessed, about twenty years for the larger and twelve for the smaller ruminant? We have seen that the expenditure increases during growth more rapidly than the bulk, more rapidly *à fortiori* than the accumulation of germinal matter, which we saw did not increase even as rapidly as the bulk. We may regard this germinal matter as a sort of stock-in-trade with which the losing game of increasing profit or accumulation, but more rapidly increasing expenditure, has to be played. "The rate at which a man's wealth accumulates is measured by the surplus of income over expenditure, and this, save in exceptionally favorable cases, is determined by the capital, *with which he begins* business." In the transactions of an organism we trace the same three elements. "There is the expenditure required for the obtainment and digestion of food, there is the gross return in the shape of nutriment assimilated or fit for assimilation, and there is the difference between this gross return of nutriment and the nutriment that was used up in the labor of securing it." As long as this is in excess we have an increase of living matter and an increase of structure, and clearly the larger the capacity of the animal to take in food, etc., on commencing life (individual life), the larger and the *longer* will be the accumulation of germinal matter by the increase of bulk (profit). Say that each year the profit doubles, while the expenditure trebles, with a capital at starting of six units, while the expenditure is a third of the capital, and the profit cent. per cent., or equal to the capital at starting. In the *fourth* year, with these figures, we shall find that the capital commences to diminish, the figures representing its condition in the same units being respectively for the four years, 7, 13, 19, and 13, while it descends to 1 in the fifth year. Now, for comparison, suppose nine units as the initial capital, and the same relations of expenditure and profit, we shall find that the diminution does not commence till the *fifth* year, the growth thus continuing a year longer, the figures being 15, 24, 35, 36, and 33 respectively.

These two cases, in which the quantities are of course merely arbitrarily chosen for example, and in which the ratio of expenditure and profit as to increase is exaggerated, suffice to demonstrate the principle, which may be applied to organisms. It is because the calf at birth is a much larger animal than the lamb, having been carried longer by its parent, who from her greater size could of course give to

Digitized by Google

the offspring a greater proportionate amount of living matter to commence life with, that the cow lives longer than the sheep, or rather inherits a later natural limit to life. The quality of the germinal matter and many other conditions which have to be provided for in laying down such rules as this, by the expression "*cæteris paribus*," must always be taken into consideration.

We have, then, seen reason to think that the duration of life, after growth is completed or coming to an end, depends on the amount of living matter accumulated during growth, and that this depends on the size at birth, *cæteris paribus*. Thus it is that we trace the rationale of that connection between time of growth, time of gestation and potential longevity, which has been pointed out, though we can see no good reason why the number five or any other should express the ratio for the whole class of animals.

Is Lifting a Dangerous Exercise?

BY LEWIS G. JANES.

IN these days of "Lifting Cures" and "Health Lifts," the question of the *safety* of this method of exercise, especially in the cases of delicate invalids, women, and children, is one of the first which meets the advocates of the new system of Physical Culture. Very many, warned by personal experience or the advice of careful physicians, find an almost insuperable objection to this treatment in the fancied danger attending its use. This prejudice, however, results from a misconception of the method of exercise, or of the nature of the apparatus used in its application. The term "Lifting" is perhaps unfortunate in conveying to almost every novice an idea of a stooping motion of the body, and an abrupt strain upon the spine, *separating* the vertebræ, and producing injurious results by compression of the abdominal muscles, tending to hernia or rupture.

The effect actually produced by a well-directed lifting exercise, on a properly constructed apparatus, upon the muscles of the back and abdomen, and the spine, is directly opposite to that supposed. There is no stooping, or bending the spine, or body, during any portion of the action. The knees are flexed with the body erect, and straightened gradually and gently, the weight being supported by the hands. The spine is thus consolidated, the vertebræ compressed together, instead of separated, the muscles of the abdomen gently contracted, and the internal organs, throughout the entire movement, retain their natural positions, supported by the surrounding muscular walls and attachments. The movement is gentle, uniform, and slow, adapting the weight very gradually to the muscular tensions through the action of steel springs, without which no apparatus can be completely safe, or equally beneficial. The amount of weight is graduated to the condition of the patient.

Thus rupture or hernia, and all abdominal displacements, find here the most natural and sure remedy, while the gentle though powerful impulse given to the circulation throughout every organ of the body, internal as well as external, vital as well as muscular, forces the morbid accumulations into the natural channels of evacuation, clearing the system of waste matters, and carrying the nutriment, properly organized in the blood, to every portion of the frame. In this beautiful process of reconstruction, removing the old and effete, generating the new and healthy tissue, we find a sure promise of health, vigor, and renewed life.

The disciples of The Lifting Cure are not disappointed to detect popular errors concerning its method, occasional errors in its application resulting from ignorance of its laws or the use of imperfect and uncouth apparatus, and sometimes results laid at its door, which in no way belong there. The good old "Water-cure," so beneficial when judiciously used, has probably washed many people out of the world, through ignorant experimenting in its early history. The habit of eating is an old and good one, yet how many die every year, from the injudicious use of food. Quality and quantity here modify the result, as they do in the lifting exercise.

The public may expect to be flooded with all kinds of "lifting machines," claiming patronage on the merits of thunder stolen from The Lifting Cure. I expect to hear of injuries inflicted, and false prejudices aroused against our system,

Digitized by Google

resulting from these experiments, for which we are in no way accountable.

The Lifting Cure bases its results—

1. On its judicious application or use; and

2. On a scientifically constructed apparatus;

And claims that with the most perfect apparatus, comprising the spring and dead-weight combination, approved by the Butler System, *without the right method of application*, comparatively little benefit may be expected; while the most judicious use of a crude dead weight or lever machine, without springs, may result in injury instead of benefit, and can not produce that *vital invigoration* so essential to an increase of strength and health.

I had occasion not long since to address a communication to The Health Reformer, in correction of certain misstatements, accidental no doubt, of no less an advocate of Health Reform than Dr. R. T. Trall, concerning the apparatus and system which I advocate. This communication was, somewhat unfairly, I think, refused admission to that journal, only one or two points were noticed at all in reply, and those only admitting that partial truth which *may* be most useful in conveying a false idea.

In reply to the charge of "monopoly" against the Butler System, reiterated by Dr. Trall, it may be sufficient to say that we hold the written application of the Doctor for the right to introduce and control the aforesaid "monopoly" in the city of Philadelphia. We believe that we represent the feeling and motive of the patentee of the apparatus as well as our own, in the affirmation that we only desire to secure a fair presentation of our system on its merits, in the hands of competent persons, properly educated to use and apply it.

The following comprises the main points of the communication referred to:

"... Throwing out the experiments of Windship on rude and cumbrous apparatus, it is not unfair to claim for Dr. Butler and his co-laborers the honor of discovering, perfecting, and naming the new curative and strength-giving agent. All the apparatus now constructed and in use, under the name of Lifting Cure, Health-Lift, Combination Lift, etc., were invented subsequent to Dr. Butler's, and after careful investigation of the different styles of apparatus and the claims of their reputed inventors, we are unable to find in them any fundamental improvement on that patented and used by Dr. Butler.

"The object of this communication, however, is not so much to describe and advocate the Butler System, as to correct, authoritatively, some errors of fact and theory, into which a few people who have not thoroughly investigated the subject, seem to have fallen.

"1. The objection of the writer of the article in your August number to the Windship apparatus is just, but as a matter of fact, Dr. Windship has lifted on his yoke-lifting apparatus not *seventeen hundred* but *twenty-seven* hundred pounds. His greatest lift *by hand* is *twelve hundred and eight* pounds. But he can hardly claim to be the "strongest man in the world," as he has been out-lifted by both these methods. Prof. Butts of Ohio lifted *thirty-four* hundred pounds by yoke, and a Mr. Pierce of this city has raised more than three thousand pounds in the same manner; while Dr. Butler of Boston in the hand-lifting apparatus, in the presence of the writer, lifted *twelve hundred and twenty* pounds, and considers himself able, under favorable circumstances to raise thirteen hundred.

"2. Dr. Reilly of Chicago can hardly be said to have '*invented a machine.*' Dr. Reilly's specialty, the side-lift, was invented and used by Dr. Butler years before Dr. Reilly ever heard of it. I presume Dr. Reilly will base his claims as an inventor upon a patent received by him for an alleged improvement in lifting *handles*.

"3. The reason given in your article for declaring Dr. Butler's method of employing springs 'essentially erroneous,' derived I presume from a similar misapprehension of Dr. Smith in his pamphlet, will be seen to be itself erroneous, when the fact is known that the principal spring on which the weight is suspended, has the greatest tension at the commencement of the lifting motion, instead of the least, growing less continually as the weight is raised, thus perfectly fulfilling the law of graduation, and securing complete coöperation and safety in exercise. Beside this central spring, Dr. Butler's machine is rendered still further elastic by cartilages of rubber and platform springs having the *greatest elasticity* and *least* tension at the starting point, the value of which is sufficiently apparent to every scientific investigator. .....

"4. The Lifting Cure, while presenting primarily the all-important law of 'self-cure by self-action,' and embodying a method of culture whereby the *vital power* is developed, and applied to combat disease and increase strength, instead of producing an abnormal deformity of external muscular tissue, claims and uses all other hygienic agents as its aids. It avoids the practically fatal error of 'putting too many irons in the fire,' yet gives to thousands their first lessons in hygienic instruction. We preach the whole 'Gospel of Health'—nothing less."

Digitized by Google

The Two Sussex Lads.

I.

THERE lived two lads in Sussex, some forty years ago,
Dick* was the name of one of them, the other was named Joe;
Both were the sons of farmers, and both had prospects fair,
And of schooling both, for country lads, had got a bounteous share.

II.

To gather knowledge of all kinds, Dick ever was intent,
And in reading good and worthy books his leisure hours were spent;
Whene'er he wandered through the fields, he ever tried to find
Some lesson good in all he saw with which to store his mind.

III.

Joe never read a book at all unless some silly tale—
Give Joe his paper and his pipe and pot of home-brewed ale,
And he would sit and sip, and smoke and read, until the drink
Rose to his brain and drowned the power to understand or think.

IV.

Dick went away to London town his fortune there to try;
In study and in anxious toil his time of youth went by.
Whate'er he thought was right to do, he did with all his might;
He climbed by Duty's rugged path to Honor's topmost height.

V.

Joe's father died, and so he got the farm, but soon it passed
Into another's hands, for Joe lived very hard and fast.
The wealth his father hoarded up, and toiled so hard to win,
Joe spent in drunken revelry and every kindred sin.

VI.

Joe died upon a lair of straw, in a cellar foul and dim,
No kind voice soothed his dying hour, for no one cared for him;
And when his wasted form was laid within the pauper's ground,
No tear bedewed his nameless grave, no mourners stood around.

VII.

Dick died, and kind hands closed his eyes; and round his coffin stood
Men from all nations far and near, the noble and the good.
When o'er the mountains and the seas, the mournful tidings swept
That he was dead, humanity bowed down its head and wept.—

VIII.

Of these two lads, the one who spent his youth o'er pipe and pot
Died, as the drunkard ever dies, uncared for and forgot:
While Richard, by untiring zeal and steady toil, became
The man than whom the world as yet can boast no loftier name.

* Richard Cobden.

Digitized by Google

Height and Weight.

WITHIN the last few years public attention has been drawn to the question of what individuals weigh, by the facilities afforded for weighing by the construction of weighing-chairs. These chairs are not only to be seen at the Crystal Palace, in London, where diminutive boys tout for custom, offering to tell you your "correct weight, for only a penny, sir," but they are often seen at the stations of the Metropolitan Railway and many other places in the country. The practice, therefore, of getting weighed is obviously on the increase, and we want to utilize the knowledge thus gained by showing how it may be turned to most advantage. It will be easily seen that to know the weight of a person without reference to some other standard, such as height, would be of but little advantage. But if by taking the height of a person we can say what he ought to weigh, then we have a means of ascertaining what persons ought, or ought not to weigh. The difficulty has been to determine what a man of a certain height really ought to weigh. If this can be determined, then we can say whether a man of a certain height exceeds or falls short of the average weight of men of his stature.

One of the earliest efforts made to obtain any thing like a fixed relation between height and weight was that of Dr. Boyd, who weighed a number of inmates at St. Marylebone Workhouse. He took the height and weight of one hundred and eight persons laboring under consumption, and found they measured five feet and seven inches, and weighed ninety pounds. He then measured and weighed one hundred and forty-one paupers who were not consumptive, and found that their average height was five feet and three inches, and that they weighed one hundred and thirty-four pounds. This subject attracted the attention of the late Dr. John Hutchinson and he determined to take the height and weight of all classes of persons in the community. In this way he collected the height and weight of upwards of five thousand persons. This list, however, included persons who exhibited themselves as giants and dwarfs, and other exceptional cases. He therefore reduced his instances to two thousand six hundred and fifty persons, all of whom were men in the vigor and prime of life, and included sailors, firemen, policemen, soldiers, cricketers, draymen, gentlemen, paupers, and pugilists. This group of cases was intended to make one class as a set-off against another, so as to get a fair average. The following is the result of Dr. Hutchinson's observations:

Height.	*Weight.*
5 feet 1 inch	120 pounds.
5 feet 2 inches	126 pounds.
5 feet 3 inches	133 pounds.
5 feet 4 inches	139 pounds.
5 feet 5 inches	142 pounds.
5 feet 6 inches	145 pounds.
5 feet 7 inches	148 pounds.
5 feet 8 inches	155 pounds.
5 feet 9 inches	162 pounds.
5 feet 10 inches	169 pounds.
5 feet 11 inches	174 pounds.
6 feet	178 pounds.

Of course the result of these investigations of Dr. Hutchinson can only be considered as approximative, and he himself thought that a larger number of observations would lead to a more perfect law. The fact is, his observations are quite sufficient to establish all that we need, and goes to show that among a certain set of healthy men his estimate of weight and height may be regarded as an approach to a healthy standard. It is only where considerable departures from the estimates given by Dr. Hutchinson take place, that any particular case demands attention. If this table is examined, it will be seen that the increase in weight for every inch of height is a little more than five pounds. In fact, allowing for any error in observation, we may say that Dr. Hutchinson's table is reducible to the law that for every inch of stature beyond five feet and one inch, or sixty-one inches a healthy man increases five pounds for every inch in height. If this deduction be accepted, we may very much simplify Dr. Hutchinson's table, and say that as a rule, a man's weight increases at the rate of five pounds for every inch of height, and this rule holds good for all practical purposes. Starting then with a person five feet in height, who, according to the assumed law, should weigh one hundred and fifteen pounds, we obtain the following results:

Height.	*Weight.*
5 feet	115 pounds.
5 feet 1 inch	120 pounds.
5 feet 2 inches	125 pounds.

Digitized by Google

Height.	*Weight.*
5 feet 3 inches	130 pounds.
5 feet 4 inches	135 pounds.
5 feet 5 inches	140 pounds.
5 feet 6 inches	145 pounds.
5 feet 7 inches	150 pounds.
5 feet 8 inches	155 pounds.
5 feet 9 inches	160 pounds.
5 feet 10 inches	165 pounds.
5 feet 11 inches	170 pounds.
6 feet	175 pounds.
6 feet 1 inch	180 pounds.
6 feet 2 inches	185 pounds.
6 feet 3 inches	190 pounds.
6 feet 4 inches	195 pounds.

Although this law is approximately good for certain number of cases, even above and below his table, it is practically found, and especially in the case of children and growing persons, that there is a wide difference of weight at heights below five feet.

Attention may be also drawn here to the fact that there will constantly occur in the community instances of persons where either the muscular or bony systems are excessively developed, and who consequently weigh more or less than their height. Dr. T. K. Chambers, in his admirable essay on Corpulence, published in 1859, calls especial attention to the researches of Mr. Brent on the assumed weights of the statues of antiquity. In order to get at this, Mr. Brent immersed in water accurate copies of these statues, and by ascertaining the quantity of water they displaced he calculated their weights. Dr. Chambers has taken the pains to reduce the absolute weights of these statues to assumed heights, and thus compared the heights and weights of these statues of antiquity with Dr. Hutchinson's modern man. Without giving the whole of the heights and weights, we present the series at the assumed height of six feet. Thus:

	Height.	*Weight.*
Bronze Tumbler	5 feet	155 pounds.
Hutchinson's Man	5 feet	178 pounds.
Dying Gladiator	5 feet	196 pounds.
Theseus, British Mus.	5 feet	210 pounds.
Hercules, British Mus.	5 feet	234 pounds.
Farnese Hercules	5 feet	259 pounds.

On this table Dr. Chambers remarks: "Of the statues here selected, the Bronze Tumbler may be taken as the type of extreme lightness and activity, the Dying Gladiator of robust strength; in Theseus and the smaller Hercules the sculptor's ideas of a hero where the bodily strength must be equal to that of any possible man. The Farnese Hercules exhibits a development of muscle greater than is ever known to exist in the human species."

Dr. Chambers also gives the height and weight of certain celebrated prize-fighters, the result of Mr. Brent's observations, which makes it very obvious that in certain cases the great weight depends on the muscular and osseous development.

	Height.	*Weight.*
Perrins	6 feet 2 inches	238 pounds.
Caunt	6 feet 2 inches	203 pounds.
Spring	5 feet 11 inches	182 pounds.
Jackson	5 feet 11 inches	196 pounds.
Bendigo	5 feet 9 inches	168 pounds.
Johnson	5 feet 8 inches	187 pounds.
Slack	5 feet 8 inches	192 pounds.
Mendoza	5 feet 7 inches	172 pounds.

The conclusion we come to with regard to these weighings and measurings is that all ordinary departures from the average height and weight of the body, deduced from Dr. Hutchinson's tables are due either to an increase or decrease of the fatty matter or of the adipose tissue in the body. Thus, taking the composition of a human body weighing one hundred and fifty-four pounds, and measuring five feet and eight inches, it will be found that it contains twelve pounds of fat. It is then mainly due to the diminution or the increase of this fatty substance that human beings weigh more or less than the standard weights given in the above table. It will be therefore here worth while to inquire what is the use of fat in the system, and what indications are afforded by the height and weight of the human body for caution in diet and regimen.

The exact way in which fat is produced in the tissue of plants and animals is not known, but there is evidence to show that it is found very generally in the tissues of plants, especially in the seeds. Oil, when used for commercial purposes, is mostly obtained from the seeds of plants, as seen in castor oil, rape oil, linseed oil, cocoa-nut oil, palm oil, and a hundred others. As it is found in the seeds of plants, so it is in the eggs of animals. The embryo of all animals is developed in contact with oil, of which we have a familiar instance in the yolk of the egg of birds. It appears also that the muscular and other tissues grow under the fostering influence of the adipose tissue.

Besides this primary influence on the growth of the body, fat subserves many other purposes.

Digitized by Google

In the first place, it seems a reserve of material for producing muscular force when needed. Animals grow fat in summer, but as the supply of this material becomes scanty in winter they lose their fat and get thin. Man himself gets fat in summer and grows thin in winter from the demand on this store for heating purposes. Hybernating animals go to their winter sleep sleek and fat, but wake up in the spring lean and meager, from the loss of fat in maintaining the animal heat necessary for life. Fat is thus seen to be an essential of animal life. Where there is too little deposited for the purposes of life, then serious disease has already commenced or may set in; while on the other hand a redundancy of this deposit may seriously interfere with the functions necessary to life.

It is from this point of view that the value practically of a knowledge of the height and weight of individuals becomes the more apparent. When the weight of a person is much below his height, then it may be suspected that some disease has set in, which may go on to the destruction of life. One of the earliest symptoms of consumption, the most fatal disease of civilized inhabitants of the world, is a tendency to loss of weight. Long before any symptoms are present of tuberculous deposits in the lungs, this loss of weight is observable in persons afflicted with consumption. At this stage a large amount of evidence renders it probable that the fatal advance of this disease may be prevented.

On the other hand, this knowledge of the true relations of height and weight presents us with individuals who weigh a great deal more than the standard presented by the above tables. In certain individuals, and, in fact, in particular families, there is a tendency to develop adipose tissue. However free from fat may be the food, what little it contains is arrested in the tissues of these individuals, and they become "fat;" that is, they weigh more than their height. The consequences of this fatness are very various. The fat may be so deposited over the system as not to be necessary to the functions of life; but every one can understand that, in the case of two men of equal stature, say five feet and eight inches, one having to carry one hundred and fifty-four pounds and the other one hundred and sixty-eight, the latter will be at a disadvantage. This arises from two causes. The heavier man carries, in the first place, a greater weight, and in the second place, his heart has to project into the tissues of the body a larger amount of blood in order to keep him alive. For every pound a man weighs above his height, his system is at a disadvantage, and he suffers in various ways. When fat is distributed about the body then no inc disadvantage is felt. But when fat ha mulated in particular parts of the body fering with the functions of particular then its evil influences become speedily ap The most accurate account of the effects accumulation of fat in the viscera of the will be found in a pamphlet by Mr. B who, though not at all what we should fat man, nevertheless, so suffered from the chest that he could not walk forward stairs, or stoop to buckle his shoe. Th no doubt that in his case there was a nec for immediate relief, and he obtained it b staining from articles of food which supp to the system.

When persons weigh much above height, it is obviously a matter of import that they should as much as possible relie tax put upon their muscular and circul system by diminishing their weight. F nately, this is not a very difficult thing t but it should be done with caution. "To B with success requires caution. The imme withdrawal of all fatty food, and the substi such as starch and sugar, which produce f frequently attended with dangerous res Mr. Banting's diet, although so beneficial in case, was not altogether a judicious one, and have no doubt that many of our "stout" fri have found an early grave by their determi tion to reduce themselves to the standard weight for their height. With regard to st people, or those who weigh more than th height, it should be recollected that if th have suffered no inconvenience from th weight, it is better to leave well alone. Th are few people living in the scientific circles any city who are not well acquainted with t portly forms and genial faces of well-kno men from seventy to eighty years of age. would be folly on the part of the men who ha thus achieved the normal age of three-score a ten years to commence any system of artific diet, when their natural instincts have guid them in spite of their weight, to their pres green old age.

When studied from a judicious point of vi there is no doubt that an estimate of the heig and weight of an individual ought to enter in an estimate of the possible chances of life. I medical practice it may become the decidi point of the treatment of disease; while in the estimates which insurance offices are obliged t make of the prospective value of life, it is o the utmost importance. E. L.

Digitized by Google

STUDIES IN HYGIENE.

Society for Promoting the Spread of Hygienic Knowledge.—A few friends to Health Reform, in New Haven, Conn., feeling that they could do and get good, proposed coming together from time to time at one another's houses, to talk over, in an informal way, matters of vital importance to all, though practical by most—Health, and all that pertains thereto.

From a weak and feeble beginning, they have had their numbers increasing so rapidly, that it was thought best to organize into a society, which was accordingly done, and President, Vice-President, Secretary, Reader, and a Committee on Topics for Discussion and General Business, were chosen.

It is deemed best not to make our meetings public just at present, but we presume the rapid increase in persons attending them will demand it in a little time; for we find that with a very little missionary work, our numbers are easily and rapidly augmented. They are quite informal at present; we meet but once a fortnight on Saturday evenings—dispatching the business between 7½ and 9, then tarrying a little for social chat, to make our acquaintances more cordial, and our friendships stronger. At each meeting the subject for the next is announced, and a person appointed to read an essay or talk upon the subject sufficiently long to break the ice and make it suggestive to others. Then the President gently draws from each one present some remarks by way of experience or observation. Generally all have something to say, and are willing to say it, for each one is expected to think on the subject and to come prepared. Some bring books with articles on the subject in hand, which are put into the hands of our extemporaneous Reader, so that all have the benefit of what is read. Need I say that, although we are mere beginners and do things crudely, our meetings are very interesting and profitable?

At our next meeting, one of our leading physicians of New Haven, is to read an original paper before the Society on the "Relations between States of the Mind with States of the Body, and the Dependence of each upon each." The subjects to be discussed may be numbered by legion. There is no danger of our dying out.

Our only drawback is, too little time. Of course, our Society is honored by the presence of ladies. We could not get along without them. They take a more active part than men, and why should they not; this subject appeals to them far more strongly than to any others. Already a Health Library, and Health Tracts are subjects for consideration. One evening, one of themselves suggested that it would be well if all would provide themselves with Health magazines, and all subscribed at once for The Herald of Health.

Who can predict the good results of these meetings, or to what they may not lead in time! Certainly the success of this movement will lead to similar societies being formed in other communities. W.

[Note.—We look upon this movement as a very wise one. Are there not other towns and cities where the people can form similar societies for promoting the spread of a knowledge of health, and the best ways of living? We should be glad to chronicle the doings of such societies everywhere.—Editor.]

Abuses of Dress.—The tight waists, the low necks to dresses, and the high-heeled shoes are most flagrant abuses, and ought not to be longer tolerated. We shall not quarrel with the jaunty little hats of the ladies; for they are indeed pretty, and no harm results from them, as of all parts of the body the head needs the least clothing. But, to pass to the other extremity, we have to say that the detestable high heels to ladies' boots and shoes, running as they do down almost to a point, are spoiling the gait and ruining the ankle-joints of children and young misses. We are careful to order our shoemakers to remove such heels from shoes before permitting them to be brought into our dwelling. Heels of moderate height and good breadth are of great service in elevating the feet so as to avoid direct contact with moist earth, and they also give support and afford firmness to the step. Why should Fashion push good devices to absurd extremes? We must aid in dethroning the tyrant when her decrees lead to the physical or moral injury of the race. The present fashion of leaving the neck and the upper part of the chest bare, is fraught with evil consequences. It would be less objectionable in countries uniformly warm; but that our daughters, here in this frigid and changeable climate, should constantly expose to chilling

Digitized by Google

winds a vital part of the body, is one of the evils of fashion which should be discountenanced by every mother, and father, and brother.—*Nichol's Journal of Chemistry.*

Regarding shoes we will add that the common practice of buying those already made is very bad in its effects on feet. Shoes should always be made for each foot on a last made for them. Let any one who is used to wearing shop shoes wear a pair made on an anatomical last, and they will for the first time enjoy the luxury of happy feet! We say happy, for the feet are quite as susceptible of happiness as any part of the body.

THE COATING OF THE TONGUE.—In health the tongue has hardly a discernible lining; disease quickly gives it one. In inflammation of the respiratory textures at the commencement of fevers, in disorders of large portions of the abdominal mucous tract, the epithelium accumulates, and the tongue has a loaded, whitish appearance. The coat is apt to be yellowish in disturbances of the liver, and of a brown or very dark hue when the blood is contaminated. But we must be very sure, in drawing our inferences, that the abnormal aspect be not due to the food partaken of, or to medicine. Its color is also modified by the character of the occupation. Thus, as Chambers asserts, there is a curious, smooth orange-tinted coating on the tongue of tea-tasters. A local cause sometimes gives rise to a thick opaque coat. For instance, decayed teeth may produce a yellow sheathing on one side. Affections of the fauces also occasion a deep yellow hue. Again, some persons, wake up every morning with their tongues covered at the back with a heavy coating, which wears off during the day.—*Dr. J. M. DaCosta.*

PHYSICAL CAPITAL FOR CHILDREN.—Every hour that a child sleeps is just so much investment of physical capital for years to come. Every hour after dark that a child is awake is so much capital withdrawn. Every hour that a child lives a quiet, tranquil, joyous life of such sort as kittens live on hearths, squirrels in sunshine, is just so much investment in strength and steadiness and growth of the nervous system. Every hour that a child lives a life of excited brain-working, either in a school-room or in a ball-room, is just so much taken away from the reserved force which enables nerves to triumph through the sorrows, through the labors, through the diseases of later life. Every mouthful of wholesome food that a child eats, at

easonable hours, may be said to tell on
moment of his whole life, no matter hov
it may be. Victor Hugo, the benevolen
has found out that to be well fed once in
days for one meal has been enough to tra
the apparent health of all the poor child
Guernsey. Who shall say that to take o
seven days, or even once in thirty days, r
wholesome supper of chicken salad and
pagne may not leave as lasting effects o
constitution of a child?—*Independent.*

Not only is sleep necessary for childre
they should retire early. Sleep taken early
night is worth more than that taken late i
morning, besides early to bed is apt to l
lowed by early to rise, and this habit
formed is of value all throughlife.

NEAR-SIGHTEDNESS.—At least in
classes of society, the possibility of blindne
or near middle life, from changes incide
excessive near-sightedness, as well as the
disposition to transmit the same infirmitie
liabilities, ought to be taken into accou
forming matrimonial alliances, like any
impending disability from incurable ailm
The fact of its being frequently inherited
understood, parents should watch for any
manifestations of its presence in their chil
and take measures to prevent its progressiv
crease. Teachers should impose upon
sighted eyes as little as possible of studie
quiring close application, even though at
time the child makes no complaint. It is q
tionable if our system of education, augmen
as it does the frequency and degree of
sightedness, is an advance in civilization.
would be better to go back at once to the
teachings of the schools of Athens, than t
on creating our favorite type of educated
and women, at the expense of their own
their children's eyesight.—*Dr. H. W. Will*

MAN'S FEET *vs.* BEAR'S FEET.—Ma
foot is called a plantigrade foot; that is, a
which has the whole sole flat upon the ea
There is one other beast—and a very respect
one in his way, which has also a plantigr
foot, and that is the bear; but the bear's
and method of using it differ from man's,
his method of using it, in this respect—t
whereas as we walk we strike first the heel,
then roll forward upon the toe of each foot al
nately, the bear lifts the whole of the foot
gether and puts it down flat, in precisely
same way that a negro clog-dancer does. T
bear has not the power to put down his h

Digitized by Google

st and then roll forward and give a spring as e do, but it puts it down flat, as any one of us ould if we had a wooden leg. So that there s a difference both in the structure and method f using this very useful member.—*Professor Wilder.*

EXCESSIVE LONGEVITY.—Here's the old an again, 143 years old this time, and living n the North Carolina mountains. The Tarboro Carolinian says that at the time of Braddock's defeat he was twenty years old, and had a wife and three children. He has always been in moderate circumstances; lived upon a coarse vegetable diet; never drank any liquid but spring water, and bids fair to live many years longer. He has survived seven wives, having lost his last one about sixty years ago, he now begins to feel quite lonely, and wishes to marry again.—*Ex.*

The above story is going the rounds of the papers and may be true, but if so it is a case of excessive longevity, of which there are few cases on record. A majority of the race die too soon perhaps one in a million of all born lives too long. The subject of excessive longevity will be carefully treated in the papers on this subject now being published in THE HERALD OF HEALTH.

PRECOCIOUS CHILDREN.—Experience has demonstrated that of any number of children of equal intellectual power, those who receive no particular care in childhood, and who do not learn to read and write until the constitution begins to be consolidated, but who enjoy the benefit of a good physical education, very soon surpass in their studies those who commence earlier, and read numerous books when very young. The mind ought never to be cultivated at the expense of the body; and physical education ought not to precede that of the intellect, and then proceed simultaneously with it, without cultivating one faculty to the neglect of others; for health is the base, and instruction the ornament of education.—*Spurzheim.*

A precocious child should not be taught to read before it is eight years old, and greater care should be taken to develop its body than brain. There are thousands of children born with a tendency to excessive development of the nervous system, who, if they could have physical development instead of mental during the years of growth, would make our brightest and best citizens. Stimulate their brains in youth, and they break down and die.

EXTINCT FAMILIES.—What has become of the children of all the extinct royal houses? If we suppose two children to every man, we get a geometrical progression in the number of their descendants. Taking the Carlovingian dynasty, for example, the last two sons found an asylum in Germany. Each of these may have been the father of thirty generations; and there might be now, had not wars and famine interposed, upward of a thousand millions—as any one may calculate—of lineal descendants of the last Carlovingian king. In other words, under peaceful conditions, it would take a single pair only thirty-one generations, or less than a thousand years, to people the whole world as it is now peopled. Of course all these calculations are upset by war, famine, pestilence, and ignorance of hygiene. Still, with all deductions, is it not obvious that the blood of any given man must, after many generations, be flowing in the veins of millions of people?—*Harper's Weekly.*

A better knowledge of the laws of marriage, and of hygiene would save many a family from becoming extinct. It must be a sad thought to look forward to the time when not a drop of the blood of any person shall course in any human vein, still Heaven often decrees it. Would it not be well for people to think of this matter more? To found a family that shall be a power for good on the earth, ought to be a more frequent desire. Americans think too little of the future. They care too little for children, and too many families are childless from choice. When age creeps on them, they will suffer sorrow and loneliness. A reasonable number of children is a desideratum in any well-ordered family.

MAKING MONEY.—A medical journal says, "Making money is in America the 'chief end of man,' as the Westminster catechism has it. Plenty of advisers are ready with their wise saws how it can be accomplished. We are one of them, and offer a saw quite as true and less trite than any of them, and it is this, Keep healthy. Living in the midst of a commercial mart, and in the thick of the desperate conflict for wealth, we may have seen many a hero in the fight lose all for want of health; lose it, perhaps, just at the moment when a month or two of work would have made a fortune."

Most of the successful men are healthy men, or were so at the time the foundation of their fortune was laid. To get rich requires health, and to keep and enjoy a fortune it is even more important.

Digitized by Google

RECIPES FOR WHOLESOME COOKING.

MOLDED FARINACEA.

No. 1. Arrowroot.—Take four ounces of arrowroot; one quart of new milk; one small saltspoonful of salt, and four ounces of white sugar. Set a pint and a half of milk on the fire, adding the sugar and salt; when boiling, put in the arrowroot, previously mixed till perfectly smooth, with half a pint of cold milk, and stir constantly till it has boiled three minutes; then add ten drops of almond-flavor, and pour it into a mold previously dipped in cold water.

No. 2. Barley.—Six ounces of Scotch barley; three pints and a half of water, and six ounces of sugar. Steep the barley twelve hours; drain it, and pour the water, boiling, upon it; stew quickly in the oven in an earthenware jar, covered, till perfectly soft, and all the water is absorbed; when about half enough, add the sugar, and six drops of the essence of lemon; pour it into a mold, and let it stand to set. When boiled quickly, the above quantity requies two hours and a half, and is a much better color than when it is longer in preparation.

No. 3. Lentils.—Take three ounces of lentil flour; four ounces of sugar; six drops of almond-flavor, and one pint of water. Mix the flour with a little of the cold water; set the remainder on the fire, and when boiling, pour a little to the flour, and mix well; put it into the pan with the sugar, and stir the whole quickly over the fire fifteen minutes, adding the almond-flavor; pour it into a mold previously dipped in cold water; when cold, serve with preserved or stewed fruit.

No. 4. Molded Rice.—Take eight ounces of rice and one and a half pints of milk. Wash, and swell the rice in the milk, till the whole of the milk is absorbed and the rice thoroughly softened; then pressing it into a mold or basin for half an hour, with a weight upon it, serve it, turned out, with preserved or stewed fruit.

No. 5. Ground Rice.—Take six ounces of ground rice; two ounces of loaf sugar; six drops of lemon-flavor, or three drops of almond-flavor, and one quart of water. Steep the rice in a little of the water, while the rest of the water is boiling; then add it to the boiling water with the sugar; boil twenty minutes, stirring it all the time; add the flavor; dip the mold into cold water; pour in the rice, and let it stand till cold, serving with stewed or preserved fruit.

No. 6. Molded Sago.—Take five table-spoonfuls of sago; one-fourth pound of sugar, and eight drops of the essence of lemon. Steep the sago a quarter of an hour in half a pint of cold water. Pour on it one and a half pints of boiling water, and boil the whole in an earthen vessel in the oven about one hour, occasionally stirring it. Pour into molds or basins, and let it stand. When cold, turn it out, and serve with stewed fruit.

No. 7. Sago with Fruit.—Take four ounces of sago; half a pint of raspberry and red currant juice (strained), and six ounces of loaf sugar. Wash the sago and steep it one hour in cold water; strain off the water; add the juice and boil gently a short time, stirring it occasionally, and adding the sugar; when clear pour it into a mold; let it stand twelve hours, and pour it on a flat dish.

No. 8. Semolina.—Five ounces of semolina, and one quart of milk. Pick and wash the semolina; mix it with a little of the cold milk; set the remainder of the milk on the fire, and, when boiling, put in the semolina; let it boil about twenty minutes; then pour it into a mold, previously dipped in cold water; let it remain twelve hours; turn it out of the mold, and serve with canned peaches.

No. 9. Tapioca.—Take three ounces of tapioca; two ounces of ground rice; one pint and a half of milk, and eight drops of almond-flavor. Wash the tapioca in water two or three times; mix with the ground rice; add half a pint of cold milk, and let it remain thirty minutes; then add the remainder of the milk, and simmer it half an hour, stirring well the whole time; add the almond-flavor, and pour it into a mold previously dipped in cold water.

No. 10. Cracked Wheat.—For a quart of the cracked grain have two quarts of water boiling in a smooth iron pot over a quick fire; stir in the wheat slowly; boil fast and stir constantly for the first half hour of cooking, or until it begins to thicken and "pop up;" then lift from the *quick* fire and place the pot where the wheat will cook slowly for an hour longer. Keep it covered closely, stir now and then, and be careful not to let it burn at the bottom.

Wheat cooked thus is much sweeter and richer than when left to soak and simmer for hours, as many think necessary. White wheat cooks the easiest. When ready to dish out, have your molds moistened with cold water, cover lightly, and set in a cool place. A handful of raisins added with the wheat is nice. Eat warm or cold, with milk and sugar.—*Lizzie R. Bronson.*

LEMON PIE AND GEMS.

Lemon Pie.—Take one lemon, grated and squeezed; one cup vinegar; a table-spoonful of corn starch dissolved in cold water; then pour a cup of boiling water over it.

Crust.—One part white flour, one part graham flour, one part corn-meal. Shorten it with butter or condensed milk, reduced one-third.

The above recipe for lemon pie is used in our Institution, and a majority of our guests will testify as to the excellence of lemon pie made in this way.

To Make Gems.—See that your oven is hot enough to bake potatoes, and that your small oblong iron or tin pans are hot, and greased with olive oil. Now mix wheat-meal or graham flour with cold water, or milk and water if preferred, to the consistency of corn-bread batter with the greatest possible rapidity, and put instantly into the pans, and bake twenty-five or thirty minutes. Success depends upon the speed of the whole process. Gems may be eaten while warm, but not while hot enough to melt butter.—*Lizzie R. Bronson.*

Digitized by Google

EDITORIAL DEPARTMENT.

Herald of Health AND Journal of Physical Culture
Advocates A Higher Type of Manhood, Physical Intellectual and Moral

NEW YORK, MARCH, 1871.

WATER.

"To the days of the aged it addeth length;
To the might of the strong it addeth strength;
It freshens the heart, it brightens the sight;
'Tis like quaffing a goblet of morning light."

☞ THE PUBLISHERS *do not hold themselves as indorsing every article which may appear in* THE HERALD. *They will allow the largest liberty of expression, believing that by so doing this magazine will prove to be more useful and acceptable to its patrons.*

☞ *Exchanges are at liberty to copy from this magazine by giving due credit to* THE HERALD OF HEALTH AND JOURNAL OF PHYSICAL CULTURE.

TOPICS OF THE MONTH.

BY M. L. HOLBROOK, M. D., EDITOR.

THE ENERGY OF OLD MEN. — VON MOLTKE.—The word Energy means the power to do work. One man, for instance, is sufficiently strong to do each day an amount of labor equal to lifting a certain number of tons of matter ten feet high, another half as many, and another twice as many tons. This power, whatever it is, is known among physiologists by the name of Energy. We all, of necessity, live in a world of work. We must labor if we would eat, and we must work if we would live. We can not escape this condition of things, if we would, and it is very doubtful if we should care to have it otherwise if we could. We are usually proud of the possession of great power to do work, not necessarily physical work, but work of some sort, and the man who can do twice as much as his fellows is looked up to and admired, courted, often worshiped. It is a royal thing to possess great strength, to be filled with power, to bubble over with surplus energy, so that every department of our being can be kept in full activity, during a reasonable number of hours each day. Children abound in energy. In proportion to their size, they possess more than grown people, but it can not with propriety be turned into work, as it is required to build up the body into full proportions. Hard work is not good for children; it dwarfs and stunts the body and brain. It kills the goose that lays the golden egg. As the body and mind mature, work may be increased, and usually from the age of thirty to fifty, or sixty, the amount of energy which can be spared for hard work is, in healthy persons, very considerable. It is not often that great power is retained much after fifty or sixty. Indeed, it is more likely that, at this age, the man or woman, if alive, is feeble, infirm, and tottering on the verge of the grave. A remarkable exception to this, is seen in Count Von Moltke, who is now the great military genius of Europe, if not of the world. This man is now over seventy years old; and the vigorous campaign which he has led, must have subjected him to greater physical and mental exertion than almost any living man of his age, or perhaps any other age, has ever had to endure. We know little of his life or history, but there can be no doubt of this, that he has not rudely wasted his strength, in any part of his life. It is altogether likely that his life has been one favorable to growth and development, both mental and physical, and that he has been able to lay up a reserve force of vital power with which to do his work now. Indeed, we know that the great General had not distinguished himself before sixty, or before the

Digitized by Google

Austrian and Prussian war of very recent date. It is a settled fact in physiology, that those who spend their vitality in hard work or dissipation in early life can not have it in old age. "You can not eat your cake and keep it too," said the mother to her boy. You can not be powerful at seventy if you are wasteful at thirty, is an equally trite saying.

It is a grand thing to be powerful when old. Those days when the grasshopper is a burden are hateful days, and it is wise to shun them. It is thought an absolute necessity for every young man to lay up something for a rainy day. To be old, and poor, and homeless is a hard lot, but is it not equally hard to be old and infirm, and rickety, and toothless, and decrepit? Would it not be wise for all to save some strength, as well as money, for old age? Then might old men, and old women, our grandfathers, and our grandmothers, be beautiful and sweet and blessed, instead of a burden to themselves and a care to others, as they often, though we are happy to say not always, are. We are privileged to know at least one aged couple whose lives are sweet and wholesome, a delight to themselves and others.

Might not the number of Von Moltkes, of strong and happy old men and women, be greatly increased, by a little more wisdom and thoughtfulness in early life?

RAILROAD HORRORS—A NEW FACULTY NEEDED.—It is seldom that the country is more shocked than at the terrible accident that occurred on the Hudson River Railroad at New Hamburgh, near midnight, February 6. A Pacific express train dashing on at the rate of forty miles an hour runs on to an oil train, which, by accident, has been thrown on to the track, when in an instant several sleeping cars filled with passengers are set on fire, and the engine and a considerable part of the train are plunged into the river, and over twenty persons in good health are hurried into eternity. It is useless to discuss the question of blame in a case like this. To lock the door after a horse has been stolen may be well, but it does not bring back the horse; to find fault with the Railroad Compa after it has sent a score of our friends i eternity is natural, but it does not bring th to life again.

And this brings us to a question which m have more practical importance than would first sight appear. It hints at a faculty in t human mind not yet fully fledged, but growin to meet a demand of the time. We mean t faculty or power of prescience. Could a pe son about to take a journey know beforehan which train to take, he could always avoid a cidents. Now, is such a thing possible? W do not say it is, but we do say that there ar indications of such a faculty or power. Ther are a number of persons who intended to tak the fatal train, but from some cause which the can not explain, did not. There were on thi train a number of persons who went on boar with the feeling that something terrible was t happen. The conductor of one of the sleep ing-cars was one of these. Premonitions o this kind are not uncommon, and some of them are so remarkable as to leave no room for doub but that they are genuine cases of foresight rather than the vagaries of a diseased brain We believe there is a great need of some such faculty in the mind, and that there are indica tions that one is slowly but gradually develop ing to meet this want. How else are people t avoid those horrible calamities which scatter havoc and destruction in their path? We would not foster the spirit of blind superstitious fear but only a proper heeding of such premoni tions of coming events as are reasonable and proper.

ANNOUNCEMENT.—We shall soon pub lish a new and interesting work on Minnesota and the climate for Consumptives, illustrated and beautifully bound. It will be a most valu able work for all with lung diseases, or wh may be subject to them, showing the best place to get benefit and care. Its hints on hygien in reference to this disease will alone be worth the cost. Sent postpaid for $1 25. Orders may be sent in at once.

Digitized by Google

HAPPINESS—WHAT IT IS, AND WHAT IT IS NOT.—Plato declared happiness to consist in the contemplation of abstract ideas of beauty and excellence. This may be a good definition of the word, as understood by men with such minds as this great Philosopher had, but it would apply to but few persons. Indeed, nine-tenths of the race would be miserable in any such pursuit, or mental occupation. A young lady defined happiness to consist in the possession of a true and beautiful lover, and no doubt she spoke the truth so far as she could speak it, but her grandmother at seventy would give quite another definition. To her it would consist in the contemplation of a well-spent life, and the hope of joy in the world to come. The truth is, each individual will define happiness in his own way. One man finds it in the pursuit of wealth, another in the pursuit of culture, another in the possession of religion. The philanthropist finds it in doing good. The hungry man seeks it in food, the cold man in warmth and shelter, the man of poverty seeks it in wealth. Probably, however, perfect health is the fountain source of more happiness than any other. With a good digestion, a tough skin and a sound mind in a splendid body, who could not be happy? There are probably more happy men and women in the world than unhappy ones, more joy than sorrow.

Many people think they are unhappy when they are not. Real unhappiness can not exist without a cause. It is a shame and a disgrace to complain of being unhappy when we are only lazy and unoccupied. Such people are like the fox who had a deep wound somewhere on his body, but he could not tell where. Let them be ashamed to own it, unless they can show good reason.

Happiness consists in loving and being loved. There is enough to love in the world, but to be loved we must deserve it. We may be admired for our beauty or talent, courted for our influence or wealth, but we can only be loved as we are good. Therefore, happiness consists in goodness. The sacred writer had it right when he said, the Kingdom of Heaven is within you.

WASTE OF LIFE.—Some striking statistics of the fatality of scarlet fever are given in The British Medical Journal:

"During the twenty-one years, from 1848 to 1868, inclusive, there were registered in England and Wales, 415,982 deaths from scarlet fever and its allied disease, diptheria. To bring this number down to the present time, exact data are not yet forthcoming, but it may be estimated that at least forty thousand deaths have occurred throughout England during the last year. In the six months ending June last, 13,900 deaths were returned as resulting from scarlet fever and diptheria—a number, however, which we suspect to be rather under than over the mark. Here, then, we have an aggregate in round numbers of four hundred and seventy thousand persons who have fallen victims to one type of zymotic disease in the last twenty-one and a half years. But what of those whom the disease attacked but did not kill outright? On the most moderate assumption it is probable that at least five millions of persons in England have, during the last twenty-one and a half years, suffered more or less severely from attacks of scarlet fever and diptheria. That a considerable number of these persons ultimately perished by other maladies, either induced by the original attack or supervening on a broken constitution, must undoubtedly be taken for granted."

Prof. T. H. Huxley, in his great lecture on the "Origin of Life," just delivered before the British Association, says, that in looking back no further than ten years, it is possible to select three years in which the deaths from scarlet fever alone have reached thirty thousand a year. This, too, leaves out of sight all who may have been maimed by the disease or the treatment, which would, perhaps, amount to as many more. The specific cause of scarlet fever is not known, though it may yet be discovered. Prof. Huxley intimates this when he remarks, "This long-suffered massacre of our innocents will come to an end." We need not, however, wait for the discovery of the specific cause of the disease before we do much to prevent the ravages

Digitized by Google

of the disease. The apathy of the people is so great on these subjects, that they allow they do not even use such preventive means as lie within their reach. We refer our readers to the able articles on this subject published in the volume for 1869.

NARROWNESS AND BLINDNESS.—Human nature is often full of generous, noble impulses. Men and women will brave peril and danger to save a life, which may perhaps not be worth half so much as their own. It is only a few years since expedition after expedition was sent out in search of Sir John Franklin. Large sums of money were expended, and many lives were jeopardized in a fruitless search, after a bold but unsuccessful navigator. None but the most selfish could fail to applaud every effort to discover the fate of one whose name was dear to all the civilized world. Noble impulses are common to all people. The wildest savage, whose greatest delight may be to tomahawk and scalp his white foe, often exhibits deeds of noble daring, of generous impulses, second to those of no living man. Does a woman or child fall overboard, how many brave, stalwart men are ever ready to plunge into the water and risk their own lives to save the life of another, to whom they may owe nothing. It is only the other day that the papers chronicled the fact that a man risked his life to save a child playing on the railroad track, unconscious of an approaching train that would in another instant have crushed it to death. Such instances are quite as common among the hard, rough, uncouth people as among the refined and gentle. But if there is much kindness and generosity among men everywhere, so is there also much narrowness and blindness. While all England was alive as to the whereabouts of Sir John Franklin and his men, and every inhabitant would have contributed his quota toward the expense of each search, had it been necessary, how many were broad and comprehensive enough to make any effort half so magnificent to improve the sanitary condition of the people, to stamp out scarlet fever, or to banish poverty and intemperance. Suppose that t man who saved the child from destruction o the railroad track at the risk of his own li had been told that a hundred children were i danger of dying with scarlet fever for want o some precaution, which he could give withou risking his life, though it might involve troubl and expense. Would he become excited ove the matter and rouse himself and his neighbor to the rescue? Ten chances to one he would let the hundred perish without lifting a finger. And why? Not because he is not a noble, kind-hearted, generous man, but because he is a blind and narrow one. He can not be made to see the danger, and he can not understand the use of precaution. It is so in every department of life. Evils exist for which there are remedies, but only a few see them, or comprehend the cause and the case. What the world needs now is not so much brave, kind, generous men and women, of whom the world is full, but broad and comprehensive ones, who are not groping in the dark, but who live in the broad light of science, religion, and culture, and who are active enough to put into use their thoughts for human progress.

LOSS OF POWER.—The statement that so much power has been wasted for 48,000 years at Niagara Falls suggested to me the calculation how much is wasting every day at Hell-gate, in the East River, opposite New York. It turns out that we have more water-power wasted here than at Niagara Falls. That power is 16,000 times as great as that from all the coal burned upon the island to-day. There is more water-power in the rivers of every State in the Union than is used by the whole United States. To make use of the tidal power would give us the equivalent of a coal mine in the middle of Hell-gate. The power of the tide running to waste upon the coast of the United States is 4,000 billion times as great as the whole mechanical world is using to-day. We can not much longer afford to incur the monstrous expense of coal. There is no necessity for it. Coal will cease to be of value to us when we learn to

Digitized by Google

make use of the mightier power in the water and in the air, the only two materials God has given us enough of without our taxing our ingenuity and toiling in constant labor to make up the deficit.—*Edward Lester.*

We think it would be an interesting calculation to cipher out just how much power runs to waste in the population of any large city in a year In New York we could show a large force going to waste every day. We will pay somebody handsomely to make the estimate. It is an important question to hygienists and physiologists.

YOUNG DOCTORS.—This season about fifteen hundred young doctors will be graduated from the medical colleges of this country. If we were to judge of the qualifications of these from those we see at Bellevue Hospital at the clinics that are daily held there, we should almost despair of the profession. Sorting out a dozen of the best of them, and the remainder are a dirty, ill-mannered, rowdyish set of fellows, or else a set of stupid knownothings, who will never do any good, but may do much harm before they die. The treatment they have given to women students who attend the clinics and lectures has been such as to indicate their own breeding better than any thing we could say. Galton, in his great work on Hereditary Genius, noticed in the February HERALD OF HEALTH, has estimated pretty accurately that in Great Britain there are only about two hundred and fifty persons to each million of adult males who ever become distinguished. If we were to apply this rule to the young men who attend the medical colleges, the hope of finding genius there would be small indeed. There ought to be more care exercised in the selection of medical students. Not every one who applies should be allowed to enter, but only such as by nature seem fitted for the work. The process applied at West Point to candidates for the military service, modified to suit the exigencies of the case, would weed out so much of the chaff of medical colleges, and give so much greater dignity to the profession, that it ought to be adopted. Who will clean this great Augean stable of its worthless trash?

THE DEATH OF ALICE CARY.—We are greatly pained to chronicle the death of an esteemed friend and frequent contributor to THE HERALD OF HEALTH—Alice Cary. She had been in feeble health for some time, and though from the nature of her disease she suffered most excruciating pains, yet she bore it sweetly and patiently to the last. Her funeral was attended by a large concourse of literary friends who mourn her loss as the loss of the friend and sweet singer of pure and beautiful song. She worked till within a few days of her death. It is only a short time since she sent us a poem for THE HERALD OF HEALTH, which will be published in the next number. She led a beautiful life, and her name will be treasured in sacred memory by thousands of friends.

RAIN WATER—QUERY?—Is rain water as pure as spring or well water, and as fit to cook with? W.

ANSWER.—Rain water is always soft, but rarely pure and wholesome as it falls from the sky. In its fall through the air it absorbs much atmospheric air, carbonic acid, and salts of ammonia. Over large towns it brings down soot, sulphurous and sulphuric acids. Near the sea, it contains a little salt. Nearly all of these substances are removed by filteriug.

HOW AN OLD MAN FEELS.—Anthony Pecour, who recently died at the age of 109 in Troy, New York, said a few days before his death that he felt as young as at fifty years of age. Up to the age of 107 he had never had a doctor. He attributes his health and extreme age to plenty of exercise and correct habits.

CHARACTERISTICS OF WHOLESOME WATER.—1. It should be transparent.

2. Nothing should settle to the bottom after it stands a few hours.

Digitized by Google

3. It should be devoid of smell or taste.

4. It should be well aerated and of such temperature as to render it neither flat, nor so cold but it can be drank in moderate quantity without injury.

WHISKY AND THE HERALD OF HEALTH.—A glass of whisky is manufactured from a dozen grains of corn, the value of which is too small to be estimated. A glass of this mixture sells for a dime, and if of a good brand is considered well worth the money. It is drunk in a minute or two. It fires the brain, sharpens the appetite, deranges and weakens the physical system. On the same sideboard on which the deleterious beverage is served lies a copy of THE HERALD OF HEALTH. It is covered with half a million types; it brings good news regarding health and happiness, from all quarters of the globe. THE HERALD costs—little more than a glass of grog, the juice of a few grains of corn, but it is no less true, there is a large number of people who think corn-juice cheap and THE HERALD dear.

HOW WATER GETS FOUL.—1. The water which falls from the clouds becomes foul by falling through the smoky, dirty air, and by the matter from the roofs of houses on which it falls.

2. Spring and river water become foul by freshets.

3. Well water is contaminated by surface impurities, sewerage, cess-pools, and by the soil through which the source of supply is accumulated.

4. River water is spoiled for domestic uses by the refuse of slaughter-houses, gas-works, and the various manufactures that pour their refuse into it.

5. Cistern water gets filthy by the settling of such impurities as are washed from the roof; by leaks in the pipe, and by not being well covered.

It is now well established that dysentery, typhoid fever, cholera, etc., and other fatal diseases, are caused by animal and vegetable substances dissolved in the water, therefore supplies of water for drinking and culinary bathing purposes should be carefully inspected. All wells should be well covered. No sewer should be near a well, and the wash of all accumulations of filth should be carefully prevented from being carried into any water-supply for the house. It is well to remember that we may get accustomed to drinking impure water and not know it, unless other senses than taste are consulted. A proper attention to this subject, and a determination to use only wholesome water, would not only prevent many diseases but often save the lives of some beloved member of the family.

DRUGGED LIQUOR.—A great deal is said about drugged liquor. If a man drinks intoxicating drinks and gets drunk, he is very apt to apologize for it by saying the liquor was drugged. But this is only a trick of the trade to avoid censure. Drugged liquor is probably little or no worse than that which is not drugged. They both belong to a class that have bad effects on the body and have no business in it. Drunkards who screen themselves from censure behind drugged liquor, are either very cowardly or very ignorant.

CHARACTER OF WATER WE MUST NOT DRINK.—1. Turbid water, or that which has taste and smell.

2. Water that leaves a sediment in the bottom of the dish.

3. Water that contains animal or vegetable matter in solution.

4. Water that is very hard, brackish water, or that which has absorbed from the air poisonous gases.

AIR AND TEMPERATURE IN MINES.—The deepest mine in the world is a coal mine in Lancashire, England. It is nearly half a mile deep. The temperature in the solid stratum is 93½ degrees, and where the air circulates 79 degrees. It is almost impossible to work in this mine, so great is the heat.

Digitized by Google

How to Treat the Sick.

HEALING ULCERS BY TRANSPLANTATION.—There are certain ulcers and wounds of integument which, solely on account of their extent, have hitherto been considered incurable. To illustrate by an example: If the whole of the skin were stripped from the arm, no effort of nature or skill of surgery, however long continued, could ever succeed in restoring the tegumentary covering. At least such has been the statement until to-day, and for the following reasons. First, because new skin never forms except from the margins of the old; and second, new skin can never be projected from the old beyond a few inches, perhaps two or three at the most. But many examples are presented in surgery, in which the integument is destroyed by burns or by machinery to such an extent that repair, limited by these invariable laws, utterly fails to complete the restoration; and great deformity from contraction, a perpetual ulcer, or amputation, have been the only alternatives.

By a successful operation upon a patient at the Hospital of the Sisters of Charity in Buffalo, in 1854, I demonstrated that a comparatively small piece of skin, perhaps three inches square, taken from one leg and transplanted to an open ulcer upon the opposite leg, which was eight inches square, would, after becoming attached, grow, and increase in size by the projection of a new skin from its margins, until the whole ulcer was closed in. This operation has been repeated many times by myself and others since the date of my first experiment, and with similar results.

But please listen now to what Mr. Reverdin has done. He has taken a piece of skin not larger than a lentil-seed from the arm of a patient, and inserting it in the midst of the raw, granulating flesh of an ulcer, it has become the center from which new skin has been formed, and has extended on all sides, and by making several of these minute insertions, the whole sore has speedily become cicatrized.

I have repeated these operations at the Charity Hospital already more than fifty times. My first patient refused to submit to the operation, fearing that the excision of the piece of skin would be painful; but having cut a small piece from my own arm, he permitted me to insert it into his open wound. This trivial operation, made in the presence of a large number of others suffering from chronic ulcers, gave them an assurance that it was almost painless and bloodless, and no further difficulty was experienced in prosecuting the experiments. We had but six successes from this large number of transplantations, but the principal causes of failure have been ascertained, and will be avoided hereafter. What is most remarkable in this thing, is that the minute piece thus implanted seems to fall off in a few days, but at the point where it rested, after the lapse of a week or two more, a small white spot is seen coming into view, like a cloud in a clear sky. The oiginal and parent structure disappears, but a cell or seed is found to have been deposited, capable of indefinite growth and development. The precise law which governs this curious process we do not pretend to have ascertained; but having discovered the fact and availed ourselves of it in the cure of our unfortunate patients, we can afford to wait for an explanation.—*Dr. Hamilton.*

IN-GROWING TOE NAILS.—This most painful of the diseases of the nails is caused by the improper manner of cutting the nail (generally of the great toe), and then wearing a narrow, badly-made shoe. The nail beginning to grow too long, and rather wide at the corners, is often trimmed around the corner, which gives temporary relief. But it then begins to grow wider in the side where it was cut off, and as the shoe presses the flesh against the corner,

Digitized by Google

the nail cuts more into the raw flesh, which becomes excessively tender and irritable. If this state continues long, the toe becomes more and more painful and ulcerated, and fungus (proud flesh), shoots up from the sorest points. Walking increases the suffering, till positive rest becomes indispensable.

TREATMENT.—We omit all modes of cutting out the nail by the root, and all other cutting or torturing operations. Begin the effort at cure by simple application to the tender part of a small quantity of perchloride of iron. It is found in drug stores in a fluid form, though sometimes in powder. There is immediately a moderate sensation of pain, constriction, or burning. In a few minutes the tender surface is felt to be dried up, tanned, or mummified, and it ceases to be painful. The patient, who before could not put his foot to the floor, now finds that he can walk upon it without pain. By permitting the hardened, wood-like flesh to remain for two or three weeks, it can easily be removed by soaking the foot in warm water. A new and healthy structure is found, firm and solid, below. If thereafter the nails be no more cut around the corners or sides, but always curved in across the front end, they will in future grow only straight forward; and by wearing a shoe of reasonably good size and shape, all further trouble will be avoided.—*Bostwick's Medical and Surgical Journal.*

CURE FOR RHEUMATISM.—One of our exchanges, The Beekeepers' Journal, prints the following remedy for rheumatism. "The man we speak of, suffered much from rheumatism in his right arm, so much so that he was not able to raise his arm to his head. Nevertheless he was compelled to perform some necessary operation on one of his stock of bees, and while doing so, was stung in the thumb of the rheumatic hand. Immediately the hand and arm commenced to swell, but as the swelling increased, the rheumatic pain diminished, and in half an hour, his rheumatism was gone.

A few months after this, being much exposed to wet weather, the malady returned. He pr cured some bees and compelled them to sti him in the upper part of his hand, and in le than fifteen minutes he was free from the ma ady."

It is not at all unlikely that such a resu would sometimes follow a bee-sting. Wha ever starts the circulation through the affecte parts will produce the same result.

VACCINATION AND CONTAGION DUE T LIVING PARTICLES.—You are familiar with wha happens in vaccination. A minute cut is mad in the skin, and an infinitessimal quantity o vaccine matter is inserted into the wound Within a certain time a vesicle appears in th place of the wound, and the fluid which distend this vesicle is vaccine matter, in quantity a hun dred or a thousand fold that which was origin ally inserted. Now what has taken place in the course of this operation? Has the vaccine matter by its irritative property produced a mere blister, the fluid of which has the same irritative property? Or does the vaccine matter contain living particles, which have grown and multiplied where they have been planted? The observations of M. Chauveau, extended and confirmed by Dr. Sanderson himself, appear to leave no doubt upon this head. Experiments, similar in principle to those of Helmholtz on fermentation and putrefaction, have proved that the active element in the vaccine lymph is non-diffusible, and consists of minute particles not exceeding 1-20,000th of an inch in diameter, which are made visible in the lymph by the microscope. Similar experiments have proved that two of the most destructive of epizootic diseases, sheep-pox and glanders, are also dependent for their existence and propagation upon extremely small living solid particles, to which the title of "microzymes" is applied. An animal suffering under either of these terrible diseases is a source of infection and contagion to others, for precisely the same reason as a tub of fermenting beer is capable of propagating its fermentation by "infection" or "contagion" to fresh wort. In both cases it is the

Digitized by Google

solid living particles which are efficient; the liquid in which they float, and at the expense of which they live, being altogether passive.—*Huxley.*

To Prevent Snoring.—Snoring comes mainly by breathing in sleep with the mouth open. Therefore the cure is, to sleep with the mouth shut. But, says one, how is the mouth to be kept shut, while we are sound asleep and do not know what we are about? We confess it is not easy to do this. Perseverance can accomplish a great deal, if the patient will try. Generally it will aid the sufferer to avoid sleeping on the back, a position in which the lower jaw naturally drops more or less, but to lie on the side or face. Sleeping in this position has many things to commend it, in our opinion. A Mr. Pinkard of New Orleans has patented a device to hold the mouth shut during sleep, but we do not believe it could be of more than temporary value.

Remedies for Poison by Ivy.—Olive (sweet) oil is said to be a sure cure for the effects of the Poison Ivy, or Poison Oak (Rhus toxicodendron). In severe cases it may be taken internally, as well as applied externally. Dose, two table-spoonfuls three times a day, keeping the affected parts well oiled all of the time. Anointing the exposed parts with the oil will prevent poisoning.

Take a handful of quick-lime, dissolve in water, let it stand a half-hour, then paint the poisoned parts with it. Three or four applications never fail to cure the most aggravated cases.—*Journal of Chemistry.*

Cure of Stammering.—The effectual cure mainly depends upon the determination of the sufferer to carry out the following rule: Keep the teeth close together, and before attempting to speak, inspire deeply; then give time for quiet utterance, and after very slight practice the hesitation will be relieved. No spasmodic action of the lower jaw must be permitted to separate the teeth when speaking. This plan regularly carried out for six months, cured me when twenty years old. I was painfully bad, both to myself and others. Without determination to follow out the plan, it is of no use attempting it.—*Exchange.*

Prospects of Female Doctors.—While the conservative members of the profession are insisting that women are physical and mentally unfit for the study and practice of medicine, and must not be tolerated or acknowledged as regular practitioners, the incentives and facilities for the medical education of females are increasing notably in all directions, both in Europe and America. A wealthy citizen of Boston has lately bequeathed nearly a million and a half of dollars for the endowment of an institution for females—medicine being first named in the list of branches to be taught. If our good brothers in Philadelphia and elsewhere, members of the Pennsylvania State Society, and of the National Association and other organized bodies, who condemn as heretics all doctors in petticoats and their abettors, do not throw off their stiff stocks and suffer their heads to turn on the axis, they will run the risk of being crowded out of the profession by the well-trained graduates of crinoline, who are mustering in the latter days like the soldiers of Germany. The opponents of female doctors are really their best friends. They do not understand the nature of women or they would not attempt to thwart her aspirings by prescription. "When she will she will, you may depend on't."—*Pacific Med. and Surg. Journal.*

Inebriation Hereditary.—Dr. Turner, in his "Second Annual Report of the State Inbriate Asylum," states that out of fourteen hundred and six cases of delirium tremens which have come under his observation, nine hundred and eighty had an inebriate parent or grandparent, or both. He believes if the history o each patient's ancestors were known, it would be found that eight out of ten of them were free users of alcoholic drinks.—*Med. Record.*

Digitized by Google

Food for Mirth and Thought.

PERSONAL INDEPENDENCE.—Thus all things attest the nobleness of personal independence, and all things attest the need of it. Why, then, should we not devote ourselves to its culture? Is it a thing hopeless of attainment? Are we told that to judge what is right is no such easy matter? That very few are capable of doing it? That the attempt to do it would bring the uttermost confusion upon us? That the process would produce an abundant crop of conceit and impudence, a beautiful harvest of vagaries and whims, a hideous fruitage of intellectual abominations? Perhaps it would. To judge what is right is no easy matter; and the individual verdicts might, very possibly, clash together in a manner most deplorable. But the way to learn swimming is not to stand shivering on the bank of the pool. No dread of the plunge will answer the purpose of the dip and struggle. The proper way to judge wisely is to judge as wisely as you can. Would you have light, use the light you have. Consciences, like limbs, are made strong by using them. Self-reliance comes from relying on self, in the hope that self will presently become worth relying on.—*O. B. Frothingham.*

A KIND HEART.—It is kindly sympathy with human life that enables one to secure happiness. Pride is like an unsilvered glass through which all sights pass, leaving no impression. But sympathy, like a mirror, catches every thing that lives. The whole world makes pictures for a mirror-heart. The best of all is, that a kind heart and a keen eye are never within the sheriff's reach. He may sequester your goods. But he can not shut up the world or confiscate human life. As long as these are left, one may defy poverty, neglect of friends, and even, to a degree, misfortune and sickness, and still find hours brimful every day of innocent and nourishing enjoyment!

CHOKED TO DEATH.—In San Francis recently, the sudden and unaccountable death a boy ten years of age, led to the arrest of father on suspicion; when, by chance, the phy cian who conducted the autopsy, after its co pletion, bethought himself to examine and move the larynx, this organ was found to co tain a large mass of meat, which produced dea by suffocation. It appeared that the boy in t night had been awakened by an attack of vomi ing, during which the meat became lodged in i position. *The Pacific Medical Journal* gives a account of another case also, in which a patie who was put under the influence of chloroform after having eaten a hearty meal, during an a tack of vomiting lodged a portion of food in h larynx and was suffocated in spite of every e fort.—*Buffalo Medical Journal.*

A SUCCESSFUL WOMAN FARMER.—A woman has carried off the $500 prize offered fo the best managed farm in Oxfordshire, England English women take more interest in agricul ture than their American sisters do. It does no however follow that the woman above referred to did any of the work on her farm; no doubt she employed a first class superintendent, as other English farmers do, and may not have had much to do in bringing about the result which won for her the prize.

REV. C. G. AMES, of California, has a wife who is a help-meet indeed, taking her husband's place in his pulpit in case of his sickness or absence. On a recent Sabbath she "got up in the morning, prepared breakfast, washed and dressed her baby, dressed her little daughter for Sabbath-school, put baby to sleep, and sat down and reviewed her sermon before time to take the cars for church; then, consigning baby to the loving care of his grandmother, she went to church and preached to the entire satisfaction of a large and critical audience."

Digitized by Google

WHAT SOME MEN AND WOMEN DO.—Some men move through life as a band of music moves down the street, flinging out pleasure on every side through the air to every one, far and near, that can listen. Some men fill the air with their presence and sweetness as orchards, in October days, fill the air with the perfume of ripe fruit. Some women, cling to their own houses like the honeysuckle over the door, yet like it fill all the region with the subtle fragrance of their goodness. How great a bounty and a blessing is it so to hold the royal gifts of the soul that they shall be music to some, and fragrance to others, and life to all! It would be no unworthy thing to live for, to make the power which we have within us the breath of other men's joy; to fill the atmosphere which they must stand in, with a brightness which they can not create for themselves.—*Beecher.*

WHAT NOT TO LOSE.—I do say to every young man whom I am now addressing, whatever your pursuits may be, however active, however absorbing, don't, unless you are willing to forfeit one of the most lasting of human enjoyments—don't, if you can possibly help it, allow yourself to lose your taste for reading. I say nothing of books as a mere substitute for and preventive of indulgence in low pleasure; you, I hope, are above wanting that sort of recommendation. But it is a bad thing to have the brain always filled with one's own narrow personal concerns, or what is one degree worse, with the small personal concerns of one's neighbors. I have not a word to utter against strenuous devotion to business while you are at it; on the contrary, that is the secret of success, and what is worth more than success—of self-approval.—*Lord Derby.*

WHAT IS A KINDERGARTEN?—For those who do not know what the word Kindergarten implies, I will say Kindergarten means a garden for children, where the children are considered as the various plants, and the teacher as the gardener; who has to be intimately acquainted with their nature and needs, in order to supply all the necessary conditions of soil, moisture, sunny-side or shade, that is necessary to promote their healthy growth and fruitage. At the same time Froebel wanted a garden connected with every school, so that the children should be in constant contact with nature, and be able to watch her processes, and learn to take care of plants, and also animals; which duty lovingly performed in early childhood, prepares the child, later in life, to take care of those dependent on him.—*Mad. Kriege.*

KINDNESS IN DROVERS.—Miss Burdett Coutts has been giving prizes to English drovers who have been merciful to their cattle, as a reward for their kindness to dumb animals on the way to the shambles.

It may be that drovers and butchers can be kind and tender, indeed they often are, but the tendency of their profession is toward cruelty and hardness. If as claimed by almost all naturalists and physiologists man must eat meat to live, then let us not complain that there are men cruel and hard enough to furnish it for us. It requires a nature somewhat cruel and harsh to follow such pursuits without pain to themselves for the pain they inflict on dumb animals.

FOR the benefit of young girls who are impatient to put on trained skirts, it may be stated that the Princess Beatrice, daughter of Queen Victoria, now nearly sixteen years old, has never yet worn any thing but short dresses even upon the grand occasion of a drawing-room reception, when court-trains are universal.

A DENTIST, trying in vain to extract a decayed tooth from a lady's mouth, gave up the task with this apology: "The fact is, madam, it is impossible for any thing bad to come from your mouth."

A TEMPTING ARGUMENT.—It is a plausible and tempting argument, to claim suffrage for woman on the ground that she is an angel; but I think it will prove wiser in the end, to claim it for her as being human.—*Higginson.*

WHY is a hobbling parson like a secular person? He is a *lame man* (layman).

Digitized by Google

ANSWERS TO CORRESPONDENTS.

BY A. L. WOOD, M. D.

Torpidity of Liver and Constipation.—"What is your opinion of the use of white mustard seed as a remedy for obstinate constipation and torpid liver? I am subject to both, and have been induced to use the seed, and find that it affords considerable relief. I am fearful, however, that if its use was continued for any length of time, or until the bowels had become habituated to it, that they would not act without the customary stimulus if its use was suspended."

You are right. The effect is the same, except in degree, as other cathartic medicines. They all give temporary relief, but it is at the expense of a future aggravation of the same difficulty and a diminution of vital power. Free enemas of tepid water constitute the best means for temporary relief. To effect a cure, diet, exercise, bathing, etc., must be closely and perseveringly attended to. The food should be confined to fruit, vegetables, and farinaceous preparations, as graham bread, cracked wheat, oat, rye, or wheat meal mush or cakes, etc. If meats are used, only those which are lean and fresh. No fat or salted meats, gravies, soups, pies, puddings, cakes, fine-flour bread, greasy food of any kind, salt, spices, and condiments, milk, tea or coffee should be used. The patient should take as much exercise daily as he is able, and if it can be taken out of doors, so much the better. A loose dress about the waist, and abdominal breathing, in which there is an expansion and contraction of the abdomen at every breath, are very important. Kneading of the abdomen with the hands is useful, also percussion of liver and bowels. A regular hour for evacuations should be established as soon as possible, and every day when the hour arrives the effort should be made, whether successful or not. The patient should bathe at least once or twice per week, so as to keep the skin clean and in an active condition. Obstinate cases should go to some institution where they can get the full benefit of the Movement-cure treatment. It is as near a specific in such cases as any thing can be, and when the cure is once effected the patient can always stay cured with a reasonable attention to the laws of health.

Effect of Alcohol upon Longevity.—"I know a man upwards of ninety years of age who has used alcoholic liquors freely ever since he was a young man. How do you account for the fact that he is still living, and in good health?"

There is once in a while a man who has such an "iron constitution" that he can indulge in excesses of one kind or another and still live to a good old age, but such cases are rare, and serve to show the endurance of which some people are capable. In such instances, however, it will generally be found that their other habits have been good, and conducive to health. That the use of spirituous liquors shortens life is a fact so generally admitted by all who have investigated the matter, that it seems almost useless to cite proof of the fact, yet the following extract from a pamphlet by Dr. Joseph Parrish, of Media, Penn., can not fail to prove interesting, as the facts therein stated are the result of careful investigations by the life insurance companies of this country and of Europe, to ascertain the influence of intemperance upon their risks:

"When, in a given number of risks, ten temperate persons die between the ages of fifteen and twenty, inclusive, eighteen intemperate persons die. When, in a given number of risks, ten temperate persons die between the ages of twenty-one and thirty, inclusive, fifty-one intemperate persons die, or the risk on an inebriate is more than five hundred per cent. greater than on a temperate person. When, in a given number of risks, ten temperate persons die between the ages of thirty-one and forty, inclusive, about forty intemperate persons die, or the risk is increased some four hundred per cent. Hence, insurance companies avoid risks on inebriates as they would on consumptives, or those suffering from Bright's disease, etc. These com-

Digitized by Google

panies have investigated this matter, not as philanthropists or reformers, but simply from an economic point of view.

The difference in the chances of duration of life between persons of sound constitution and those whose vigor is impaired by alcohol is as follows: A temperate person's chance of living is at 20, 44.2 years; at 30, 36.5 years; at 40, 28.8 years. An intemperate person's chance of living is at 20, 15.6 years; at 30, 13.8; at 40, 11.6."

About Fretting.—Fretting is one of the silliest, most unnecessary, unchristian, unreasonable, unprofitable, undignified, unpleasant, and useless things in the world. It never does any good, but always does harm to the one who frets, if to no one else. It is doing unto others as you would NOT have others do unto you. Fretting is a habit, and may either be inherited or acquired. When it has been inherited it is much more difficult to overcome than when it has been acquired, but in either case the most strenuous efforts should be made to conquer it. Its effects upon the subject of it are to cramp and belittle the mind, disease the body, and augment every sorrow and diminish every joy of life. It is a powerful producing cause of dyspepsia and nervousness, with their numberless variations and complications, and is sure to make worse any disease from which the person may be suffering. Patients who are continually fretting and worrying about some real or imaginary trouble, are very difficult to treat with any degree of satisfaction or success. Of two invalids suffering from the same disease, and whose general conditions, strength of constitution, course of treatment, etc., are similar, the one who is cheerful, hopeful, and always looking on the bright side of things will recover in less than half the time required by the confirmed fretter, and if the disease is a dangerous one the chances are ten to one in favor of the former. Fretting is a habit, and can be broken up as other habits can, but the subject of it must do the greater part of the work. He or she must first be convinced of the folly, uselessness, and sin of the thing, and fully determine to conquer the detestable habit, and then whenever any thing irritating occurs, KEEP THE MOUTH SHUT, and think of the folly and sin of giving way to the fretting proclivities until the irritated feeling has ceased. The persons coming most nearly in contact with the victims of this habit can do a great deal to aid them in overcoming it by kind and encouraging words, and by carefully refraining from saying or doing any thing likely to induce the feeling of fretfulness.

Chapped Hands and Lips.—"I am greatly troubled during cold weather with chapped hands and lips. How shall I find relief?"

Persons with a languid circulation, relaxed condition of tissues, and impure blood, are most liable to be afflicted. This being the case, to effect a cure it is evident that these predisposing conditions must first be remedied. Consequently all the resources of Hygiene should be employed to purify the blood, equalize and strengthen the circulation, and invigorate the muscular and other tissues of the system. One of the best local applications is glycerine, which may be applied in small quantities several times a day, and should be THOROUGHLY RUBBED IN. It serves to keep the affected parts soft and pliable, and to protect them from the air. Gloves lined with wool are good to protect the hands from the cold.

Ripe Fruit and Cold Water.—"Can a nursing mother eat ripe fruit of all kinds, and drink cold water?"

She can and should. Ripe fruit is one of the best articles of food, and cold water the best and only drink needed. The fruit should not be eaten between meals, but as a part of the regular meal. It should always be thoroughly masticated. Cold water should not be drank at meals, or soon after eating, as it retards digestion. The prevalent idea that nursing mothers must be fed upon warm slops is a fallacious one, and the practice is injurious to both mother and child, and should never be adopted.

Copper Cooking Utensils.—Copper and brass vessels should not be used for cooking purposes, as poisonous chemical substances are liable to be formed by the action of oils and acids upon the substance of the vessels. The use of such vessels for cooking fruit is especially dangerous, as the acids of fruit act readily upon the metal, forming very poisonous substances.

Digitized by Google

NOTICES OF NEW PUBLICATIONS.

NATURE'S ARISTOCRACY, Etc. By Miss Jennie Collins. Boston: Lee & Shepard.

A pretentious title to a book of platitudes. It is evidently written to subserve the purposes of the working people, and has its point of value; but, if the picture here given of the manners of the ladies of Boston is a true one, they are the most exacting, petty, ill-bred class of women in the country; we hope for the honor of the sex, that the views proceed from a prejudiced and narrow observation, and have no foundation in facts.

MODERN WOMEN, and What is Said of Them. A Reprint of a series of articles in The Saturday Review. Second Series. New York: J. S. Redfield.

An English reprint consisting of essays upon various characteristics supposed to adhere to the modern woman. They are evidently the product of the masculine brain—trenchant, observant, and with a hit upon the nail-head good to witness. More keen than just, more witty than humorous, they provoke thought, and are well worth perusal.

THE TEMPERANCE ALPHABET. With Original Designs. By Edward Carswell. New York: National Temperance Society.

Mr. Carswell in preparing this little work has put all the children under obligations to him. Each letter of the alphabet is printed in red, two on a page, with appropriate designs accompanying, and a line underneath to tell the story. We know of several little boys and girls who have enjoyed Mr. Carswell's books and we hope learned a useful lesson as well.

JOHN SWIG; or, The Effect of Jones's Argument. By Edward Carswell. New York: National Temperance Society.

This little illustrated book which is written in verse and can be read in a quarter of an hour is one of the books lately published by the Temperance Society. We should like to see a copy of it put into the hands of all who are licensed to sell wine and spirituous liquors. It would do them good.

DOUBLE PLAY; or, How Joe Hardy chose his Friends. By William Everet. Boston: Lee & Shepard.

This a well written story for boys. The character of Frank Eustis is one admirable for boyish study. The incidents are natural, and the moral and religious tone high, manly, and pious. We would cheerfully put it into a boy's hands.

LETTERS EVERYWHERE; or, Stories and Rhymes for Children. By Theophele Schuler. Illustrated. Boston: Lee & Shepard.

These stories seem to be a collection from a foreign source, and are pleasing and instructive. We have tried them upon little folks, and found they "took" well.

WHAT IS SAID OF THE HERALD OF HEALTH.—An exchange says, "It is by far the best semi-scientific magazine published, for the use of intelligent and cultivated people. In it are presented all the best and richest results of science, in such a form that any well educated person can fully understand and enjoy them; and its literary character is of the highest."

THE PUBLISHERS' DEPARTMENT.

Contributors to this Number.

REV. J. C. HOLBROOK, D. D,
MRS. R. B. GLEASON, M. D.,
J. HENRY BENNET, M. D.,
REV. CHARLES H. BRIGHAM,
MRS. H. C. BIRDSALL,
F. B. PERKINS,
E. RAY LANKESTER, B. A.,
LEWIS G. JANES,
DR. A. L. WOOD, and
THE EDITOR.

A Good Sewing Machine is given free for a club of 30 subscribers and $60. This premium is very popular. If there is a poor, deserving family in your neighborhood help it to get a good sewing machine by subscribing at once. Perhaps your minister's wife wants one. If so, help her to get it, by helping her to get up a club. The Empire is one of the best sewing machines in use, and we are sure that it will give you good satisfaction.

Facts for the Ladies.—Ten years ago I purchased a Wheeler & Wilson Sewing Machine, and have had it in constant use in my family since. We used it during the war to make clothing for our volunteers in the service, and for the hospitals, and *this work* was very heavy, being coarse woolen, and cotton fabrics. It is still in good working order, nothing having been broken but a few needles. You are welcome to use my name in your recommendations.

MRS. HUGH McCULLOCH,
Wife of Secretary U. S. Treasury.

I have in my family a Wheeler & Wilson Sewing Machine, that has been in almost daily use for the past ten (10) years, and not a thing has ever been done to it in the way of repairing; not a screw loose, or any part of it out of order in all that time. It has been used in making coats, vests and pants, of the thickest woolen goods, besides doing all kinds of family sewing, and is now, this day, the best machine for work I ever saw.

OLD SAYBROOK, Conn. GILBERT PRATT.

Digitized by Google

Notice to Our Correspondents.—

The following hints to correspondents should be observed in writing to us:

1. ALWAYS attach name, Post Office, County, and State to your letter.
2. SEND MONEY by Check on New York, or by Postoffice Money Order. If this is impossible, inclose Bills and register Letter.
3. CANADA AND NEW YORK CITY SUBSCRIBERS should send 12 *cents extra*, with which to prepay postage on subscriptions to THE HERALD OF HEALTH.
4. REMEMBER, if you are entitled to a Premium, to order it when you send the Club, and inform us how it is to be sent.
5. REMEMBER THAT WE NOW GIVE the *Empire Sewing Machine* as a premium. It is guaranteed to give good satisfaction.
6. REMEMBER TO SEND in Clubs early.
7. REMEMBER TO LOOK at our Premium List and Book List, and see exactly what we give and have for sale.
8. REMEMBER that for the names and addresses of 25 persons, either invalids or friends of Temperance and Health Reform, we give Prof. Wilson's book on the Turkish Bath. It contains 72 pages.
9. STAMPS should be sent to prepay postage on letters that require an answer.
10. Those who want a good *Spirometer*, *Parlor Gymnasium*, or *Filter* for making their water clean, will find the prices in another column.
11. INVALIDS from all parts of the country are invited to write to us for our circular, and full particulars as to Treatment or Board in the Hygienic Institution, See advertisement elsewhere.
12. See List of Books elsewhere.

Caution.—

Our friends in writing to us will please be very particular and give Postoffice, County and State with every letter, and not depend on us to remember where they live, though they may have told us a hundred times. Those who think we can turn to our books and find their names and address without trouble, are quite mistaken.

The Address Label.—

By this method our subscribers can keep their own accounts as to when their terms of subscription close; for instance, if the printed slip has "De71," or "Je72" added to the name, it signifies that the subscriber's term of subscription expires with the December number of 1871, or the June number of 1872, and so on *et seq.*

Books C. O. D.—

Parties who order books will find it cheaper to send the money with the order, than to order C. O. D., as in this case the cost of collection will be added to the bill. This is considerable, when the money has to be returned from a distant point. Those who order C. O. D., should send one-fourth the value of the order in advance to insure prompt attention.

Home Treatment.—

Invalids wishing prescriptions for home treatment can have them for Five Dollars. They should send full particulars of their cases. Any person sending five new subscribers to THE HERALD OF HEALTH and Ten Dollars, will, if he does not choose other premiums, be entitled to a prescription for treatment free.

Our Premiums.—

We shall be careful to send out as Premiums nothing which is not all that we claim for it in value. No cheap, second-hand, or indifferent article will be used.

CLUBBING

WITH OTHER MAGAZINES.

We will send *THE HERALD OF HEALTH* and any one of the following Journals one year for the sum below mentioned. The order and money for both must be sent at the same time.

THE HERALD OF HEALTH, $2 00, and

Atlantic Monthly	$4 00	for $5 00
Harpers' Monthly	4 00	for 5 00
Harpers' Bazar	4 00	for 5 00
Harpers' Weekly	4 00	for 5 00
Phrenological Journal	3 00	for 4 00
Our Young Folks	2 00	for 3 50
New York Tribune	2 00	for 3 35
American Agriculturist	1 50	for 3 00

Cash Clubbing Rates.

1 Subscriber	$ 2 00
4 Subscribers	7 00
10 Subscribers	15 00
25 Subscribers	25 00

Single Numbers, 20 cents.

Address WOOD & HOLBROOK, Publishers,
15 Laight Street, New York.

Job Printing.—

We are prepared to execute in neat, substantial styles, various kinds of JOB PRINTING: such as Pamphlets, Circulars, Envelopes, Billheads, Letter-heads, Cards, Labels, Small Handbills, etc., at the same rates as in all first-class New York printing establishments. Stereotype work done to order.

☞ Our friends in the country who wish neat and accurate printing, can rely on first-class work, by sending plainly written and well-prepared manuscripts. For terms, send sample or copy of work, state quality of printing material to be used, and the number of copies wanted, inclosing stamp for reply.

Talks to My Patients.—

Mrs. Gleason's book, advertised and noticed elsewhere, is meeting with a good sale. We can supply it to subscribers and agents in any quantity. A good many ladies are selling it with success. We should like to have in every town a good Lady Agent. For particulars of agency, write to the Publishers.

How to Send Money.—

In making remittances for subscriptions, always procure a draft on New York, or a *Postoffice Money Order*, if possible. Where neither of these can be procured, send the money, *but in a Registered letter*. The present registration system has been found by the postal authorities to be virtually an absolute protection against losses by mail. *All* Postmasters are obliged to register letters whenever requested to do so.

Wanted.—

Will our readers please send us brief items of news and experience referring to Health and Physical Culture topics. Make them pointed and practical, and we will publish them for the benefit of others. Do not mix them up with business or personal matters but on separate sheets of paper and in readiness for the Printer.

Clubs of Twenty-five.—

Any person who will send us at one time twenty-five new subscribers to this monthly, shall have them for Twenty-five Dollars. Remember they must be new subscribers, and all be sent at one time.

Digitized by Google

New Premium List for 1871

NOW IS THE TIME TO BEGIN!!

OCTOBER, NOVEMBER, & DECEMBER NUMBERS FREE

TO NEW SUBSCRIBERS!

GRAND PREMIUMS.

For 300 Subscribers and $600

We will give A BRADBURY PIANO, worth $600!

For 100 Subscribers and $200

We will give ONE OF ESTEY'S FIVE-OCTAVE COTTAGE ORGANS, Black Walnut, Double Reed, Harmonic Attachment, and Manual Sub Bass, Three Stops, worth $200!

For 85 Subscribers and $170

We will send ONE OF MASON & HAMLIN'S FIVE-OCTAVE ORGANS, worth $125, with Five Stops, Viola, Diapason, Melodia, Flute, Tremulant, with two sets of Vibrators throughout, and Knee Swell.

For 50 Subscribers and $100

We will give A LADY'S ELEGANT GOLD WATCH AND CHAIN, worth $75.

For 30 Subscribers and $60

We will give A SPLENDID EMPIRE SEWING MACHINE, worth $60. This is as good as any machine in the market, and can not fail to give the best satisfaction.

For 25 Subscribers and $50

We will give A SPLENDID WILSON SEWING MACHINE, half case, worth $50. This is the same style of machine that other Companies sell for $75.

PICTURE PREMIUMS.

For 10 Subscribers and $20

We will send two of Prang's Chromos, entitled "MORNING" and "EVENING;" size of each, 12x18 inches value, $10.

The above pictures are copied from Rosa Bonheur's wonderful paintings known by these names. They are companion-pictures, and ought to go together. No description can do them justice.

For 8 Subscribers and $16

We will give one of Prang's Beautiful Chromos, entitled "STRAWBERRIES AND BASKET;" size, 13x18 inches; value, $7 50.

(This is a large and very handsome picture, quite equal to the original oil painting from which it is copied, which was valued at many hundred dollars.)

For 6 Subscribers and $12

We will give Prang's Splendid Chromo, entitled "THE KIDS' PLAYGROUND;" size, 11x18 in.; value, $6.

(This is also a very handsome gem of art, and will greatly delight any family that may own it.)

For 4 Subscribers and $8

We will give one of Prang's Chromos, entitled "THE BABY; OR, GOING TO THE BATH;" size, 7x10 inches; value, $3.

For 3 Subscribers and $6

We will give one of Prang's Chromos, entitled "PIPER AND NUTCRACKER, valued at $3.

(This is a very popular picture after Landseer, a sufficient recommendation to any work of art.)

☞ If our friends wish to ornament their homes with beautiful works art, at small expense, these offers of pictures will suit them. We guarantee the pictures will give perfect satisfaction.

BOOK PREMIUMS.

For 60 Subscribers and $120

We will give the NEW AMERICAN ENCYCLOPEDIA in 20 volumes, worth $100!

This great work is a complete library of itself, and for reference or information ought to be in the hands of every family.

For 15 Subscribers and $30

We will give ONE OF WEBSTER'S PICTORIAL UNABRIDGED DICTIONARIES, Illustrated with 3,000 Cuts, worth $12.

For 10 Subscribers and $20

We will give A BOUND VOLUME OF THE HERALD OF HEALTH for 1867, 1868, and 1869.

3 Subscribers (1 Old, 2 New) and $6

A copy of Prof. Welch's New Book, "MORAL, INTELLECTUAL AND PHYSICAL CULTURE," worth $2 25.

This is a perfect encyclopedia of Gymnastics and Physical Culture.

2 Subscribers (1 Old, 1 New) and $4

A copy of "A WINTER IN FLORIDA," worth $1 50.

Premiums to Each Person in the Club.

There are many persons who would like to send Subscribers to THE HERALD OF HEALTH without thought of personal reward, but for the good they can thus do. To such we make the following enticing offer:

For 25 Subscribers and $50,

All sent at one time, we will give to each THE HERALD OF HEALTH for one year, and a copy of either of the following new works, viz.: "A Winter in Florida;" value, $1 50; "Talks to my Patients," value, $1 50; or, The American Agriculturist for one year, value $1 50; or, if 35 cents be added to each name, The New York Weekly Tribune for one year, valued at $2. Bear in mind that the 25 names and the $50 must all come at one time.

☞ SEE PAGE 143 FOR CLUBBING.

Address WOOD & HOLBROOK,
Nos. 13 & 15 Laight Street, New York.

Digitized by Google

Advertisements.

☞ ADVERTISEMENTS of an appropriate character will be inserted at the following rates: Short advertisements, 15 cents per line; thirteen lines, for three or more insertions without change, 20 per cent. discount; one-half column, $12; one column, $22; one page, $40. All advertisements must be received at this office by the 5th of the month preceding that on which they are to appear.

Are You Going to New York?

If so, and you wish to stop where you can *FEEL AT HOME*, and get *GOOD FOOD HEALTHFULLY PREPARED*, and *PLENTY OF IT*,

Go to the Hygienic Institute,

Nos. 13 & 15 *Laight Street.*

Horse Cars pass near the door to all parts of the city, making it a very convenient stopping place for persons visiting New York, either upon business or pleasure. Open at all hours, day and night. Board by the day or week, at reasonable rates. Rooms can be secured in advance by writing. Address

WOOD & HOLBROOK, Proprietors,

Nos. 13 & 15 Laight Street, New York.

New Views of Temperance!

HEAR BOTH SIDES!!

ALCOHOL AS MEDICINE, and how its use affects the Temperance cause.

A DISCUSSION between an M. D. of Newark, Ohio, and Thos. F. Hicks, M. D.

TESTIMONIALS.

"It is emphatically *a book for the times*, and should be read by every one, especially, Temperance men. We advise our readers to send for it."—*The Nation* (Boston).

"It should be in the hands of every thinking man and woman. Every Good Templar Lodge and every Temperance Organization should be supplied with copies."—*Temperance Wreath.*

"This discussion is worth a wide circulation."—*Phrenological Journal.*

"A close, incisive argument followed by a strong array of weighty testimony from prominent authors. . . . Invaluable to thinkers, writers, and speakers as a book of reference."—*Temperance Press.*

"The subject is of great importance. More so than is generally appreciated even by Temperance advocates; and the form in which it is here presented, that of debate, is calculated to make its discussion interesting. We commend it to the friends of Temperance."—*Indiana Radical.*

Price 25 cents, post-paid. Five copies for One Dollar. Address T. F. HICKS, M. D., Syracuse, N. Y. m-3t

BOOT AND SHOE STORE, No. 415

Canal Street. Ladies', Gentlemen's, Boys', Misses' and Children's Boots, Shoes and Rubbers, in all their varieties, always on hand. Work made to order, and Repairing done on the shortest notice and reasonable terms.

DAVID WALKER,

n-1y No. 415 Canal, corner Sullivan Street.

THEODORE TILTON'S NEW PAPER.

[TO BE ISSUED MARCH 1,]

THE GOLDEN AGE,

A NEW WEEKLY JOURNAL, EDITED BY THEODORE TILTON.

Devoted to the Free Discussion of All Living Questions in Church, State, Society, Literature, Art, and Moral Reform.

PUBLISHED every WEDNESDAY in NEW YORK.

Price, Three Dollars a Year, Cash in Advance.

Mr. TILTON, having retired from the *Independent* and the Brooklyn Daily *Union*, will hereafter devote his whole editorial labors to the *Golden Age*.

Persons wishing to subscribe will please send their names, with the money, immediately, to

THEODORE TILTON,

m-tf P. O. Box 2,848, New York City.

Healds' Hygeian Home.

WILMINGTON, DELAWARE.

DRS. PUSEY and MARY H. HEALD opened their new institution for the Hygienic treatment of invalids (without medicine), JAN. 1, 1871.

Dr. M. H. Heald (formerly Dr. York) was widely known to Hygienists during several years' practice at Our Home, Dansville, N. Y. Dr. P. Heald has also had large experience in the Hygienic system of treatment.

The building, beautifully located in the suburbs of a most delightful and healthful city, near the romantic and historic Brandywine, and overlooking the Delaware River, is entirely new, and was planned expressly for a "Cure." Every apartment will be warmed by *Steam-heated Air*, and be *thoroughly ventilated*, thus giving a *pure* atmosphere, free from all gas and dust, and insuring the comfort and welfare of winter guests. The best appliances provided for Water and Sun Baths, Swedish Movements, etc. Mrs. H. will devote especial attention to lady patients, giving them the benefit of kindly sympathy as well as of experience and skill. The Hygienic diet supplied, will include the choicest fresh and canned fruits and vegetables, and varied farinaceous preparations.

Railroad communication North, South, East, and West.

☞ For Circulars, etc., address, with stamp, HEALDS' HYGEIAN HOME, Wilmington, Delaware. m-1t

Slow Horses Made Fast

AND FAST HORSES MADE FASTER.—A complete and practical guide for increasing speed, including the "secrets" sold at high prices, exposures of falacious theories and faulty appliances. With full and reliable expose of the secrets and tricks of jockeys, and much other matter invaluable to all who have any thing to do with horses. Numerous engravings.

"A series of very interesting and instructive articles."—ROBERT BONNER in New York Ledger.

Only Fifty Cents of Booksellers or by mail.

JESSE HANEY & CO., 119 Nassau Street, N. Y.

xm-2t

J. H. SCHOONMAKER,

SHIP BREAD AND

CRACKER BAKERY,

436 GREENWICH STREET,

Corner of Vestry Street, New York.

☞ Manufacturer of Dr. R. T. Trall's GRAHAM BISCUITS. m-1t

Ventriloquism—Best Book

at *lowest* price. A real self-instructor, with numerous examples for practice and exhibition, also tells how to make and use the famous Magic Whistle. Only 15 cts. of Booksellers or by mail. JESSE HANEY & CO., 119 Nassau St., New York. "The boys have so often been humbugged by advertised instructions in ventriloquism that they will be thankful to Mr. Haney for furnishing at such trifling cost a book from which the art can really be fully and easily learned by any one."—*N. Y. Eve. Free Press.* xm-2t

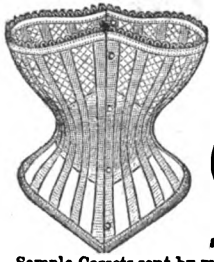
Digitized by Google

COLGATE & CO.

RECOMMEND THEIR NEW

"RONDELETIA" Toilet Soap.

Sold by Dealers in Perfumery and Fancy Goods and First-class Grocers.



Fanning's Patent

KID FITTING

DEMI-SKELETON

CORSET.

The most easy, graceful, and sensible Corset ever introduced.

Sample Corsets sent by mail, prepaid, on receipt of Two Dollars. For circular, prices, etc., address

WORCESTER SKIRT CO., Worcester, Mass.

TO THE WORKING CLASS.—We are now prepared to furnish all classes with constant employment at home, the whole of the time or for the spare moments. Business new, light, and profitable. Persons of either sex easily earn from 50c. to $5 per evening, and a proportional sum by devoting their whole time to the business. Boys and girls earn nearly as much as men. That all who see this notice may send their address, and test the business, we make this unparalleled offer: To such as are not well satisfied, we will send $1 to pay for the trouble of writing. Full particulars, a valuable sample which will do to commence work on, and a copy of *The People's Literary Companion*—one of the largest and best family newspapers published—all sent free by mail. Reader, if you want permanent, profitable work, address

E. C. ALLEN & CO., AUGUSTA, MAINE.

DOOLEY'S YEAST POWDER THE BEST TRY IT. SOLD BY GROCERS.

$5 to $10 PER DAY. MEN, WOMEN, BOYS and GIRLS who engage in our new business make from $5 to $10 per day in their own localities. Full particulars and instructions sent free by mail. Those in need of permanent and profitable work should address, at once,

GEORGE STINSON & CO., Portland, Me.

WM. J. CARLTON'S

LIST OF

Advertising Mediums.

150 Religious Papers.
50 Agricultural Papers.
15 Literary and Illustrated Papers.
30 Magazines.
25 Family Secular Weeklies.
30 Secular Papers around New York.

Any of the Above Lists Sent on Application.

Address WM. J. CARLTON,
Advertising Agent,
39 Park Row, New York.

MY TWENTY-THIRD

Annual Catalogue

OF

New and Rare Plants

Illustrated with numerous engravings, and containing two

BEAUTIFUL COLORED PLATES,

Is now ready, together with List of

SURPLUS STOCK

Both will be sent to all applicants on receipt of 25 cen
To our customers of past years it will be sent witho
charge.

Peter Henderson

67 NASSAU STREET, NEW YORK.

REDUCTION OF PRICES

TO CONFORM TO

REDUCTION of DUTIES.

GREAT SAVING TO CONSUMERS

BY GETTING UP CLUBS.

☞ Send for our New Price List, and a Club Form wil
accompany it, containing full directions—making a larg
saving to consumers and remunerative to club-organizers

The Great American Tea Co.

31 & 33 Vesey Street,

P. O. Box 5643. NEW YORK.

A Great Offer. HORACE WATERS 481 Broadway, N. Y.,

will dispose of One Hundred PIANOS, MELODEONS, and ORGANS of six first-class makers, including Waters', at extremely low prices, FOR CASH, DURING THIS MONTH, or will take a small portion cash and balance in monthly or quarterly instalments.

J. J. H. GREGORY'S

SEED CATALOGUE.

Having in former years introduced to the public many new and rare vegetables, I am again prepared to supply Vegetable and Flower Seed of the purest quality. My Annual Catalogue, which abounds in fine engravings, contains not only numerous novelties, but all the standard vegetables of the farm and garden (over one hundred of which I grow on my three seed farms), and a carefully selected list of flower seed. Catalogues free to all.

All my seed is sold under three warrants—

1st: *That all money sent shall reach me.*
2d: *That all seed ordered shall reach the purchaser.*
3d: *That my seeds shall be fresh, and true to name.*

JAMES J. H. GREGORY, Marblehead, Mass.



THEA-NECTAR

IS A PURE

BLACK TEA

with the Green Tea Flavor. Warranted to suit all tastes. For sale everywhere. And for sale wholesale only by the *Great Atlantic and Pacific Tea Co.*, 8 Church St., New York. P. O. Box 5506. Send for Thea-Nectar Circular.

Digitized by Google

AN ERROR CORRECTED!

Because WOOD'S HOUSEHOLD contains nearly as much matter as any $2.00 magazine, many have supposed that its contents are either selected or furnished by third or fourth rate contributors. The fact is, no other periodical has so good a right to claim to be a first class

ORIGINAL HOUSEHOLD MAGAZINE.

Among its contributors for 1871 are the following well known writers:

HARRIET BEECHER STOWE, GAIL HAMILTON, HORACE GREELEY,
M. M. POMEROY, ELEANOR KIRK, ABBY SAGE RICHARDSON,
VIRGINIA F. TOWNSEND, DIO LEWIS, ELLA WHEELER,
GEORGE BURLEIGH, CARRIE D. BEEBE, JOSEPH ALDEN,
MARY CLEMMER AMES, GEO. W. BUNGAY, MARY F. WATERBURY,
SELWYN LEE STELLIS, MARY A. DENISON, GEO. KLINGLE,
ALICE CARY, WM. A. SIGOURNEY, PHŒBE CARY, etc. etc.

Every number will contain a $100 Prize Story, complete; beside several stories which were entered in competition for these prizes. No effort or expense will be spared to make it the very best household periodical in the world. Yearly $1. Sold by newsdealers at 10 cents per copy. Splendid Premiums. One specimen copy mailed free to any address.

STITCH! STITCH! STITCH!

We not only furnish the best magazine in the world, for the money, but we give more money's worth in premiums than is paid by any other publisher for the amount collected. To give some idea of the magnitude of our premium business, we give below the receipt and addresses for our twenty-fourth shipment of Wilson's Shuttle Sewing Machines:

We have this day received S. S. Wood's order for 74 Wilson Improved Sewing Machines, which we shall ship immediately to the accompanying addresses, as Premiums for obtaining subscribers to WOOD'S HOUSEHOLD MAGAZINE; this being Mr. Wood's twenty-fourth premium shipment of Machines from February 9, 1869. These are first class, double-thread, Shuttle Machines, and are fully warranted for three years.

CLEVELAND, O., Jan. 25, 1871. WILSON SEWING MACHINE CO.

Addresses for 24th Premium Shipment of Wilson Improved Sewing Machines.

Mrs. A. W. Heise, Joliet, Will. Co. Ill.; Joseph Doeming, Antwerp, Paulding Co., Ohio; Mrs. J. H. Buck, Whitewater, Walworth Co., Wis.; Mrs. Sarah Phillips, Glade Mills, Butler Co., Pa.; H. Baldwin, Elmira, N. Y., box 797; Mrs. Avery F. Palmer, Cardiff, Onondaga Co., N. Y.; Maggie Rohrer. Fox Lake, Dodge Co., Wis.; Annie C. Perry, Ford's Ferry, Crittenden Co., Ky.; Mrs. Ida P. Webster, Mansfield, Tioga Co. Pa; Phebe L. Randall, Waoousta, Clinton Co., Mich.; Mrs. Geo. W. Bump, Sharon, Conn.; Anna E. Weast, Schenectady, N. Y.; Mrs. Emily Perry, Johnson's Creek, Niagara Co., N. Y.; John B. Hervey, Lockport, N. Y.; Mrs. Charlotte B. Miller, Troy, Bradford Co., Pa.; Mrs. J. G. DeLane, Hancock, Berkshire Co., Mass.; Mrs. Sarah J. Lee, East Clarksfield, Huron Co., Ohio; Mrs. Eliza A. Parmelee, West Bloomfield, Ont. Co., N. Y.; Ettie A. Bush, Campbelltown, Steuben Co., N. Y.; Mrs. Elizabeth Jane Goff, Hankins Depot, Sull. Co., N. Y.; Mrs. Kittie A. Harvey, Irwin Sta., Westmoreland Co., Pa.; O. D. Jones, Vermillion, Oswego Co., N. Y.; G. T. Peckham, 9 Bond St., Providence, R. I.; Mrs. Mary Vandervoort, Callicoon Depot, Sull. Co., N. Y; Mrs. Wm. Wheatley, Woodbury, Queens Co., N. Y. (L. I.); Mrs. Allen Renoud, Westport, Fairfield Co. Conn.; Alpha Steenard, Nelsonville, Athens Co., Ohio; Mrs. Hannah J. Doty, Marengo, Morrow Co., Ohio; Mrs. Elmer Hull, Buckley, Iroquois Co., Ill.; Anna R. Harding, Monroeville, Salem Co, N. J.; D. D. K. George, Andes, Del. Co., N. Y.; A. E. Hadley, Springville, Erie Co., N. Y.; Jennie Goodrich, Seal, Wyandotte Co., Ohio; Fred. Lyman, Cuba, Allegheny Co., N. Y.; Amanda Hurley, Omaha City, Hall Co., Neb.; Mrs. Melinda Parker, Sonora, Steuben Co., N. Y.; Mrs. Hattie Boyce, Savona, Steuben Co., N. Y.; R. L. Robinson, Frankfort, Herkimer Co., N. Y.; Anna A. Wright, Worcester, Vt.; Ester Golding, Syosset, Queens Co., N. Y. (L. I.); Hugh Laughlin, East Palestine, Col. Co., Ohio; J. F. Figgins, Salineville, Columbiana Co., O.; Ella M. Burgin, Delhi, Delaware Co., N. Y.; Nettie Avery, Esperance, Schoharie Co., N. Y.; Mrs. A. E. Westcott, Factoryville, Wyoming Co., Pa.; Lizzie Whitaker, Coldwater, Mich.; Isaac S. Pyle, St. Clairsville, Pa.; Mrs. Addie G. Stillwell, St. Clairsville, Belmont Co., Ohio; Chas. F. Ackerman, Somerset, N. Y.; Mrs. Jennie Agrelius, Youngsville, Warren Co., Pa.; Eliza McGlinchy, Flint, Genessee Co., Mich.; Nancy S. May, Unadilla, Livingston Co., Mich.; Mrs. Wm. Foote, Charlotte, Chittendon Co., Vt.; Dan. F. Lents, Palestine, Col. Co., Ohio; Lucina Bell, Broome, N. Y.; Jas. D. Wood, Rollin, Lenawee Co., Mich.; Hattie Porter, Batavia, Branch Co., Mich.; G. H. Corvin, Ox Bow, Jeff. Co., N. Y.; Josephine Dulin, Martinsville, Clark Co., Ill.; Jordan C. Dodge, Glen Cove, (L. I.) N. Y.; Maggie Godkins, Kingston, Ulster Co., N. Y.; Carrie M. Strong, Middletown, Middlesex Co., Conn.; George King, Thompsontown Sta., Juniata Co., Pa.; Mrs. Wm. A. Shelton, Woodbury, Litchfield Co., Conn.; Jennie R. Sheppard, Kossuth, DesMoine Co., Iowa; Jennie Hoofnagle, Abingdon, Wash. Co., Va.; Abbie O. Buck, Portage, Wyoming Co., N. Y.; Abbie McCollum, New Scotland Sta., Albany Co., N. Y.; Mrs. Eliza W. Payne, Kingsbury, Whiteside Co., Ill.; Byron S. Smith, Whitesboro Depot, Oneida Co., N. Y.; Lucy Gafford, Troy, Bradford Co., Pa.; Bell Crooks, Ashland, Boyd Co., Ky.; Mrs. Sarah A. Perkins, Newcastle, Lawrence Co., Pa.; Mrs. Datus H. Hunt, Middleford, Niagara Co., N. Y.

The Wilson Improved is one of the best machines manufactured. Send for Illustrated Catalogue of Premiums, which contains several hundred addresses, with the voluntary testimonials of those who have received these machines as premiums. Please forward the addresses of friends who would be likely to raise a club, and we will mail specimen and catalogue free. Address

m-1t S. S. WOOD, *Newburgh, N. Y.*

Digitized by Google

INSTITUTE DEPARTMENT.

☞ In this Department we purpose giving, from month to month, a description of the various agencies we employ in the treatment of disease, the reasons why we use them, their effects in different diseases, occasional reports cases, and various items of interest in regard to the institution.

We Never Give Poisonous Drugs!



Poisons Never Cure Disease!

THE NEW YORK HYGIENIC INSTITUTE,

Nos. 13 & 15 LAIGHT STREET, NEW YORK CITY.

A. L. WOOD, M. D., Physician.

The objects of this institution, which has been in successful operation for more than twenty years, are two-fold, viz. 1. The treatment and cure of the sick without poisoning them, by Hygienic agencies alone.
2. To furnish a pleasant, genial Home to friends of Hygiene throughout the world, whenever they visit this city.

CURE DEPARTMENT.

Thousands of invalids have been successfully treated at this institution during the past twenty years, and its fame extends wherever the English language is spoken. Its appliances for the treatment of disease without the use of poisonous drugs are the most extensive and complete of any institute in America. They comprise the celebrated

Turkish Baths, Electric Baths, Vapor Baths, Swedish Movement Cure,

MACHINE VIBRATIONS, the varied and extensive resources of the WATER CURE, LIFTING CURE, MAGNETISM, Healthful Food, a Pleasant Home, etc., etc. Particular attention is given to the treatment of all forms of CHRONIC DISEASE, especially of Rheumatism, Gout, Dyspepsia, Constipation, Torpidity of the Liver, Weak Lungs and Incipient Consumption, Paralysis, Poor Circulation, General Debility, Curvature of the Spine, Scrofula, Diseases of the Skin, Uterine Weaknesses and Displacements, Spermatorrhea, etc. Any one wishing further information should ☞ *SEND FOR A CIRCULAR,* ☜ containing further particulars, terms, etc., which will be sent free by return mail.

BOARDING DEPARTMENT.

We are open at all hours of the day and night for the reception of boarders and patients. Our location is convenient of access *from* the Railroad depots and Steamboat landings, and *to* the business part of the city. Street cars pass near the doors to all parts of the city, making it a very convenient stopping place for persons visiting the city upon business or pleasure. Our table is supplied with the Best Kinds of Food, Healthfully Prepared, and Plenty of It. In these respects it is unequaled. Come and see, and learn how to live healthfully at home. Terms reasonable.

Drs. WOOD & HOLBROOK, Proprietors.

Digitized by Google

American Educational Monthly.

"For all who have Children to Educate, or school taxes to pay."

CONTENTS FOR JANUARY, 1871—VOL. VIII.

A Japanese School —*Frontispiece.*
Schools in Japan.
Geography a Civiliser.
Law on Corporal Punishment.
Schools of the French Peasantry.
Eminent Educators Deceased.
Fiction an Educator.
English Literature.
What Knowledge is of Most Worth.
Teaching Public School—Rhymes.
Education in Germany.
An Empire without Inhabitants.
The Log School-House—Illustrated.
Is the Higher Education Growing Unpopular?
"The Sons of Pestalozzi."
Something About Ink.
How Marbles are Made.
Of What Sponges Consist.
Educational Intelligence:
The Indians; Texas.
Chicago; Decatur; Turkey
Correspondence.
Current Publications:
Hart's Rhetoric.
Smith's Pretentious Book Title.
Scott's New History.
U. S. Commissioner.
American Educational Annual.
College Catalogues.
Scientific.
Miscellanea.
An Old Scholar—Illustrated.
Smile Whenever you Can—Music.

Price 20 Cts.....or $2 per Ann.
WITH VALUABLE PREMIUMS.

J. W. SCHERMERHORN & CO.,
PUBLISHERS,
Xf-2t 14 Bond Street, New York.

Fresh Garden, Flower, Fruit, *Herb, Tree and Shrub, and Evergreen Seeds, prepaid by mail, with directions for culture. Twenty-five different packets of either class for* **$1.00.** *The six classes* **$5.00.**

20,000 lbs. Evergreen and Tree Seeds; Apple, Pear, Cherry, &c.; Grass Seeds; Beet, Cabbage, Carrot, Onion, Squash, Turnip, and all Vegetable and Flower Seeds, in small or large quantities; also Small Fruits, Stocks, Bulbs, Shrubs, Roses, Verbenas, &c., by mail, prepaid. New Golden Banded Japan Lily, 50c. Priced Descriptive Catalogue sent to any plain address, gratis. Agents wanted. Wholesale List to Agents, Clubs and the Trade. Seeds on commission.

B. M. WATSON, Old Colony Nurseries and Seed Warehouse, Plymouth, Mass. Established in 1842. m-2t

THE ELMIRA WATER CURE WILL be re-opened May 1st for the reception of patients, being under the general care of Dr. S. O Gleason and Mrs. R. B. Gleason, M. D., assisted by Miss L. Z. Brooks. Address for Circular, with Stamp, S. O. GLEASON, M. D., Water Cure, Elmira, New York. my-tf

COLBY WRINGERS! Best and Cheapest! Try it! Children's Carriages, Sleds, Sleighs, and Velocipedes. COLBY BROTHERS & CO., 508 Broadway, N.Y. jy9t



The Best Thing Out.

IF you want for your family a paper that is filled with *entertaining* and *useful* reading, one which will cultivate a taste for something better than the sensation novels of the day, send at once one dollar and ten cents to C. H. CUSHING, 85 Washington Street, Chicago, and you can have the Semi-monthly FAMILY CIRCLE for one year, containing articles upon Natural History, beautiful illustrations, biographies of eminent persons, a valuable domestic department, and a variety of miscellaneous reading. Also, to every subscriber is GIVEN a BEAUTIFUL $2.00 STEEL ENGRAVING.

AGENTS WANTED EVERYWHERE. A good, active man, woman, boy or girl in every town and county in the country can find pleasant and profitable employment. Good pay in cash. Send five cents for specimen copies, and say where you saw this.

C. H. CUSHING,
85 Washington St., Chicago.
m-1t

Empire Shuttle Sewing Machine

Patented Feb. 14, 1860, and Sept. 18, 1866.

Received the First Prize at the Great Fair of the American Institute, in New York, Oct. 26, 1867, and highest premium for the Best Manufacturing Machine at the Paris Exposition, July, 1867.

No. 1, FAMILY MACHINE.

This machine is constructed on a new principle of mechanism, possessing many rare and valuable improvements, having been examined by the most profound experts, and pronounced to be simplicity and perfection combined.

The following are the principal objections urged against Sewing Machines:

1. Excessive fatigue to the operator.
2. Liability to get out of order.
3. Expense, trouble, and loss of time in repairing.
4. Incapacity to sew every description of material.
5. Disagreeable noise while in operation.

The Empire Sewing Machine is exempt from all these objections Address the EMPIRE SEWING MACHINE CO., 294 Bowery, N. Y.

For 35 Subscribers and $70,

to THE HERALD OF HEALTH, we will send an Empire Sewing Machine worth $60.

WOOD & HOLBROOK,
f-tf 15 Laight Street, New York

Hunting, Trapping, and FISHING MADE EASY —New, reliable, and gives more matter than any dollar book, *double* amount of any 25ct. book, including preparation and use of bait, traps, &c, all modes of preserving and preparing skins and furs, and much other practical and valuable information—just what is wanted. Price *lower* than *any other*; *none* (even at $2 or $5) *more* reliable; none at less than $1 *as* reliable and complete. Examine at any Bookstore and prove. Only **20** cts. of Booksellers or by mail.

JESSE HANEY & CO., 119 Nassau Street, N. Y.
xm-2t

Dr. A. Smith's Water Cure.
The Hygeian Home is at Wernersville, Berks Co., Pa. Send for a circular. m-2t*

Digitized by Google

1871.

THE

National Standard.

Published every Saturday.

An Independent Reform and Literary Journal.

AARON M. POWELL, EDITOR.

WENDELL PHILLIPS, LYDIA MARIA CHILD, REV. JOHN T. SARGENT, HON. GEORGE W. JULIAN, FREDERICK DOUGLASS, MARY GREW, JULIA WARD HOWE, LOUISA M. ALCOTT, COL. T. W. HIGGINSON, and others, contributors.

Mr. Phillips's articles alone are worth many times the subscription price for the year.

THE NATIONAL STANDARD

will be radical in its treatment of public questions; independent in its political relations; will seek to eradicate the spirit of caste; to secure equal rights for women; to promote the welfare of the laborer; to extend civilization and ultimate citizenship to the Indian; to obtain justice for the oppressed everywhere; to strengthen the cause of Temperance; of Education; and to promote practical, unsectarian religion, and all that makes for peace and a true civilization.

Subscription price, per year, $3 00. To Clubs of Five, $3 50; to Clubs of Ten, $2 00. Single copies, Six Cents. A Liberal Premium List. The Standard offers superior inducements to Advertisers.

Specimen numbers sent free.

THE NATIONAL STANDARD, $3 00.

☞ Now is the Time to Subscribe. ☜

Address A. M. POWELL,
Editor of The National Standard,
Xj-3t P. O. Box 1416, New York.



A CHICAGO WEEKLY OF CHOICE, STIRRING, AND ELEVATING LITERATURE for old and young. A friend to all true religion and reform. Not sectarian in religion or politics. A paper for the people. Should be in every family in the land. Contains sermons of London's great preacher, C. H. Spurgeon. Contains latest news and market reports up to time of going to press One of the cheapest and liveliest papers published. Only One Dollar a year. Six Months, 50 cts.; Three Months, 25 cts. Publisher of Game of "SOCIETY, OR THE SOCIAL CONFLICT BETWEEN GOOD AND EVIL." Address
Xn-6t E. C. EGGLESTON, Editor Life Boat.

TOBACCO AND ITS EFFECTS,

Being

A PRIZE ESSAY,

Showing that the use of Tobacco is a physical, mental, moral, and social evil. By Henry Gibbons, M. D., Editor Pacific Medical and Surgical Journal.

☞ Price, by mail, 20 cents. Address

WOOD & HOLBROOK,
No. 15 Laight Street, New York.

$5.60 IN GOLD.—A Present

Of the splendid Steel Engraving Evangeline (Price $5.60 in gold) to subscribers for the **Illustrated Excelsior Magazine.** The Illustrations ALONE are worth many times its cost, and the magazine REDUCED from $2 50 to $1 00 a year, is now one of the CHEAPEST in the world. Contains BEAUTIFUL STORIES, SPLENDID PICTURES, INTERESTING PUZZLES AND REBUSES, CUTS OF LADIES' PATTERNS, NEWS, &C. &C. We will send the Magazine one year, also this splendid Steel Engraving, on receipt of the regular subscription price, $1 00, and 8 cents for postage. Sample copies, FREE. Address the Publisher, C. L. VAN ALLEN, 171 Broadway, New York. Xf-4t

"**Amer. School Inst,.**" founded 1855, *Is a reliable and practical Educational Bureau*
To aid those who want well-qualified Teachers;
To represent Teachers who seek positions;
To *give* parents information of good Schools;
To sell, rent, and exchange School Properties.
Sixteen years have *proved* it efficient in securing "THE RIGHT TEACHER FOR THE RIGHT PLACE."
J. W. SCHERMERHORN, A. M., Actuary,
Xf-11t 14 *Bond Street, New York.*

HYGIENIC.

Dr. Jenkins' Institution, Binghamton, is now open for patients and a few boarders. The best facilities are afforded for the treatment of all forms of Chronic Diseases. Special treatment given to women by Mrs. Jenkins. Address E. S. JENKINS, M. D., or MRS. L. A. JENKINS, M. D., Binghamton, New York. jy-tf

CAUTION.

All persons are hereby cautioned against infringing my Letters Patent for Improvements in Sewing Machines, extended for seven years by Act of Congress, dated July 14, 1870. All infringers will be prosecuted according to law. JOHN BACHELDER. n-5t

A MODEL HOUSE! Convenience, beauty, and economy combined! Descriptive circulars, free to all.

A HEALTHY HOUSE! Eight page description, with price list of plans, views, etc., for 25 cents.

A RADICAL REFORM in House Architecture! Address GEO. J. COLBY, Architect, Waterbury, Vt jy-9t

Digitized by Google

CATALOGUE OF BOOKS

PUBLISHED AND FOR SALE BY

WOOD & HOLBROOK, 15 Laight St., NEW YORK.

The Tree of Life; or, Human Degeneracy.—Its Nature and Remedy. By Isaac Jennings, M. D.—The author of this book was for thirty years an Allopathic physician, but becoming convinced that medicines did more harm than good, he substituted placebos of bread pills and colored water in his practice, and the record of his cases show that the latter treatment was eminently successful in removing disease. It contains the following table of contents: Man's Spiritual Degeneracy; Physical Depravity; Physiological and Psychological Reform; Remedy for Man's Spiritual Degeneracy; Man's Physical Degeneracy; Constitution of Human Physical Life; Vital Economy, or Organic Laws of Life; Source and Mode of Transmission of the Principle of Human Physical Life; Predisposition to Disease; Hereditary Diseases Mode of Renovation of Impaired and Feeble Vital Machinery; Analysis of a Few of the Most Prominent Symptoms of Disease; Law of Contagion and General Causation; Medical Delusion; Remedy for Man's Physical Degeneracy; General Directions Resumed; Specific Directions—Croup—Dysentery—Cholera; Final and Effectual Remedy for Man's Physical Degeneracy. Price, by mail, $1 50.

Sexual Physiology.—This work contains the latest and most important Discoveries in the Anatomy and Physiology of the Sexes; Explains the origin of Human Life; how and when Menstruation, Impregnation and Conception occur; giving the laws by which the number and sex of offspring are controlled, and valuable information in regard to the begetting and rearing of beautiful and healthy children. It is high-toned, and should be read by every family. With 80 fine Engravings. *Agents wanted.* Send stamp for Circular. Price, by mail, $2.

Hydropathic Encyclopedia.—Illustrated. A Complete System of Hydropathy and Hygiene, embracing Anatomy; Physiology of the Human Body; Hygienic Agencies, and the Preservation of Health; Dietetics and Cookery; Theory and Practice of Treatment; Special Pathology and Hydro-Therapeutics, including the Nature, Causes, Symptoms, and Treatment of all known Diseases, Application to Surgical Diseases and to Hydropathy, to Midwifery, and the Nursery. With 200 Engravings, and nearly 1000 Pages, including a Glossary, Table of Contents, and Index complete. Price $4 50

Physical Perfection.—Containing Chapter on Structure of the Human Body; the Perfect Man and Woman; the Temperaments; Laws of Human Configuration; Embryology; Childhood; Effects of Mental Culture; Moral and Emotional Influences; Social Conditions and Occupations; Effects of Climate and Locality; Direct Physical Culture; Practical Hygiene; Womanhood; the Secret of Longevity; the Arts of Beauty; External Indications of Figure, etc., etc. Beautifully illustrated with 100 Engravings, and handsomely bound. Price, by mail, $1 50.

Rathe's Manual of Gymnastics.—Illustrated. For Instruction in Classes and Private Use. Dio Lewis's System Explained. By W. L. Rathe. Price 60 cents

The True Temperance Platform; or an Exposition of the Fallacy of Alcoholic Medication. Being the substance of Addresses delivered in the Queen's Concert Rooms, London; to which is added a Discussion on the Modus Operandi of Alcoholic Medication. This excellent Temperance document should be read by every one who would understand the true arguments against the use of alcohol. Price, by mail, 50 cents.

Diptheria; Its Nature, History, Causes, Prevention, and Treatment on Hygienic principles, etc. It contains chapters on the Nosology and Technology of Diptheria, Description and Pathology of Diptheria, the False Membrane, History and Infectiousness of Diptheria, its Causes and Mortality, Complications and Sequelæ, Morbid Anatomy of Diptheria, the Drug and the Hygienic Treatments, Stimulation, etc. Price, by mail, $1 25.

The New Hygienic Cook Book. By Mrs. M. M. Jones.—This work contains several hundred recipes for cooking the most palatable and wholesome food without the use of deleterious compounds. Also, directions for Washing, Ironing, removing Stains, Canning Fruit, etc. Price 30 cents.

Water Cure for the Million.—The processes of the Water Cure Explained, Popular Errors Exposed, containing Rules for Bathing, Dieting, Exercising, Recipes for Cooking, directions for Home Treatment, and cases to illustrate, etc. Price, by mail, 30 cents.

The Turkish Bath; Its History and Philosophy. By Erasmus Wilson. With Notes and an Appendix by M. L. Holbrook, M. D.—This is the only book on the Turkish Bath published in this country. Illustrated. Price 25 cents.

New Medical Charts, so arranged as to present to the eye at a glance the Fundamental Problems of all the Medical Systems and the Distinctive Principles in the Philosophy and Practice of the Hygienic System. Price $3. Sent only by Express.

Diseases of the Throat and Lungs. Giving their Cause, means of Prevention, and methods of Cure. Price, 25 cents.

The Cause of Exhausted Vitality; or, Abuse of the Sexual Function. Price, in paper, 75 cents; in muslin, $1.

Woman's Dress; with numerous Engravings showing how Woman's Clothing can be made beautiful, healthful, and comfortable. Price 30 cents.

Children; Their Management in Health and in Disease. By Dr. Joel Shew. Price $1 75.

How to Bathe.—This is a concise family guide for the use of all kinds of baths. Price 40 cents.

The Movement Cure; Its Principles and Practice. By Geo. H. Taylor, M. D. Price $2.

Is It I?—A Book for Every Man, by Dr. Storer. Price, by mail, $1.

Why Not?—A Book for Every Woman, by Dr. Storer. Price, by mail, $1.

Digitized by Google

Conant's Binder,

OR BOOK COVERS FOR PERIODICALS.



Adapted to the *Atlantic, Harpers', Putnam's*, and THE HERALD OF HEALTH, 50 cts.

MUSIC SIZE.—Adapted to the various Publishers' *Sheet Music* $1 00

A cheap and durable method of Binding Magazines, Papers and Music. Extremely simple. New numbers can be added as received.

We can recommend it as being just the thing for preserving Magazines perfect and clean.—*Gardener's Monthly.*

This is a useful invention, by which a Periodical is inserted in a moment between two durable covers. Various sizes are made. A good thing.—*New York Tribune.*

Conant's Binder is one of the best and cheapest contrivances for keeping Periodicals in good condition that we have ever seen, and it meets a want that has long been felt in every reading family. It is strong and durable, and is designed either for a Temporary or Permanent Binder."—*Dedham Gazette.*

WOOD & HOLBROOK,
15 Laight Street, New York.

oc-tf

Another New Work!

THE IDENTIFICATION
OF THE
ARTISAN AND ARTIST,
THE
Proper Object of American Education.

Illustrated by

A Lecture of Cardinal Wiseman,

On the Relation of the Arts of Design with the Arts of Production. Addressed to American Workingmen and Educators, with an Essay on Froebel's Reform of Primary Education,

BY ELIZABETH P. PEABODY.

This is a very instructive and valuable pamphlet. Price by mail, 25 cents.

WOOD & HOLBROOK, Publishers,
15 Laight Street, New York.

"Bradbury Piano."

☞ From personal acquaintance with this firm we can ndorse them as worthy of the fullest confidence of the Christian public. We are using the Bradbury Pianos in our families, and they give entire satisfaction.

Persons at a distance need feel no hesitation in sending or their illustrated price list, and ordering from it.

MRS. U. S GRANT, Washington, D. C.
S. P. CHASE, Chief-Justice, Washington, D. C.
D. D. PORTER, Vice-Admiral, U. S. Navy.
M SIMPSON, Bishop M.E. Church, Philadelphia.
S. HAWK, St. Nicholas Hotel, New York.
THEODORE TILTON, editor of The Independent.

The best manufactured; warranted for six years Pianos to let, and rent applied if purchased; monhly installments received for the same. Old pianos taken in exchange. Second-hand pianos at great bargains, from $50 to $200. Send for illustrated Price List.

F. G. SMITH & CO.,
late Sup't for and successor to Wm. B. Bradbury,
m-1y 427 Broome Street, New York.

List of Articles for Sale b

WOOD & HOLBROOK, No. 15 Laight Street, New Yo

BACON'S HOME GYMNASIUM, with boo of explanation and 100 cuts, $10.

——Trapeze Adjustment, with 32 illustrations, $3 50.

——Swing Adjustment, for children, $1 50.

Each part sold separately. The whole, $15.

This is the most valuable piece of Gymnastic appar tus for home use ever invented. Any one can use it. I weak chests, backs, and sides its use is the best remc known. A half hour's use of it daily would prevent a cure many cases of dyspepsia and consumption.

SYRINGES.—The best styles in marke Usual style, by mail, $3. For children, with Eye an Ear Douche for sores, etc., $2. The Spray Syringe, $3 The Trade supplied.

BOUND VOLUMES.—We still have a few Bound Volumes for 1863, 1864, 1867, 1868 and 1869 fo sale, postpaid, by mail, for $3 Soon it will be impossible to obtain them.

HERALD OF HEALTH COVERS—so that every one can bind their numbers and preserve them neatly. 50 cents.

BREAD PANS—for making light, aerated Bread without soda, saleratus, yeast, or other poisonous compounds. Only by Express, $1 25.

HAND MILLS—for cracking Wheat, making Rusk, Hominy, etc. By Express, $3.

BEST GRAHAM CRACKERS—per barrel, $10. Half barrel –38 lbs., $6.

ELECTRIC MACHINES—Kidder's, best Manufactured, $20 to $22.

FILTERS.—Kedzie's, Family Size, $10 50.

Hygienic Home Water Cure,

637 California Street,
SAN FRANCISCO, Cal.

This is by far the most extensive and complete Health Institute on the Pacific Coast, based strictly on the Hygienic principles of treatment.

Dr. Smith has built and arranged the Home with special reference to its supplying the place in San Francisco that the Laight Street House and Hygienic Institute furnishes to the friends of Health Reform in New York city. The Medical Department is ample for the cure of all who may desire hospitalities, and the Boarding Department is well arranged for the accommodation of the friends of Hygiene throughout the coas. All are cordially invited to visit our healthful Home.

BARLOW J. SMITH, M. D.,
Consulting Physician.
R. S. MACBETH, M. D.,
aug-tf Attending Physician.

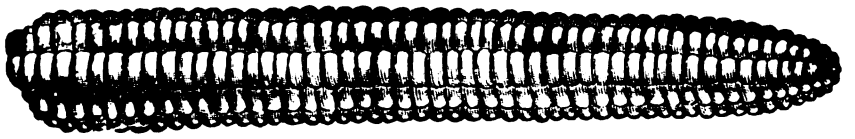
WOOD'S HOUSEHOLD MAGAZINE contains in every number one complete prize story valued at $100. Forty pages of other matter. Yearly, $1. Sold by Newsdealers at 10 cts. per copy. Splendid Premiums. $500 cash to be awarded for prize clubs. Specimen copy free. Address S. S. WOOD, Newburgh, N. Y. n tf

D. H. PRIME, *Printer, at the Hygienic Institute, N. Y.*

Digitized by Google

The Premium Sanford Corn.

[CONTINUED FROM SECOND PAGE OF COVER.]



This variety has been tested the past season in nearly every State and territory, and the claims made in favor of it are sustained by the most convincing and disinterested testimony (neither bogus or bought) establishing the fact that it is not a Humbug, and confirming all previous evidences of its superiority. Nothing is claimed for it but that which can be fully substantiated. It has the reputation in this (Suffolk Co.,) as being the best field corn, and as such has taken the highest premium for five successive years. In Michigan, Wisconsin, Minnesota, and other States, it has ripened from two to four weeks earlier, producing from one-third to double the quantity of other corn.

FURTHER TESTIMONIALS.

YPSILANTI, Mich., *Jan.* 7, 1871.

S. B. FANNING: Thinking you might be interested, I give you the result with the Sanford Corn I planted the 26th of May, while my neighbors were cultivating theirs. Planted on clover sod—no manure and only ordinary cultivation—I have harvested from the first acre measured, one hundred and fifty-five bushels; the second, one hundred and forty-four bushels. I cut the stalks the 10th of September fully ripe. The best acre of my common corn planted in the same field with same culture, yielded but one hundred and ten bushels. I have seventy-five bushels more shelled corn than if I had planted the White Dent, Eight-rowed Yellow, or Red Blaze. From three bushels of ears I get two bushels of shelled corn. Have done this three or four times in shelling that amount. When weighed at the mill, I had one hundred and twenty pounds of nice corn from three bushels of ears. If any one can beat this I will make another trial next year, if I live. It is universally liked in this vicinity. The seed delivered cost me $8.70 If I had paid $25 for it, it would be the cheapest seed I ever planted. Some of my neighbors think I have "Corn on the Brain," and it is partly true, and I have it in the crib. JOHN HOWLAND.

FORTVILLE, Ind.

S. B. FANNING—*Sir:* The corn I purchased from you was planted on the 23d of May, two grains in a hill. Hoed it twice before and once after harvest. Did not see it afterwards until it had eared, and was surprised to find from three to eight stalks in a hill, and most of them with two and some with three ears on a stalk. It yielded at the rate of 120 bushels per acre, which was just twice the yield of our common corn. I intend to plant largely of it the next season, and think all farmers will find it to their advantage to give it a trial. FRANK K. BOOLE.

BLOOMSBURG, N. Y

S. B. FANNING—*Dear Sir:* I planted the Sanford Corn on the 5th of June. The dry weather kept it back, and it was more than a week before it sprouted. It commenced to set ears about the 19th of July, and it beat all corn I ever I saw for sets. Some stalks had five, some four, and none less than three. About this time the drought commenced and dried up many of them, but it yielded seventy-five bushels per acre, and nothing but the dry weather kept it from yielding double that amount. I consider the stalks very valuable for fodder.

A. B. CRANE.

AUBURN, Ohio, Nov. 14, 1870.

S. B. FANNING: I take pleasure in reporting result of my experiments with the Sanford Corn. Late in May I planted two Quarts on old ground, ordinarily manured. There was a fine growth of stalks and a large yield of splendid looking corn. From the two quarts planted on a quarter of an acre of ground, I obtained thirty-five bushels—at the rate of one hundred and forty bushels per acre. The large, well-filled ears are admired by all who see them. A gentleman of this place raised thirty-eight bushels, from two quarts seed. I am satisfied that the Sanford Corn is not excelled by any variety, but believe it superior to all. GEO. WM. WILSON.

MOUNT EATON, Ohio.

Dear Sir: I planted the Sanford Corn on the 16th of May; it was ripe two weeks earlier than my other corn. I planted my common corn in the same field. It took twelve rows to make forty-five bushels of ears. Of the Sanford Corn it took only eight rows to make the same number of bushels. It will yield with me one-third more than the common corn. E. D. PINKERTON.

PRICES: One Quart, post-paid, 75 cents; Two Quarts, $1.25; One Peck, by Express, $2; Half Bushel, $3; One Bushel, $5.

Send stamp for Circular, giving full description, History, and Testimony. Also, Price-list of new varieties of Corn, Potatoes, Oats, and other choice Farm Seeds. Money may be sent in Registered Letter, or Post Office Money Orders (drawn on Riverhead P. O., N. Y.). Any amount less than $2 may be sent by mail at my risk.

Address **S. B. FANNING, JAMESPORT, N. Y.**

FARMERS, BUY YOUR SEED from the GROWER.

SEED OATS.
Sample Free.
WHITE PROBESTIER.
WHITE SWEDISH.
WHITE SCHONER.
RUDIGILL.
YELLOW LUTHAIRAN.
RAMSDELL'S NORWAY.
EXCELSIOR.
SURPRISE.

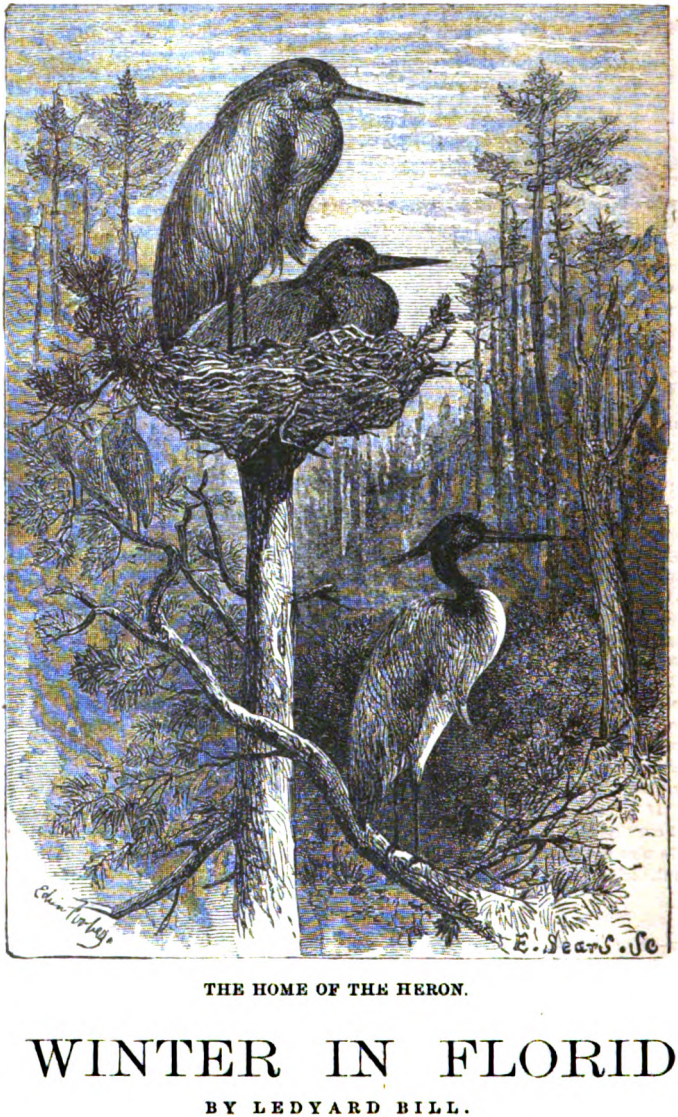
I will send sample of either variety of Oats by mail, *free.* Samples of all mailed to any address upon receipt of three stamps.

Send stamp for circular, giving full description and Price-list.

POTATOES!
EARLY ROSE.
KING OF THE EARLIES.
EXCELSIOR.
CLIMAX.
PEERLESS.

Address **S. B. FANNING, JAMESPORT, N. Y.**

FOURTH EDITION—REVISED AND IMPROVED.



THE HOME OF THE HERON.

A WINTER IN FLORIDA.

BY LEDYARD BILL.

With Illustrations by Forbes, comprising views of the old city of St. Augustine, and the Natural Scenery and objects in Eastern Florida. The following newspaper extract is one of the many encomiums it has received from the press.

"He justifies the predictions of the climate, saying that it is so delightful that no disease can experience it without favorable effect. To the consumptive, who has not fallen too far within the grasp of this inexorable malady, it offers a safe harbor from the severe winters of the North."

"Americans should know their own country. We believe it will be found that we have under our flag every degree of climate desirable. When we have advanced a little farther into the science of knowing our bodies and their disabilities, we shall know where to find the climate that will best suit each case. There is no sense or humanity in having a wretched sufferer remain in a climate that feeds and sustains his disease. Let our physicians seek out the localities that will best assist each patient, and let the many sufferers be told where they may live a life that is something more than a living death.

"We welcome this book for giving us knowledge of another locality before little known."

Price, $1 25.

WOOD & HOLBROOK, Publishers,

13 & 15 LAIGHT STREET, NEW YORK.

ATTENTION! All Wishing Farms in BURG, CUMBERLAND COUNTY, NEW JERSEY, 44 Miles from New York, on the Railroad to Philadelphia. Soil, fine loam; superior for all crops. Country just rolling enough for beauty and utility. Climate, mild and proverbially healthy. Water, soft and pure. No fever and ague. Sold only to actual settlers, on easy terms. Price per acre, $25 and upward. For Circulars and Maps, address ROBERT CAMPBELL, No. 153 Broadway, New York.

D. W. BRIGHAM, Agent, Bricksburg, N. J.

Digitized by Google

OLD SERIES—VOL. [illegible] NEW SERIES—VOL. 17.

BOSTON MEDICAL
JUL 23 1894
THE

HERALD OF HEALTH

Improved Send notice

AND

JOURNAL OF PHYSICAL CULTURE,

ADVOCATES

A Higher Type of Manhood—Physical, Intellectual, and Moral.

CONTENTS FOR APRIL, 1871.

GENERAL ARTICLES: Page

Alcoholic Medication—*P. H. Hayes*, M.D. 146
Lord Bacon's Statements on Longevity —*E. Ray Lankester*, B. A. 148
Boys, and What to Do with Them—*Mrs. R. V. Darwin* 151
To Any Desponding Genius (A Poem) —*Alice Cary* 152
Country and City Life—*C. H. Brigham* 153
On Not Doing What You Like—*Perkins* 158
Dust and Disease (A Poem) 159
Personal Influence—*Henry W. Beecher*. 161
The Education of Our Daughters—*Mrs. R. B. Gleason*, M. D. 163
The Physique of Kaffirs 166
That Great Cure-all, Righteousness... 168
Theories Put in Practice, or Diary of a Physician's Wife—*Mrs. H. C. Birdsall* 169
How to Prepare Cow's Milk for Babes. 172
Studies in Hygiene 174
Recipes for Wholesome Cooking 176

EDITORIAL DEPARTMENT:

Weeding Out the Cowards 177
The Oldest Doctor in America 178
A Wholesome Family—Does it Pay to be Sick?—Ministers' Salaries 179
College Dormitories and the Health of Students—Mixing with Strangers... 180
Does Suffering Make People Better?—No Colds on Mount Washington, etc. 181

HOW TO TREAT THE SICK:

Treatment of Scarlet Fever 182
A Cure for Every Drunkard—Cure of Erysipelas 183

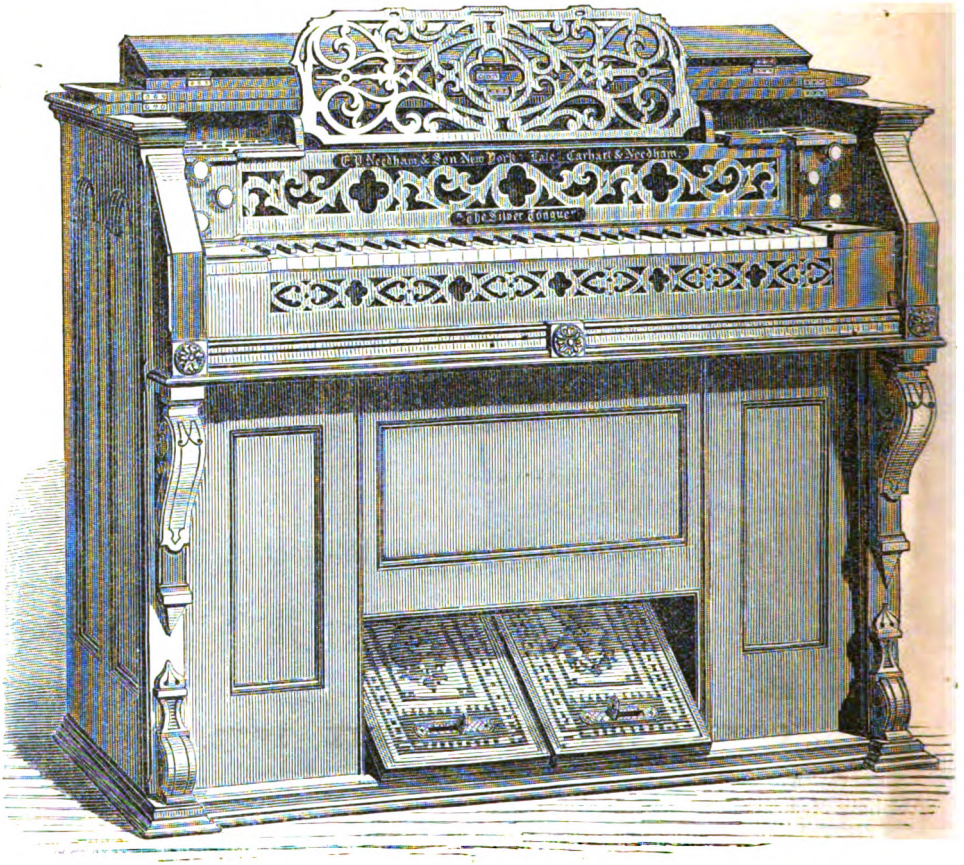
ANSWERS TO CORRESPONDENTS:

How to Prevent Spring Sickness—Lead Water-Pipes—Fruit in the Evening. 184
How to Give Children an Appetite—Sleeplessness—Tropical Fruits, etc.. 185

NEW YORK:
WOOD & HOLBROOK, PUBLISHERS, 13 & 15 LAIGHT ST.
GENERAL AGENTS—AMERICAN NEWS CO. . . . NEW YORK NEWS CO.
$2 per Annum. Single Copy, 20 Cents.

Digitized by Google

SYMMETRICAL, SONOROUS, SUPERB!



THE "SILVER TONGUE" ORGANS.

E. P. NEEDHAM & SON, 143, 145, and 147 East 23d Street, New York.

FOR PRICES AND DESCRIPTION OF STYLES SEND FOR CIRCULARS.

CLIMATES FOR INVALIDS.

Including a careful description of the Climate, Soil, Water, Air, Scenery, and Natural Advantages of MINNESOTA, for Tourist, Invalid, and Emigrant; including carefully prepared notes of the Climates of Florida, Nassau, Corfu, California, the Adirondacks, etc. etc., together with Hints to Invalids of the inestimable value regarding the best places to visit, etc. etc., in one neat illustrated volume of over 200 pages, handsomely bound. By LEDYARD BILL. Sent, postpaid, by mail, for $1.25.

A WINTER IN FLORIDA;

Or, Observations on the Soil, Climate, and Products of our Semi-Tropical State, with Sketches of the Principal Towns and Cities, a brief Historical Summary, and Hints to Tourist, Invalids, and Sportsmen. By LEDYARD BILL. This work is replete with information for all classes. The adaptability of the climate to invalids is carefully treated. The chapter on Orange Culture is alone worth the price of the work. Sent by mail, post paid, for $1.25.

Any person ordering both of the above books at one time, can have them for $2.00. Both books are illustrated.

WOOD & HOLBROOK, Publishers, 15 Laight Street, New York.

Digitized by Google

THE HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE.

VOL. 17, No. 4.] NEW YORK, APRIL, 1871. [NEW SERIES.

PUBLISHED MONTHLY BY WOOD & HOLBROOK, 13 & 15 LAIGHT STREET.

A NEW DISCUSSION OF TEMPERANCE PROBLEMS;

COMPRISED IN A SERIES OF TWELVE ESSAYS CONTRIBUTED BY OUR BEST THINKERS AND WRITERS.

No. VI.—ALCOHOLIC MEDICATION.

BY P. H. HAYES, M. D.

ALCOHOLIC stimulants first exalt, then impair, depress, partially *paralyse* the powers and actions of life. Ordinary medicinal doses, at first brighten the eye, flush the face, increase the action of the heart, and give a general feeling of warmth and cheer to mind and body. The second effects of the same doses are: dimness of the eye, pallor of the face, tremors, palpitation, weak and irregular pulse, and a general feeling of bodily and mental exhaustion. The first effects are short, lasting at most but a few hours; the second are long in comparison, lasting many hours, or even days. The first or primary effects are an effort to raise the tides of life and feeling above where simple nutrition can sustain them, and in this effort nervous force is rapidly spent, at the expense of the powers of life, of which the secondary and remote effects, the exhaustion, irritation, languor, and melancholy—all of them shades of *paralysis*—are at once the consequences and the proof.

Physicians give these stimulants for their primary, exalting, or toning effects only. But the doses repeated, these effects grow shorter and weaker, and tend to disappear entirely, while the secondary and more remote effects deepen and strengthen, until they triumph over the primary, and break down the constitutional health. It is almost incredible, that the vast amount of dosing with alcoholic stimulants can only secure transiently the ends sought after, while it must end in producing, in a more permanent form, substantially the very same conditions of debility it was given to cure.

But, say authorities, you must give the brandy in small and repeated doses *only*, that is to say, in *stimulating* doses only, and so avoid these secondary and disastrous effects. Is there such a thing as stimulating doses *only*?

Can alcoholic stimulants, by any possible mode of administration, produce perpetual exaltation? Are not first effects really a vital wrestling against the presence of alcohol, and the secondary effects the lapse of nature after the struggle? Could a dose which left no secondary effect, if such a dose were possible, answer the intention of the dose, and satisfy either physician or patient?

Digitized by Google

It is not many years ago that an epidemic brought into Bellevue Hospital, in the city of New York, a great number of cases of typhus fever. Now if there be one disease which, first of all, the advocates for alcoholic medication will name, and the books, too, as the very crisis of necessity for their use, it is the turning point of low fevers. But what says the Doctor in charge at Bellevue? "We gave brandy to hold up the pulse, following the direction of Dr. Stokes, to begin when the first sound of the heart was almost gone; and so we did, and we went on trying to hold up the pulse, until twenty ounces of brandy, and even much more was given to single cases in a single day. But we found, after the fever had run a certain time that we could not control the pulse in this way, and then we stood by and gave the brandy 'on principle.'" Just at this time, and when *one in five* of these patients were dying, the Doctor ordered every patient removed to the "Island," and placed under tents. And he says, "I determined not a drop of stimulants should go into those tents." Scarcely, however, were his patients established in their tents, before his associate came to him and said, "Doctor, many of our patients are in a state of *coma*, and if we don't stimulate them they will die." But the Doctor was true to his determination, and I have heard him declare that, here, with *fresh air*, and *without stimulants*, they got the *best record ever shown*, only *one in sixteen* of these patients died.

"Stimulating doses *only*?" Mark it! When these doctors found they could hold up the pulse no longer with the brandy, just there was the point where the worn-out powers of life could not be stimulated any more, and the depressing and paralyzing effects of the brandy were all they could get. Even then they stood by and gave it "on principle," which means, I take it, that they gave it because it is custom, precedent, or according to the books.

Mark it! Many of these cases were in the full narcosis—"*coma*"—of alcoholism, when they reached the "Island," of which "*fresh air*" cured them.

Mark it! any alcoholic stimulant you choose to give, in repeated medicinal doses, in acute or chronic diseases, will end at last in causing the very forms of constitutional disturbance and failure it is given to cure, and one may stand by and give it "on principle," only to see their patient sink into yet deeper exhaustion.

Alcoholic stimulants in low fevers? I would rather manage the fevers than the alcohol!

I wonder how soon the time will come when doctors will find out how sure a poison alcohol truly is, as they are just now beginning to find out of their old friend, opium, since the discovery of its galloping rival, the hydrate of chloral; or, as Dr. Handfield Jones, who after treating nearly forty cases of *pneumonia* with *tartar emetic*, and then as many more without it, naively declared he never knew what a poison *tartar emetic* was before.

No fact is better established than that alcoholic stimulants greatly impair and finally destroy the glandular system. The stomach, the strongest of all the organs of the body, resists their action better than the liver, yet even here inflammation, thickening, and discoloration of the mucous membrane, and great loss of gastric gland secretions takes place, with, of course, greatly impaired digestion. But a man's foundation is in his digestion, and as the foundation fails so fails the man. The liver, only a step from the stomach, in the route of the portal circulation, gets the alcohol only slightly diluted, and here it inflames, contracts, and deforms this organ, and wastes and destroys that very part of it which secretes or separates the *bile* from the blood. The same change takes place in the kidneys, from the same cause, though hardly so promptly, or certainly, as these organs are in the course of the circulation farther away from the stomach where the alcohol is received into the blood. Now what is true of these stimulants, as to these larger glands, is true of all the other glands of the body whose office, like those already named, is either to supply some secretions useful in nutrition, or to eliminate waste and poisonous elements from the blood. But where falls the stress of a fever? It is upon the glandular system. What does a physician most of all want to do to abate and shorten a fever?—Get the glands into action. What organs fail first of all in all fevers, and cause that self-poisoning which is the basis of all fevers?—The glands, including, of course, the skin, which contains in its substance a vast network of minute glands, which, taken together, eliminate from the blood at least one-fourth of all the effete and worn-out elements of the continued waste of the body.

What then? Shall we use an article to cure fevers whose primary, heating, and irritant action impairs secretion, and whose after effects are to cause a slow consumption of the substance of the glands themselves?

Have not physicians while depending upon the delusive support of alcoholic stimulants in low fevers forgotten the power of truly helpful agents, *fresh air*, which is the great antidote for

Digitized by Google

the poisoned blood of fevers; free water-drinking, the only perfect mode of dissolving and diluting fever poisons; tepid sponging, and friction of the skin with cool hands, which dilate fever, excite the skin to action, and tone and soothe the nervous system?

Alcoholic stimulants retard the breathing; this they do by a partial paralysis of that part of the brain which sends its nerves to the lungs, but the breathing retarded, carbonic acid gas—itself a narcotic poison—is retained in the blood, a most dangerous element in fevers, and the cause of a dusky or livid paleness, often seen here, and also in the face of chronic spirit-drinkers. In this manner the blood becomes impure, and not only in this way, but by the presence of alcohol itself, and by its checking the action of the glands. But it is only pure blood that flows quickly and freely through all the invisibly minute hair-like blood-vessels, where all the acts of nutrition takes place; and by so much as the blood becomes impure, by so much does there come a greater stress upon the heart to circulate this impure blood, and by ason of this stress it is often found dilated and hypertrophied. These facts, taken together, explain the narcotism of alcohol; they explain the blunting of all the bodily sensations, and they account for the loss of animal heat, or the failure of the body in keeping itself warm by its own organic processes.

Finally, what physician does not know how quickly alcoholic stimulants create a new and deceptive *want* in the nervous system—a *want* unknown to normal human nature, a want which cries "give! give!" with an importunity irresistible in proportion to the duration of the habit which caused it, and to the wreck of mind and body which follows it. What physician, who keeps love or faith with human nature, will not take care how he creates this fraudulent *want*, which, before himself or his patient knows it, may become a passion which blinds the reason and paralyses the will, the only recuperative power of the soul.

HYGIENE OF BOOTS.—Breaking in a young span of boots is ecstacy, or would be if fitting boot-makers could be found; but there's the pinch, though they do give you fits sometimes.

Getting tailored to suit me, the next thing was to get booted. I succeeded. It cost me nineteen dollars.

I'd willingly return the compliment for nothing.

At last my boots were finished, and I went into them right and left; at least, I tried so to do.

With every nerve flashing lightning, I pulled and tugged most thrillingly, but in vain.

"There's no putting my foot in it," says I.

"Give one more try," says he.

Although almost tried out, I generously gave one more. I placed the boot-maker's awl in one strap, and his last-hook in the other, and with "two roses" mantling my cheeks, postured for the contest.

I tried the heeling process, and earnestly endeavored to toe the mark; but to successfully start the thing on foot was a bootless effort.

Then I slumberously gravitated, and dreamed thus:

Old "Leather-brains" in Satan's livery, producing a hammer from a carpet-bag proceeded to shape my feet, and fill them with shoe-pegs.

My nap was ruffled, and not to be continued under those circumstances, so I wisely concluded it.

"They're on!" says the boot-maker.

And a tight on it was, excruciatingly so.

My feelings centered in those boots, tears filled my eyes, and I was dumb with emotion; but quickly reviving, I slaked the cordwainer with a flood of rabid eloquence.

The cowering wretch suggested they would stretch.

But they shrank.

However, "in verdure clad," I was persuaded into wearing them, and stiffly sidled off, a badgered biped, my head swinging round the circle, and my voice hanging on the verge of profanity all the way.

As fit boots they were a most successful failure. I gave them to the office-boy; but the crutches I afterward bought him cost me twenty-seven dollars. Yours calmly.—*Victor King, in Punchinello.*

FORCE IN POWDER.—Forty-three pounds of gunpowder exploded behind a three hundred-pound shot sends it thirteen hundred feet in one second. This force is exerted in the short space of the two-hundredth part of one second. It would take a steam-engine with the power of 6,880,681 horses to do the same work in the same time. One horse-power lifts thirty-three thousand pounds one foot in one minute.

WHY is a blind man like a water-pipe? He is generally *led* (lead).

Digitized by Google

Lord Bacon's Statements on Longevity.

BY E. RAY LANKESTER, B. A., OXFORD.

WE now present Lord Bacon's statements on the subject, which we have transcribed from a well-known translation of his works. Truth and error are strangely mixed in this interesting summary.

"Touching the length and shortness of life in living creatures, the information which may be had is but slender, observation is negligent, and tradition fabulous. In tame creatures their degenerate life corrupteth them, in wild creatures their exposing to all weathers often intercepteth them; neither do those things which may seem concomitants give any furtherance to this information (the greatness of their bodies, their time of bearing in the womb, the number of their young ones, the time of their growth, and the rest), in regard that these things are intermixed, and sometimes they concur, sometimes they sever.

1. Man's age (as far as can be gathered by any certain narration) doth exceed the age of all other living creatures, except it be of a few only, and the concomitants in him are very equally disposed, his stature and proportion large, his bearing in the womb nine months, his fruit commonly one at a birth, his puberty at the age of fourteen years, his time of growing till twenty.

2. The elephant, by undoubted relation, exceeds the ordinary race of man's life, but his bearing in the womb the space of ten years is fabulous; of two years, or at least above one, is certain. Now his bulk is great, his time of growing until the thirtieth year, his teeth exceeding hard, neither hath it been observed that his blood is the coldest of all creatures; his age hath sometimes reached to two hundred years.

3. Lions are accounted long livers, because many of them have been found toothless, a sign not so certain, for that may be caused by their strong breath.

4. The bear is a great sleeper, a dull beast, and given to ease, and yet not noted for long life; nay, he hath this sign of short life, that his bearing in the womb is but short, scarce full forty days.

5. The fox seems to be well disposed in many things for long life; he is well skinned, feeds on flesh, lives in dens, and yet he is noted not to have that property. Certainly he is a kind of dog, and that kind is but short lived.

6. The camel is a long liver, a lean creature, and sinewy; so that he doth ordinarily attain to fifty, and sometimes to a hundred years.

7. The horse lives but to a moderate age, scarce to forty years, his ordinary period is twenty years, but perhaps he is beholden for this shortness of life to man; for we have now no horses of the sun that live freely, and at pleasure, in good pastures; notwithstanding the horse grows till he be six years old, and is able for generation in his old age. The ass lives commonly to the horse's age, but the mule outlives them both.

8. The hart is famous amongst men for long life, yet not upon any relation that is undoubted. They tell of a certain hart that was found with a collar about its neck, and that collar hidden with fat. The long life of the hart is the less credible, because he comes to his perfection at the fifth year, and not long after his horns (which he sheds and renews yearly) grow more narrow at the root, and less branched.

9. The dog is but a short liver, he exceeds not the age of twenty years, and, for the most part, lives not to fourteen years; a creature of the hottest temper, and living in extremes, for he is commonly either in vehement motion, or sleeping; besides, the bitch bringeth forth many at a burden.

10. The ox likewise, for the greatness of his body and strength, is but a short liver, about some sixteen years, and the males live longer than the females; notwithstanding they bear usually but one at a burden; a creature dull, fleshy, and soon fatted, and living only upon herby substances, without grain.

11. The sheep seldom lives to ten years, though he be a creature of moderate size, and excellently clad; and, that which may seem a wonder, being a creature with so little a gall, yet he hath the most curled coat of any other, for the hair of no creature is so much curled as wool is. The ewes bear young as long as they live. The sheep is a diseased creature, and rarely lives to his full age.

12. The goat lives to the same age with the sheep, and is not much unlike in other things, though he be a creature more nimble, and of

Digitized by Google

somewhat a firmer flesh, and so should be longer lived.

13. The sow lives to fifteen years, sometimes to twenty; and though it be a creature of the moistest flesh, yet that seems to make nothing to length of life. Of the wild boar or sow, we have nothing certain.

14. The cat's age is betwixt six and ten years; a creature nimble and full of spirit. A creature ravenous in eating, rather swallowing down his meat whole than feeding.

15. Hares and coneys attain scarce to seven years, being both creatures generative, and with young ones of several conceptions in their bellies. In this they are unlike, that the coney lives under ground, and the hare above ground. And, again, that the hare is of a more duskish flesh.

16. Birds, for the size of their bodies, are much lesser than beasts; for an eagle or swan is but a small thing in comparison of an ox or horse, and so is an ostrich to an elephant.

17. Birds are excellently well clad, for feathers, for warmth and close sitting to the body, exceed wool and hairs.

18. Birds, though they hatch many young ones together, yet they bear them not all in their bodies at once, but lay their eggs by turns, whereby their fruit hath the more plentiful nourishment whilst it is in their bodies.

19. Birds chew little or nothing, but their meat is found whole in their crops, notwithstanding they will break the shells of fruit and pick out the kernels; they are thought to be of a very hot and strong construction.

20. The motion of birds in their flying is a mixed motion, consisting of a moving of the limbs, and of a kind of carriage, which is the most wholesome kind of exercise.

21. Aristotle noted well touching the generation of birds (but he transferred it ill to other living creatures), that the seed of the male confers less to generation than the female, but that it rather affords activity than matter; so that fruitful eggs and unfruitful eggs are hardly distinguished.

22. Birds (almost all of them) come to their full growth the first year, or a little after. It is true, that their feathers in some kinds, and their bills in others, show their years; but for the growth of their bodies it is not so.

23. The eagle is accounted a long liver, yet his years are not set down; and it is alleged, as a sign of his long life, that he casts his bill whereby he grows young again; from whence comes that old proverb, the old age of an eagle. Notwithstanding perchance the matter may be, thus, that the renewing of the eagle doth not cast his bill, but the casting of his bill is the renewing of the eagle; for, after that his bill is grown to a great crookedness, the eagle feeds with much difficulty.

24. Vultures are also affirmed to be long livers, insomuch that they extend their life well near to a hundred years. Kites likewise, and so all birds that feed upon flesh, and birds of prey, live long. As for hawks, because they lead a degenerate and servile life for the delight of men, the term of their natural life is not certainly known; notwithstanding amongst mewed hawks some have been found to have lived thirty years, and amongst wild hawks forty years.

25. The raven likewise, is reported to live long, sometimes to a hundred years. He feeds on carrion, and flies not often, but rather is a sedentary and melancholic bird, and hath very black flesh. But the crow, like unto him in most things (except in greatness and voice), lives not altogether so long, and yet is reckoned amongst the long livers.

26. The swan is certainly found to be a long liver, and exceeds not unfrequently a hundred years. He is a bird excellently plumed, a feeder upon fish, and is always carried, and that in running waters.

27. The goose also may pass amongst the long livers, though his food be commonly grass, and such kind of nourishment, especially the wild goose; whereupon this proverb grew amongst the Germans, *Magis senex quam anserni-valis*—older than a wild goose.

28. Storks must needs be long livers, if that be true which was anciently observed of them, that they never came to Thebes, because that city was often sacked. This, if it were so, then either they must have the knowledge of more ages than one, or else the old ones must tell their young the history. But there is nothing more frequent than fables.

29. For fables do so abound touching the phœnix, that the truth is utterly lost, if any such bird there be. As for that which was so much admired, that she was ever seen abroad with a great troop of birds about her, it is not such wonder; for the same is usually seen about an owl flying in the day-time, or a parrot let out of a cage.

30. The parrot hath been certainly known to have lived three-score years in England, how old soever he was before he was brought over; a bird eating almost all kind of meats, chewing his meat, and renewing his bill; likewise curst and mischievous, and of a black flesh.

Digitized by Google

31. The peacock lives twenty years, but he comes not forth with his argus eyes before he be three years old; a bird slow of pace, having whitish flew.

32. The dung-hill cock is venereous, martial, and but of a short life; a crank bird, having also white flesh.

33. The Indian cock, commonly called the turkey cock, lives not much longer than the dung-hill cock; an angry bird, and hath exceeding white flesh.

34. The ringdoves are of the longest sort of livers, insomuch that they attain sometimes to fifty years of age; an airy bird, and both builds and sits on high. But doves and turtles are but short lived, not exceeding eight years.

35. But pheasants and partridges may live to sixteen years. They are great breeders, but not so white of flesh as the ordinary pullen.

36. The blackbird is reported to be, amongst the lesser birds, one of the longest livers; an unhappy bird, and a good singer.

37. The sparrow is noted to be of a very short life. But the linnet, no bigger in body than the sparrow, hath been observed to have lived twenty years.

38. Of the ostrich we have nothing certain; those that were kept here have been so unfortunate, that no long life appeared by them. Of the bird ibis we find only that he liveth long, but his years are not recorded.

39. The age of fishes is more uncertain than that of terrestrial creatures, because living under the water they are the less observed; many of them breathe not, by which means their vital spirit is more closed in; and, therefore, though they receive some refrigeration by their gills, yet that refrigeration is not so continual as when it is by breathing.

40. They are free from the desiccation and depredation of the air ambient, because they live in the water, yet there is no doubt but the water, ambient, and piercing, and received into the pores of the body, doth more hurt to long life than the air doth.

41. It is affirmed, too, that their blood is not warm. Some of them are great devourers, even of their own kind. Their flesh is softer and more tender than that of terrestrial creatures; they grow exceedingly fat, insomuch that an incredible quantity of oil will be extracted out of one whale.

42. Dolphins are reported to live about thirty years; of which thing a trial was taken in some of them by cutting off their tails, they grow until ten years of age.

43. That which they report of some fishes is strange, that after a certain age their bodies will waste and grow very slender, only their head and tail retaining their former greatness.

44. There were found in Cæsar's fish-ponds lampreys to have lived three-score years; they were grown so familiar with long use, that Crassus, the orator, solemnly lamented one of them.

45. The pike, amongst fishes, living in fresh water, is found to last longest, sometimes to forty years; he is a ravener, of a flesh somewhat dry and firm.

46. But the carp, bream, tench, eel, and the like, are not held to live above ten years.

47. Salmons are quick of growth, short of life; so are trouts; but the perch is slow of growth, long of life.

48. Touching that monstrous bulk of the whale or ork, how long it is weiled by vital spirit, we have received nothing certain; neither yet touching the sea-calf, and sea-hog, and other innumerable fishes.

49. Crocodiles are reported to be exceeding long lived, and are famous for the times of their growth, for that they, amongst all other creatures, are thought to grow during their whole life. They are of those creatures that lay eggs, ravenous, cruel, and well fenced against the waters. Touching the other kinds of shell fish we find nothing certain how long they live."

I SHOULD say that Dryden is more apt to dilate our fancy than thought, as great poets have the gift of doing. But if he have not the potent alchemy that transmutes the lead of our commonplace associations into gold, as Shakespeare knows how to do so easily, yet his sense is always up to the sterling standard; and though he has not added so much as some have done to the stock of bullion which others afterwards coin and put in circulation, there are few who have minted so many phrases that are still a part of our daily currency.—*Lowell.*

LITTLE THINGS.—Dr. Franklin tells us that in his youth a little book fell into his hands entitled "Essays to Do Good," by Cotton Mather. "It was tattered and torn, and several leaves were missing, but the remainder gave me such a turn of thinking as to have an influence on my conduct through life; for I have always set a higher value on the character of the doer of good than on any other kind of reputation, and if I have been a useful citizen, the public owes all the advantages of it to that little book."

Digitized by Google

Boys, and What to Do with Them.

BY MRS. R. V. DARWIN.

OLIVE LOGAN has written of girls. I, too, love them. The wings of two angel ones hover over me as I write. God be praised that the only one who now lights my home is growing into an age of better development for woman! But let us not, in the growing thought for the girls, overlook the boys. He—your boy—may be a rosy baby now in your arms, and as you poise his little feet in your hand, you can not but think of the time when his plump limbs will have grown to athletic beauty and strength, and the sweet lips give forth utterances for the good of his fellows. How is this best to be accomplished? How is the friction of circumstance and influence to be so guaged as to form a noble character? It is worth a life-time of thought and research to have reared one noble man; to have him developed morally, mentally, socially, and physically, as God designed he should be when he gave him to you. You want to give your child a healthy body, that it may be a fit temple for the indwelling of a healthy soul. Then give him your first care, instead of yielding up those first precious years to hirelings, who, by ignorance, want of judgment, or worse, may plant the seeds of disease that life may not overcome. You may have been taught that fashion, friends, and society had many claims upon you, and that you must yield to them instead of the demands of your child. Make *them* subservient, and then both may be justly dealt by. In food and dress use nature and common sense as a guide. Use soft, light material, covering the body so that warmth and freedom may be secured. In food, learn what makes bone, muscle, and blood, and out of the abundance which God has given us, feed as nearly in its native simplicity as possible, and not so prepared as to be stimulants, which are irritants. Then with the proper use of pure air and water, the physical conditions are fulfilled. Now, the smile and look of love from your eye satisfy his social wants. Ere long his little playmates, with rattle and toy, are acceptable; and not far distant, the game and romp, when he is one among many. There he will learn self-reliance, with the opportunity of exercising benevolence or the reverse. Teach him *early* to yield his wishes to others, to think of others' pleasure and happiness before his own. Then comes the great question, the great study even, how to employ the time in which he is under your control, so that he may not only be happy in such employment, but that it may in the best manner conduce to his full growth and well-being. And for all this, let me throw in a plea for child-life, boy-life, with its exuberance, in the country; that he may grow in a garden of God's own planting, not in a hot-house, the city; where he may have no unnatural stimulants and excitements, no artificial props nor repressions. Curiosity is one of the strongest faculties of childhood. Mother Earth woos him with so many voices to gratify that faculty, giving the best amusement, and yielding instruction at the same time. Let utility and beauty grow side by side in his soul. No matter how young, let each attainment be made to subserve a useful end, giving him a double relish and incentive. The spiritual portion of his nature is not left unsupplied by the recognition of the subtle elements that work through all, as guided by an all-wise and loving Hand. On such a foundation, science, the arts, and poetry may build. When you have formed, not only a love for but *use* for these, you have built a bulwark against the temptations of the world.

What is it to be a man? The noblest work of God. Then how fearful to pervert that work, and make it evil. Mothers, when you have fulfilled the physical conditions of your child, and have made for him a home, in the best acceptation of that word, you have done much, and that which only a mother can do, but you can do more. As his physical, moral, and spiritual development goes on, keep very near to him, in each department of his nature; follow the various windings of the new seething life with judicious sympathy and care. Let him feel that to you, of all the world, his soul may be open, and you may then stand a guide to the bark freighted with so much treasure. It is said that every child is a child of sin. Surely each one is born with tendencies to evil, but may it not be also true, that if those tendencies are overgrown with influences for good they may die out for want of nourishment, and the roots being planted in the good soil of a loving home, surrounded by the sweet influences of nature, he may mature and bloom into a strong, vigorous, and noble life?

FIFTH AVENUE, New York.

Digitized by Google

To Any Desponding Genius.

BY ALICE CARY.

TAKE this for granted, once for all:
There is neither *chance* nor *fate*,
And to sit and wait for the sky to fall,
Is to wait as the foolish wait.

The laurel, longed for, you must *earn*—
It is not of the things men lend,
And though the lesson be hard to learn,
The sooner the better, my friend.

That another's head can have your crown
Is a judgment all untrue,
And to drag this man, or the other down,
Will not in the least raise you!

For, in spite of your demur, or mine,
The gods will still be the gods,
And the spark of genius will outshine
The touchwood, by all odds!

Be careful, careful work to do,
Though at cost of heart, or head—
The praises, even of the Review,
Will hardly stand in stead.

No light that through the ages shines
To worthless work belongs—
Men dig in thoughts as they dig in mines,
For the jewels of their songs.

A fresco painter in ceiling wrought,
With eyelids strained, 't is said,
Till he could but read of the fame so bought,
With the page above his head.

Hold not the world as in debt to you
When it credits you day by day,
For the light and air, for the rose and dew,
And for all that cheers your way.

And you, in turn, as an honest man,
Are bound, you will understand,
To give back either the best you can,
Or to die, and be out of hand.

Digitized by Google

Country and City Life.

BY REV. CHARLES H. BRIGHAM.

"GOD made the country and man made the town." The songs of poets, the homilies of preachers, the theories of economists, only amplify this ancient proverb. The praise of rural life is still earnest and ardent. From Hesiod to Wordsworth, from Virgil to Tennyson, from Horace Flaccus to Horace Greeley, the men who have written for drawing-rooms and palaces have insisted upon the superior charm of the fields and the woods, and a home apart from the haunts of men. "*Fortunatus et ille deos qui novit agrestes*"—"Happy indeed is he who knows the rustic gods"—this is the refrain of fashionable not less than of romantic sentiment. What gushing school-girl has not poured out her raptures upon the pleasures of the farm and the pasture, all the more perhaps that she has had no experience of them? Is not love's young dream oftener of "love in a cottage" than of love in a four-story brownstone front in the middle of a block in "Fortieth" or "Fiftieth" Street? Sentimental youths and maidens do not now sing that silly duet, "when a little farm we keep," which delighted the souls of the last generation in Boston drawing-rooms, but they cherish withal a hope that they may sometime "retire on their estate," own land, and become lords of the soil. Not the plaudits of the crowd, but the rippling streams shall satisfy the statesman, when his work is done. "Inglorious, he will love the rivers and the woods," as the bucolic bard has so sweetly suggested. In spite of depreciating epithets, of satirical comment upon the boorish manners, the awkwardness, the bashfulness, the greenness, the ungraceful raiment, expressed so concisely in that one word, "countryfied," rural life keeps its dignity as the most ancient, the most natural, the most dignified, and the purest of all conditions in human existence; better than life in the city or life on the sea, or life in the mine, or life in the army, or life of the nomad, or life of the vagabond.

Along with this praise of the purity, the simplicity, the peace, the joy of country life go objurgations upon life in the cities, those centres of profligacy, corruption, vanity, and crime, those "sores on the body politic." "Ah, wicked Paris," says one pious New York editor, in his book of travel, "I fear that you will laugh and be damned." "Don't come to the cities," is the advice that prudence and piety concur in urging upon the youth of the land. The moral dangers of cities are a steady theme for the country pulpit, and the physical dangers of cities are illustrated in the medical lecture-room by those who have ample knowledge of their theme. The competitions, the temptations, the syren deceits of the city are set in contrast with the tranquil ways of rural life. Young men are warned by sarcasm, by rhetoric, and by arithmetic, of the risk they are running in venturing in the lottery of city life, where the blanks are so many and the prizes are so few. Do not statistics prove that ninety-five merchants out of a hundred fail in business? Are not the salaries of clerks inadequate to meet their board bills? What virtue shall be secure in these multiplied fascinations, of the theatre, the saloon, the billiard-room, the club, the stock exchange, and the house of the harlot? The city is a dreadful place, even when it is grand and bewildering. How much wiser to stay in the village or on the farm, to keep away from the strife and the peril of these hateful crowds, and to earn a living by honest labor! Who would wish a nobler life or a sweeter epitaph than the elegy in the country church-yard, which tells the virtue and the honor of those who shunned the madding crowd of the great marts, and kept in the cool sequestered vales the noiseless tenor of their way? The Hebrew prophets were not more fervent in their rebuke, and lament, and warning of the wickedness of Tyre and Babylon, of Jerusalem and the cities of Egypt, than the American prophets of to-day about the wickedness of New York, and Chicago, and Washington, and even of Boston—the Athens of America, and the Jerusalem of the Puritan faith.

These contrasted pictures of the purity of rural life, and the danger of city life, seem to have small influence in hindering the constant movement from the country to the city. Cassandra could not prophesy more vainly than the preachers. The passion for city life is all the time gaining force, and the more its perils are demonstrated the more there are to tempt them. Not only do the sons of farmers forsake the farm and go to seek their fortune in the crowded streets, but the farmers themselves sell their farms, and go to the city to enjoy in the last years of life the hard gains of their long toil.

Digitized by Google

It is the dream of country girls that they shall live in the city when they are married; if they can not have the fortune of Cinderella, and a house on the avenue, they shall at least have a house in the suburb, where they can see the glory of the city, and feel that it belongs to them. Very few there are who go back to the farm, even after the experiment of urban life has failed; they will try this experiment again and again, before they will become slaves of the soil. We accept the poetry of pastoral life, the eclogues and the georgics, but the prose of city life wins in the contest. The real pride of the nation is not in its wheat-fields and its potato-fields, not in its barns and pastures, but in the marvellous growth of its great cities. "Come and see Chicago, the eighth wonder of the world," is the invitation which the West holds up to the wondering foreigner. Every year that sentiment which has ruined France, centering every thing in Paris, is gaining ground in this republican land; and we mark our prosperity more and more by the growth of our cities. The consolation for neglected fields in Vermont and New Hampshire is that more streets are opened on Manhattan Island, and that more blocks of brick and iron are built on these streets. Even the emigrants who come from the bogs of Ireland find the cities more convenient than the rich pastures, which wait for their spades. They stay in filthy tenement houses rather than go apart upon the fertile, but lonely prairie.

This lamentable tendency, nevertheless, has its excuse and its reason, like all tendencies. City life has advantages which can not be disputed, and which plead powerfully with a practical people. Gas for light, and water on all the floors of the house, are real conveniences. Shops close at hand, the butcher, the baker, the carpenter, the grocer, the tailor, and the haberdasher within easy call, add a great deal to the comfort of life. In a city, one can buy every thing on any day, and can gratify any wish. There is variety of choice; the newest things are there, the latest fashions. One has not to wait until the fashion has changed to learn what it really is. In the city you can get every thing that you want, and when you want it. And you can ride so cheaply—five miles for five cents, and in a good, roomy, comfortable horse-car, so safe, so easy to get into and out of, and with no trouble or responsibility of horse or carriage! In a city, too, you have so many neighbors, a dozen families within call from your window; no need to be lonesome there. You can even take your choice of churches, for the chances are that within comfortable walking distance, half a dozen sects and as many schools within the sects, will have each one or more tabernacles of their faith; you can hear High Church or Low Church, Orthodox or Liberal, Catholic or Infidel, just as you may prefer, from the mouths of their oracles. And then, too, how many spectacles there are in the city that the country never can show, spectacles in the streets, spectacles in halls, spectacles in the theatres, military processions, with long ranks of valiant warriors, Masonic processions, with their white aprons so clean, and their mystic emblems; Fenians and Trades Unions, and gorgeous funerals, so delightful in that long string of black coaches, and in the great nodding plumes of the hearse; and Booth and Wallack, and the Black Crook, and Admiral James Fisk, Jr., with his bevy of beauties, and his "Twelve Temptations!" Think of these delights, with all the other luxuries and amusements, the hand-organs, and the brass bands, and the philharmonic orchestra, and the picture stores, and the jewelry stores, and the fairy dry good stores, and the galleries, and the public libraries, and the grand celebrations! How shall the country ever offset by its attractions these luxuries and comforts, which are perennial, and real all the year round? Of what use to deny the superior convenience of a life in the city, where every want is so readily met, and even a surly rector may not hinder the burial of a sinner, while there is "a little church round the corner?" If you wish excitement, you can have it at any time by walking a square or two, and if you wish privacy, you can keep it by shutting your door. How pleasant, too, to know that there is always a policeman within call, that the schoolhouse is not far off, and that you have part in something that is really great, where things are done on a large scale! These advantages of city life are very palpable, and make their inevitable appeal. It is difficult for one who has enjoyed them for years to understand how others can live without them, or how they can be dispensed with. When we go into the country, to live on our estate, we must take a considerable part of these luxuries with us, else our dream of happiness will be rudely falsified.

Yet against this array of conveniences in city life, it is quite possible to bring an array of annoyances and dangers equally positive and unquestionable. Noise, noise, from morning till night, and in the night, too, is the inevitable plague of city life. The wheels will rattle upon the pavements, the trampers, and news-

Digitized by Google

boys, and milkmen will scream in the streets, there will be ringing of bells, and firing of guns, and the constant mingling of innumerable discords. The music of hand-organs will cease to be luxury, and become exasperation in its endless grindings. Dirt, in the form of mud or the form of dust, is another fatal contingent of city life, which all the skill of the sweepers can not remove. In half the cities of the land, where there are steamboats at the piers, or factories in the streets, smoke will load the air, and leave its grime on the staircase and the table. The narrow streets hinder light, and not a few will be compelled to sit in darkness even in the luxurious "surrounding." The convenient horse-cars, in which riding is so cheap, may be crowded, and become a snare in the help they give to pickpockets; and alas for him who trusts them when the snow has fallen heavily! The water-pipes, so "handy," may freeze, and leave the house forlorn, when their service is most important. That other houses are so near makes fire all the more dangerous; and who can tell what pestilence is in the chambers across the way, and what contagion may come in this close neighborhood? Have not the streets their dangers, in the tangle of carts, and carriages, and omnibuses, or the rush and fury of crowds and mobs? Who shall feel safe in the city when burglars are breaking locks, and trying windows, and hiding in closets? If the spectacles are abundant, are not the saloons more so, saloons for gambling, and drinking, and other iniquities? Are not the city doors besieged by beggars, and trampers, with their lying stories, and their ready fingers so quick to pilfer? Think of the artificial wants which this rivalry of city life creates, and the fearful expense which it requires. Think of the taxes, an ever-increasing burden! If there are such numerous churches within convenient distance, and such fine liberty of choice, consider the cost of any one of these, and what contributions they call for. Salvation in the cities in any form is an expensive luxury. Surely, with all these drawbacks, and how many more that might be mentioned, the conveniences of city life are fairly balanced, and it ought not to seem so attractive. The heartlessness, the frivolity, the dissipation, the risks, and the plagues of city life must be taken into the account, when we magnify its comforts, and think of its dignity. If the aggregate is so grand, the units are the more insignificant, and the details are repulsive.

But country life has also its tale of miseries, which match, as the practical men will say, the miseries of city life. It has the fatal ban of *dullness* to condemn it. The epithet "stupid" seems to describe it concisely and exactly. It is monotonous, has no variety, no excitement, no freshness. The scenes are the same all the time, and the days are all alike. One is likely to "rust out," who lives in the country, and "*rus*" and "rust" go together, by more than euphony. The city may be a "sink of iniquity," but then it is lively; and is not a lively hell better than a stupid heaven? So at least the young will reason, and not a few who are demure and pious, too. Country life, too, is lonely, and the penalty which is paid for broad landscape is the loss of human society. Trees, and cows, and sheep, excellent as they are, are not full substitutes for friendly men and women. Many of those who are condemned to the solitude of the farm-house, while husbands and sons are off at labor, envy the delight of those city dames whose friends can "run in at any moment." The cares of country life, too, seem petty, and there is no motive to exertion. What use in wearing handsome dresses, if no one comes to see and admire them? Then, too, the storms in the country, wind howling around the house, snow-drifts piled in the roads, the generous mud, the choking dust of dry weather, the insects, flies, beetles, and singing mosquitoes, which swarm in their season; let one who fancies country life try it in fly-time, or when the mercury is below zero, and the well and wood-pile are outside of the house. And what hard work to keep any thing in order; servants unwilling to stay, because there is no Catholic church within three miles, and they can not see company; farm hands with sharp appetites and cow-hide boots, bringing into the house an aroma that is not of Araby the blest! No schools, too, within walking distance, and those that there are, small, inferior, and poorly provided! Are not these trials of country life very real and vexatious? Is not the enthusiasm for this life only irony, when it is analyzed and tested?

And yet the lovers of rural life are not going to give up their cause to these grumblers, or allow that the man who goes back to the meadows of his childish sport, and on that spot so dear to memory, "slaps a mosquito and brushes a tear," is wrong in his tearful regret. The poets have reason when they sing of the joys of Arcadia in the songs of birds, and the music of brooks and winds. It is an unspeakable privilege which the country residents enjoy, to have plenty of light all day, and plenty of fresh air, to see the sun from his rising to the setting,

Digitized by Google

and to breathe inspirations of oxygen not adulterated with feculent gases and poisons; to smell the new-mown hay in summer, and the resinous pine in winter, as it softens the blast. Green lawns, and fields white to the harvest are more beautiful to the eye than the best pictures of landscape in the galleries of Schaus and Goupil. And fresh vegetables are good, too; and milk that is a pure secretion, and not mixed with chalk, or the juice of the hydrants. The singing of birds, which we can have in gratuitous concert on every morning for half the year, is worth more, on the whole, than the best performance of Beethoven or Rossini, which must be listened to at a dollar a ticket; and if we can hear the real nightingale we may not feel the loss so much if we fail to hear the "Swedish Nightingale." The quiet of the country may become oppressive, but after all, that quiet is better for the nerves, and the soul, than the perpetual rattling of wheels on the pavement. The blessings of country life are real, and we may accept the verdict of that shrewd Roman epicure, who was not at all flighty in his fancies, of the happy man who gets away from the exchange, to look out for his oxen on his land, like the earliest race of men: "*Beatus illa qui procul negotiis, ut prisca gens mortalium, Paterna rura bobus exercet suis, Solutus omni foenore.*" Health comes in the country, if wealth is more slowly gained there; and the freedom of "walking large" away from the limits of streets and walls and the eyes of policemen is very inspiring.

It is hard to decide, in this conflict of pleading, which condition of life is to be preferred. And it is more philosophical to accept the fact that both conditions are necessary, and that both belong to high civilization. There can be no civilization without cities, no high civilization without large cities. The Jerusalem of Solomon, and not the Salem of Melchisedek, marks the golden time of civilized Canaan; and Paris, with its *enceinte* of twenty miles, not Lutetia on an island in the Seine, symbolizes the wealth and culture of the nineteenth century. We must have both country and city life; and it would be well if every man and woman could have them both, if every family could have its city house and its country house, and divide the time between the work of man and the work of God. Only the fewest are blessed with such a double possession. Only the fewest can settle the dispute by choosing both kinds of life. And some who really seem to have the fortune of owning estates both in town and country destroy this by identifying the country house too much with the city house. What are called "cottages," sometimes are only palaces under a false name, city houses with rural surroundings, vain efforts to nullify the sentiment of the place. Sometimes, too, we have the grotesque specimen of a cottage on a city avenue, of gables and filagree crowning a one story tenement, and in front a shaven lawn of thirty feet square, with sculptured dogs and sheep to keep up the illusion. All such fantastic efforts to transmute the condition of city and country life are sure to fail, and mark only the "shoddy" taste of men who are anxious chiefly to be in the fashion. If men live in the country, let them live honestly in the country, and have their house and grounds in harmony with nature, no matter how much money they may have to spend. And if men live in the city, let them be just as honest there, and not try to make number four of a brick or freestone block look like a villa, to give the idea that the fortunate denizen of the thirty-feet lot has found his *rus in urbe*.

City life and country life ought not to be confounded, but they may be reconciled, and it is possible that those who live in the city may have something of the privilege of the country, and that those who live in the country may have something of the privilege of the city. The two ought to be made friendly, and to supplement each other. There is no real need that every man who lives in the country should be a "rustic," or as the old pun had it, a "rusti-cus," or that every man who lives in the city should be a "cockney." Refinement, grace, courtesy, respectability belong to life in one kind of life as much as in the other, though the fashion of garments may be different, and the work may be varied. A retired Congressman may keep his *otium cum dignitate* in mild labour in his potato-patch as much as in the slumber of an arm-chair in the Fifth Avenue. Both kinds of life allow the highest culture. Indeed, it is not easy to say whether more of the great scholars and writers have done their work in the city or in the country. Some of the finest descriptions of natural scenery have been written in the narrow lanes of London and Paris, while the most stirring riots of the mob have been told from the quiet of rural haunts, where the only murmur was of streams and breezes. The human brain can adapt itself to the most various conditions, and there are even those, like the villain Rulloff, who can work out the problems of science, in the darkness and bondage of the criminal's cell. There are saints alike in country and in city, and prophets, too. It is said sometimes, that the city pulpits have

Digitized by Google

to be supplied from the fresh life of the country, and that the preachers of righteousness to the wicked of the great social centres must be those who have been born amid purer influences. And yet it is a fact that many of the most noted preachers have been born and brought up in the city, and in speaking of its vices speak of what they have known and seen from the beginning of their days. That is true of half-a dozen of the most eminent ministers of Boston.

To bring this essay to a practical conclusion, let us answer, if we can, the two questions: "How may the Country come to the City?" and "How may the City go to the Country?" First, How may the Country come to the City? In the first place, by getting *all the sunlight* that you can get into the house, by allowing the windows to transmit their light without heavy draperies to absorb and dull it. If you can not have the landscape, at any rate have the light. Then, in the next place, by flowers around the house, and by plants and birds in the house, you can have something that suggests the country. A wretched little lawn is not worth much, but a climbing wisteria with its blue clusters, a bed of fragrant mignonette, the hues of verbenas and balsams, the delicate vine of the "morning-glory"—flowers that may be trained in the smallest door-yard or back yard, or on the window-sill, give something of the sentiment of the country even in the narrow city street. Caged birds, too, if they will sing, may remind one of the "feathered songsters of the grove." The cock's shrill clarion, indeed, is a nuisance which city proprieties can with difficulty bear, but no one will object to a linnet or a canary. The work of feeding these birds, and of caring for this little garden, is country work, as far as it goes.

In the third place, by frequent excursions outside the limits of brick and mortar, to the parks, if there are parks, such excursions as can be cheaply made, intercourse with nature can be kept up, and the city denizen can have the pleasure of country experiences without the pains. One day in a month spent in such excursions will give an idea of the country, at all seasons of the year. And the effect of these short excursions will be heightened by an annual summer journey, which every one who has means ought to take, and which is worth far more than the same cost expended on showy furniture, or even on real works of art. Of this, we shall have more to say in a future essay. And, in the fourth place, something of the quiet of the country may be realized by choosing a city house on a court, or a side street, away from the thoroughfares of traffic, or a street where the pavement is of wood or gravel. There are, even in New York, streets in which it is possible to sit by an open window without risk of deafness. These are ways in which the life of the country may have some show in the life of the city.

2. How may the City go into the Country? In many ways. First, in the *structure of the house*, not by building it of brown stone, or five stories high, but by fitting it with conveniences. A country house can have a bath-room, and even have gas, as well as a city house, and can be as compactly built. Then, in the next place, books bought for the library will supply some of the want of a public library, and newspapers can bring the reading-room. A country house that has plenty of books and papers can never be quite lonely, though there is no village within a mile. And these are a very good substitute for the "lectures," on which villagers spend so much time and money. To these, as a third resource, may be added instruments of music, pictures, and engravings. Art, of all kinds, is just as fit and as possible in a country house as in a city house. What is saved in rent and fashionable upholstery may be spent well in providing for the æsthetic sense. There is nothing incongruous in the piano in a log-cabin. If the rustic can not haunt the concert-rooms, let him make music for himself, as well as he can. And one who travels in the West knows that the best music is not by any means in Chicago or St. Louis, but that it is quite as good in the farm-houses. A fourth method of bringing the city to the country is to "have company," to invite guests to the house, and not only neighbors of the region, but city guests, too. A city house may be left to its solitude and darkness, but a country house ought never to be. It must have its rooms occupied, and voices to ring in its hall. And, finally, the city is brought to the country by living in the neighborhood of some railway-station, which makes access to the city easy and tempting. We have no space to enlarge upon these answers.

WHAT A PIECE OF WORK IS MAN! how noble in reason! how infinite in faculties! in form and moving, how express and admirable! in action, how like an angel! in apprehension, how like a god! the beauty of the world! the paragon of animals!—*Hamlet.*

Digitized by Google

On Not Doing What You Like; or, An Honest Day's Work.

BY F. B. PERKINS.

IT is not effort that is the curse—it is Drudgery.

Activity is life. Labor is a blessing. Neither a healthy body nor a healthy mind, will or can be idle. Indeed, there is great reason in favor of the doctrine that the mind is active all the time, whether we know it or not; which ought to be a great consolation to the stupid, since it implies that they have all the thought there is, if they could only get it out.

Yet there is no denying that Drudgery is a curse. Mere mindless toil is hateful; a dead-lift of duty, to be done without complaint where necessary, but very rightly to be avoided the very instant it is possible.

No human trait is clearer than this feeling; no effort of human wit more vast or more wonderful, than that to escape from this load. Do you not remember at the moment what element of practical life it is that expresses this effort?

It is Mechanical Invention; Labor-saving Machinery and Processes.

The intense intellectual activity of the Americans makes them hate Drudgery more than other nations, and renders them less able to endure it. Accordingly, it is an American characteristic to invent, *i. e.*, to substitute thought for Drudging.

This is the trait to which we owe the sewing-machine, the reaping-machine, the nail-machine—all the machines. And, it may be added, what on earth is the use of The New York Tribune flying in the face of the American man, by insisting that he should go out into the woods and live by his hands? America is a brain, not a fist. If any American lives by manual labor, he does so as the prisoner digs at his dungeon wall—to get out!

Whenever Invention shall have measurably filled its field, all that vast portion of human energy now yielded to Drudgery may be devoted to Intellect. Every new machine propels us toward a golden age. It requires no prophet to foresee that there is thus almost literally but a single step from mechanics to the millennium.

Yet at present, the world is filled full of drudgery. We can not fly; we must needs walk. We can not study and enjoy; we must be ready to pay our bills on the first. We can not follow he philosopher in his magnificent train of thought; for those pigs are squealing like fury, and the cows are in the corn. We can not master the deep loveliness of Mendelssohn's "Songs without Words;" for there are two shirts to mend, six pair stockings to darn, and a new seat to be put into this old pair of pantaloons.

Horrid!

No doubt. But isn't it funny, too? And what is of a great deal more importance, *it must be done*. Really, it might almost seem as if the world was organized on a plan for disregarding the finer feelings, disappointing us on system of just what we want, and forcing us to spend our whole lives in exactly the way we wouldn't choose.

There are several considerations to suggest here.

For instance; unrest and dissatisfaction belong to the very structure of some ill-regulated minds.

Again: It has long ago been observed that many people who do very well in their way, are incessantly haunted with a notion that they would much more greatly adorn a different station, and that their not doing so is somehow or other an injury and injustice. Comedians, for instance, have often labored under an uneasy notion that their real greatness was in tragedy. This was the case, I believe, with the late William E. Burton.

So that dissatisfaction alone is not reason enough for change, or for unhappiness. Christopher North, in one of his breezy jocular moods, intimated that he could always compass his objects, and he embodied his recipe in a ridiculous paradox. He jeered at those dull souls who begin by saying "First catch your trout." Our plan, he proceeds, is greatly superior. "We eat our trout whenever we want them, and catch them when we can."

Without stopping to unravel the extravaganza, I add a suggestion that will serve to lessen the disagreeableness of many a career of toil. Systematize your work. Lay its principles in a scientific order, and apply them by a corresponding frame of practical rules. In fact, this is very much like inventing a labor-saving machine; and at any rate, it is to a great extent true that a considerable degree of pleasure may be taken in doing any thing whatever that can be done on system.

Digitized by Google

There is a higher and deeper motive, to be unconditionally recommended to all those souls fine enough and strong enough to use it. Do your duty, because it is your duty. The old poet has said it in his quaintly-phrased and often-quoted stanza:

A servant with this clause
Makes drudgery divine.
Who sweeps a room as for thy laws,
Makes that, and the action, fine.

Enjoy if you can; be contented if you can't enjoy; and be resigned if you can't be contented. Or, in other words:

1. Do what you like.
2. If you can't do that, like what you do.
3. If you can't do that, make the best of it.

Last of all, I will add a rule that some can practise if not all, and which will be useful in more ways than one to those who can apply it:

Do your day's work clean up, and then make it your duty to enjoy yourself until bed-time. Don't chew your business over again. Fling it away. Empty your mind of it. Rest yourself. It is one of the chief recommendations of the Christian Sabbath, that the duty of cleansing the mind of secular things on that day becomes a healthful rest. Also, the pious teachers say, the true Christian's days are all Sabbaths—or should be. This is my idea: Make a daily Sabbath—a rest and relief—out of what remains when work is over. Don't be too anxious about improving your mind, unless you enjoy it. Healthful enjoyment improves the soul; and the soul is perhaps as important as the mind.

Dust and Disease.

I.

OF the wonderful things that lie round us concealed
How much have the true sons of science revealed?
Good Faraday long was the foremost of these,
And now Tyndall has told us of Dust and Disease.

II.

If a long beam of light crosses through a dark room,
It seems peopled with moats that shine bright in the gloom;
But the gay dancing things that the gazer thus sees
Are in fact nothing better than Dust and Disease.

III.

Around us, above us, on all sides they float;
They light on our skin, and they slide down our throat;
Though we don't feel or see them, yet go where we please,
The atmosphere 's laden with Dust and Disease.

IV.

All the varying ills to which flesh is an heir,
All the foes of both body and mind may be there,
Lusts and Fevers that burn, Fears and Agues that freeze,
May be mixed in these atoms of Dust and Disease.

V.

All places alike these intruders infest,
And 't is thought that St. Stephen's is none of the best;

Digitized by Google

Where Faction and Folly are busy as bees,
There will always be plenty of Dust and Disease.

VI.

In Westminster Hall, where the Lawyers convene,
These pestilent particles ever are seen;
Where wrangling and wrath can be hired with big fees,
You are sure of a market for Dust and Disease.

VII.

The Church should be free; but some heretics say
That the Vatican lately was in a bad way;
And some other Assemblies of learned D. D.'s
Are perhaps not exempted from Dust and Disease.

VIII.

The Dissenters are thought a peculiar people,
Much more pious than those that sit under a steeple;
But some one-sided views and intolerant pleas
Seem to savor a little of Dust and Disease.

IX.

But what of the Doctors? Are they without flaw?
Is Medicine more pure than Religion or Law?
I suspect that some, even with Doctor's degrees,
Love to kick up a Dust and shake hands with Disease.

X.

Diplomacy dresses her visage in smiles,
To conceal all the better her treacherous wiles;
But behind her false front a keen critic may seize
On strong proofs of her traffic with Dust and Disease.

XI.

Where Fashion and Luxury glitter like gold,
But where Beauty is bartered and Honor is sold,
Though the surface show little to shock or displease,
Yet beneath—all is Misery, Dust, and Disease.

XII.

Some attacks on the lungs, that of woe would be full,
Are repelled by a filter of loose cotton wool;
But a barrier of brass, or a *chevaux de frise*,
Won't exclude all descriptions of Dust and Disease.

XIII.

How long will these poison-germs stifle the day?
When will Truth's blessed light shed a purified ray?
When will Phœbus send heat, or Favonius a breeze,
To destroy or disperse all this Dust and Disease?

Digitized by Google

Personal Influence.

BY REV. HENRY WARD BEECHER.

AMONG the first discriminations which men learn to make, is the difference between matter and mind; and then the difference between the forces which each exerts, or which may be exerted upon either. A smith fashions the iron on the anvil. A mother fashions the child's heart and character. And very soon men distinguish the difference between one and the other process, as a physical process on the side of the forger of iron, and as the exertion of influence rather than of force on the part of the mother.

The distinction once drawn, men begin to make larger generalizations; and moral government rises up dimly in their thoughts; and moral influence begins to be a scientific truth to them. A part of this moral influence is called *personal influence*. That is, while the minds of men, as experience teaches us, may be influenced by physical events, by the whole phenomenology of nature, yet the most potent influence that ever can rest upon the mind is of another mind acting upon it. This is the highest influence of which we know any thing at present. There is nothing, for example, that has power on your thought like a thinker thinking *on* you, as it were, or thinking *to* you. Nothing so arouses the affection as a great heart near yours. Like a fire, it sends out its warmth to all that are near it, whether they want it or not. It is a separate, independent power. Nothing so excites in themselves fear, hope, courage, desire, sorrow, admiration, hatred, disgust, or appetency as personal being on personal being. Soul on soul; heart on heart; mind on mind—that is the great power.

This is true not only of single faculties, if we subdivide the mind into its constituent elements, but a powerful personal influence has also an unconscious and formative power on the whole character. It has a regulative force on the whole life. As in the presence of one that thinks you think; as in the presence of one that is mirthful you are mirthful; as in the presence of one that is sorrowful you are sorrowful; so these actions are not confined to certain special developments. There is a general influence exerted upon man by man, which often restrains, or generally stimulates, and so is regulative or educational. Personal influence may be direct, or it may be indirect; it may be conscious, or unperceived; it may be immediate and instant, or remote and gradual. It runs through all the categories of power. A sad nature sheds forth twilight. A merry and mirthful nature brings daylight. A suspicious, bitter nature insensibly imparts its chill to every generous soul. A bold and frank nature seems to carry its influence over all meanness. Firmness makes men firm. Fineness makes men fine. Taste directs, stimulates, and develops taste.

Personal influence may be over a single faculty, as I have said. Beethoven would doubtless have produced only a musical influence. Rabelais would have produced more the influence of mirth than of morals. Single faculties stimulate in men their like, or corresponding ones in others. But this power, or influence, of one mind upon another, is in the ratio the variety of faculties that are in combination and of the moral quality and intenseness of their action. More of being produces more effect. Intensity of being produces a correspondence of effect. Among men this intensity is rendered much greater by personal presence. Its duration and potency seem rather to depend upon instrumentality than personality. A great nature may influence you; but it is not probable that Raphael ever did influence men while he lived with his personal presence, as he has since with his pictures. It is not probable that Bacon's personal influence while he was alive was in any such ratio as his influence has been since his death. Moses was a natural legislator and leader; and yet his influence by his statutes and institutes has been far greater than the influence which he exerted when he was yet alive. Socrates had a certain influence; he stirred Athens as a spoon stirs a goblet; but Socrates would have lived almost none at all if he had not had his subsequent life through his Platonic writings. Though Christ was influential, his influence was circumscribed; but through laws, books, and institutions, his personal influence has been carried on through nearly two thousand years, and will go on to the end of the world augmenting.

So that, while you stand in the presence of a living being, and feel the throb of his heart, you feel his personal influence more intensely. But the personal influence of a man is more

Digitized by Google

durable and more efficacious when it is exerted through longer periods of time. There is less intensity at any single moment; but there is more continuity, and more breadth, and more variety.

Again, personal influence may act upon its subjects with their consciousness, or without their knowledge. We are perpetually indebted to men, without knowing it, for much of restraint, much of thought, and many inflections of feeling. Communities are often indebted to men all their life long, whom they oppose all their life long.

But this influence does not exhaust itself here. It is not an animal quality distinctively. It is least on that side of the mind which touches the animal condition. It grows in power in proportion as you develop those faculties which discriminate between men and animals. It is strongest in the higher range of human faculties. As men go away from animal conditions toward higher spiritual development, they grow in the power of personal influence.

Hence, as we ascend the scale of being we may reasonably presume that we shall see this trait and power growing larger, clearer, more intense, more potential, with wider spheres, with still more surprising harmonies, and with far more abundant fruits. Nor is it improbable that at length we shall reach a sphere of development and a condition where there is no external law, no compulsion; where influence shall dispossess power. All beings, if such a condition there is, shall then be held true; shall be stimulated to a noble and beautiful life; shall be filled with exquisite activity, simply by the soft, silent, sweet force of being acting unconsciously on being. For, as flowers blossom, and become fragrant, and are followed by fruit, not so much by the direct exercise of power as by the solicitation of invisible warmth and sweet influences, so there shall come a time when that which we attempt to compass now by coercive laws and penalties shall be educed and secured in a higher measure, in larger spheres, and more thoroughly, and better, by simple influence, rather than by coercive power.

Personal influence acts otherwise than through the body, which is a complex instrument. When you exert your personal influence by your tongue, what do you do but call in matter, and ask it to give some interpretation to the soul. What do you do when with outstretched arms of love you call your child to you, but ask your body as its instrument, to interpret to the soul in the language of human beings, that which is an invisible power in the soul itself? We can act through this complex instrument, the body; but there are a thousand other channels through which to exert our personal thought and feeling.

A letter is nothing but rags, with lampblack spread over it, if you resolve it to its original elements; and yet the letter, that bursts from the soul as an incarnation of its love and burning desire, going through the channels of the mail, and reaching, afar off, the soldier-boy in his camp, is more cheering to him in his sickness, and more curative to him in his wounds than all the care of the nurse, or all the medicine of the physician. A mother's word of memory and home-thoughts almost recreate life within the ribs of death under such circumstances. A letter is received from home. And what is it? A bit of paper, with ink-scrawls. Is that all? Did not the mother say, "This is I? Go for me, and speak my soul to that dear child, which I have given to my country and my God?" She did. And the message went. And was not that her personal influence? And did she not unclothe the soul, that it might touch, as it were mechanically, the other soul? Her eye, her lip, her hand, her body, as well as the letter, are various instruments by which her personal influence is exerted through symbolism.

All life, all growth, all phenomena in nature, old channels in society, may by some inspired genius be brought down and made to serve the purpose of thought and feeling.

And if such is the potency of man, if he can impress his influence upon men by these various forces of nature, of society, or of the heart, how much more can God! It is not needful that he should stand before you a living presence, nor that he should flash the glory of his substance or self on you. All nature is God's tongue. He speaks by summer and by winter. He can manifest himself by the wind, by the storm, by the calm. Whatever is sublime and potent; whatever is sweet and gentle; whatever is fear-inspiring; whatever is soothing; whatever is beautiful to the eye or repugnant to the taste—God may employ them all. And the heavens above, the procession of the seasons, as they month by month walk among the stars—these are various manifestations of God. The great all-inspiring Spirit is using, not his body, as the Pantheists teach, but his personal influence, exerted upon one and another.

Consider how even the greatest of men live, influencing but few, while thousands are not qualified to experience their influence. We

Digitized by Google

know that the influence is there, however, though men do not receive it. And God is perpetually pouring his soul through time and space, though but few know it. Not one man in a thousand understood Plato or Socrates. Not one man in a thousand ever understands a great nature, in his own age. We see this on the human plane, and how much more should we expect to see it in the divine sphere!

This personal influence, as developed in man, is in its lowest form, on account of the smallness of our nature, and its undeveloped and unregulated condition; but what an amazing power it must have when it is the being of God that exerts it! So small is man that it is not safe to let him burn on, and he stops to die that he may live again. Every twenty-four hours there are deaths and resurrections, as it were, by sleep, resting, and cleansing the old life, to bring in the new life of the next day. Easily exhausted are we, running through our periods with much friction and great difficulty, so that we must have a night with every day for recuperation. But there is no night to him that never slumbers nor sleeps—the Watchman of eternal ages. He is the same yesterday, to-day, and for ever. And what must be the Being across whose orb are no lines of latitude or longitude; in whose soul are none of those partitions that belong to weakness; to whom duration and strength are infinite; who is as young now as when, ten thousand years ago, chaos was spread before him; and who, myriads of ages to come, will be without a wrinkle or touch of time upon the beauty of his soul!

And when such a Nature, with its infinite resources, and wondrous power, pours itself abroad, what must be its personal influence! When you, mother, can do so much; when you, lover, can do so much; when the speaker can influence you so much by his words, and his presence, how much more can He do who made the ages of men, and who lent us all that we have, and call our own, and misses it not from his infinite fullness! What a power there is in heaven! what a power there is on earth! and what auspices and auguries there are of victory in days to come!

The Education of Our Daughters.—Second Article.

BY MRS. R. B. GLEASON, M. D.

THE question is often asked, "Is the college course which has been so long established for our sons the one best suited to meet the wants of our daughters?" In reply, we can only say that the plan for their education should be as liberal, and with as well-appointed facilities; whether it should always be precisely the same, is a matter of doubt. Indeed it is questionable whether a course of study which consumes so much time amid dead languages, is best for the majority of either men or women, when books in living tongues are so excellent and so abundant as now. Long ago, all learning was locked up in the Latin, then whoever would be educated must be able to read in that tongue, but now whatever is particularly important to be known in any language, is rendered into English. Latin was once the tongue of the three learned professions. All books pertaining to Theology, Law, and Medicine, were in this language. Sermons were preached, judicial documents drawn up, and medical prescriptions made, all in Latin. Francis the First was obliged to abolish it from the courts of justice, because the meaning of the words could no longer be determined, and hence gave rise to new lawsuits. Medical prescriptions are still given in the Latin all over the world, and this is, for some reasons, a general convenience, though now and then an unlucky doctor or druggist makes thereby a serious, sometimes a fatal blunder. Some knowledge of Latin is important for those having a profession in prospect, especially the medical, as the scientific terms are so largely derived therefrom. Farther than this, it is not worth while for any one except professional linguists to be digging in the graves of "deceased languages," when there is so much to be learned and enjoyed from those in common use.

When the present college course was planned, the researches in science were less extensive than now. Within the last fifty years, the microscope and the telescope have opened to us a world of wonders. The heavens above, the earth beneath, and the waters under the earth, are teeming with lessons which it would be de-

Digitized by Google

lightful to learn. We should be more happy to keep company with Cicero, Homer, and Virgil, who were worthies in their day, had not a Maria Mitchell, Agassiz, Hugh Miller, and Huxley come to lure us away, and lead to brighter worlds above, beneath, around.

No one can learn every thing; something, yes, many things, must be left out of every one's head. Surely the natural sciences can bring to most more help, more continued comfort, as years go by, than the words and ways of the old Greeks and Romans. So, too, to know Trigonometry, Conic Sections, Surveying, etc., would be of service to a few, pleasant to many, but as compared with Physiology, Geometry, and Chemistry, of comparatively little practical utility. The range of science and literature is continually increasing. Valuable researches are going on, "and of the making of books there is no end," hence the question comes to each one, How much shall we try to hold on to of the past? how much shall we keep pace with in the present? Diversity of tastes, of plans for the future, should make different scholars decide differently. Schools are meeting this question and hence have their literary course, their scientific course, their special course, etc. Amid the much that we need to know, the more that it is very pleasant to know, those who are studiously inclined are apt to undertake more than they can do and do well. Especially is this true of young ladies. They are ambitious, over-sensitive, and very quick to learn. If they have entered upon the college course they want to complete it. To fail of graduation would be in their minds to admit a mental inferiority to their brothers. But do they enter school as well developed physically, and have they the freedom there which is as favorable to health as that which the sons enjoy? By no means. They bring small waists, so that the very center and source of strength and life is curtailed; the organs of digestion and respiration being restricted, to which is also added weakness of the back and pelvis, so that all kinds of muscular exercise are irksome, many of them impossible to endure. When the habits of growing girls are as favorable to health as those of the boys, it will be time enough to begin to measure strength of mind and muscle with them, though then, not to our taste to do so. There is a diversity of gifts, diversity of duties, and a diversity of organization—things which can not be weighed or measured. But to the point. Our girls enter college enfeebled by social customs, and then try to accomplish twice or thrice as much, for a "rough guess," as our boys.

MUSIC.

Music has come to be considered by most an indispensable part of a young lady's education, and hence is added to the regular course. The piano consumes more time, year after year, than any other department. Piano practice exhausts nerve-power more rapidly than any other pursuit. The eye, the ear, the touch, the emotion, together with the position, tax the brain and spinal cord. Teachers can scarce be expected to appreciate what hard work it is for most of their pupils to learn music. Proficients in the art, possess by nature more than ordinary musical ability, and acquire with ease, what comes by a slow and tedious process, to those less endowed. The fact that so few keep in practice after they cease taking lessons, shows that as soon as they can find any thing else to do, and are not spurred on to it by the inevitable lessons, it has the "go by." Probably more time is wasted at the piano than in any other way, for we have very few even tolerable operators for the time spent at the instrument.

Many persons are so enfeebled when well learned that they can not keep in practice. Others, from want of taste, or want of time, turn away from the instrument where they have been accustomed to sit hours every day for many years. I have seen many incurable invalids among those who have practised several hours a day, in addition to other studies; numbness of fingers, paralysis of one arm, chronic chorea, or St. Vitus' Dance, sight impaired, auditory nerve super-sensitive, so that the sound of the piano was painful—these and many other nervous affections, the result of much musical and mental effort combined.

DRAWING, ETC.

Our girls usually take one or more art studies in connection with their college course, and so drawing, painting, and vocal music, come in with their claims. These consume much time and strength. Beside these, young ladies usually give more attention to the religious, the esthetic, and the social culture, than young men. All these are good, all helpful if the life-force has not been so much exhausted that it can not grow by the best of aids. For instance, religious exercises come often to be a mere form even to the devout student, who is too weary in back and brain to either think or feel, and the choicest of Scripture readings, and the most eloquent of prayers, fall on ears that have listened till they can not listen any longer. But those of us who feel that the spiritual culture is *the* most important part, fear to say that our

Digitized by Google

schools have too many religious exercises. But certain it is that they have *too much* of something.

DRESS.

Dress is a perplexing question, often discussed, and always brought to the "conclusion where nothing is concluded." We all want our daughters to give such attention to personal appearance as will make them acceptable. *We* think it is foolishly decided that, to attain this, they must be fashionably attired. The present style brings a multitude of changes—of things to be seen to. Were we to enumerate them it would take more pages than this journal could spare. Those who have heard Gough enumerate the articles which comprise a lady's wardrobe, till he was red in the face, breathless, and his audience convulsed with laughter, can have a faint conception of their number and variety. Now if all these things are "made to hand," the selecting, folding, arranging, and the keeping in order, not only of the person, but the boxes, drawers, and closets, take much time and thought. To be sure, it is said "our girls can't study all the time, and their dressing is a diversion." True, but much *less* invigorating than out-door amusements, such as college boys enjoy. The latter wear not only the same suit through the day, but often for successive weeks, only needing a brush for broadcloth, and one for boots, to be ready for any occasion. Our daughters must dress in the morning, dress for the gymnasium, and dress for tea. Now these three dressings must take from fifteen minutes to three-fourths of an hour each, according to her executive ability, and the elaborate character of the attire, and then scarce allow time for the suit and its belongings in the way of pins, cuffs, collars, ribbons, sashes, etc., to be properly laid away. Much of this must be done in a hurry, in order to be ready for the bell, and while it is good to quicken the circulation by occasional haste, by a good run, it is hard to hurry always. To be always "keyed up" so to speak, wears the nervous system. If girls must live to dress, why then they must, but they can not do this and have good health and good scholarship. But those who long for what is called a liberal education, should be encouraged to great simplicity of attire.

The student has from old time, had his gown for ease and freedom. Surely our scholastic girls should be allowed one equally simple and comfortable. Their present gymnasium suit, now extensively used, would answer the purpose well, and then, instead of three suits, and three periods of dressing, there need be but one for days of study. They would be much more ready to take gymnastics if they were spared the trouble of extra dressing. *Now* if there is any way that they can get excused from them, they do. In every school that I have visited, many young ladies have said to me, "If we could be allowed to wear our gymnasium dresses for the evening it would be a real rest to us, so much more comfortable to study in when we are tired; but as we have to hurry into them, and then hurry out, to get ready for dinner or tea, we do not enjoy it, for it is hurry all the time." Besides this, their out-door exercise would be taken with much more enthusiasm in the short suit, though as far as length is concerned, our present street suits are very comfortable, but are, with over-skirts, when much trimmed, heavier than the gymnasium dress, and do not allow the freedom of chest which is so important to make exercise of avail. Lungs, liver, and stomach, packed away closely in corsets and tight dresses, do not get half the advantage of a walk. I know that many excellent, earnest persons, fear that our young ladies wearing the short dress, would lack the refinement of women and grow boisterous and hoidenish. I know at first it gives a sense of freedom to the limbs which prompts to fun and frisking, but when one becomes accustomed to it there is only a feeling of ease, elasticity, and comfort, and no lack of modesty of manner. I have seen many ladies of culture wear the dress for months, for purposes of health or business, and lack no refinement of bearing. And when for the hour or the day, or on their return to their usual social position, they took to their former attire, they were at ease, just as much so as if they had worn it continually. In the same manner our school girls could wear the gymnasium suit for their days of study, and on Saturday, Sunday, recreation days, and evenings of literary and social pleasures, resume the ordinary dress. This need not be an arbitrary rule, simply allowed, even encouraged, and we should soon see that the best scholars would take to wrappers, or gymnasium suits, on the days for regular lessons, and on social occasions they would be not a whit behind the rest, as to good manners, or good taste in dress. They might not be as extreme in style, but real refinement comes from within. "A maid will not forget her ornaments" on ornamental occasions. Ladies do not want to be out of style, neither would we have them forget the outward adorning. We would only free them from bondage and burdens, and make their school-days the most favorable for the most healthful culture of mind and body.

Digitized by Google

The Physique of Kaffirs, and their Habits of Life.*

OVER the south of Africa is spread a race of men famous the world over as being the best representatives of savage or uncivilized life of any found on the globe. The chief tribe of Kaffirs is called the Zulu tribe. They are dark-skinned, but not jet black like negroes, for the red blood as it courses through their bodies tinges slightly their complexion so that it is considered beautiful not only by themselves, but by Europeans who have lived among them. They are very fastidious as to the color of their skin, regarding the reddish tinge with as much pride as the white girl does the beautiful blush on her cheek, and in order to enhance its beauty they grease themselves from head to foot so as to shine very much like the patent leather of which we sometimes make our shoes.

The hair of the Kaffir is always short in both male and female, and crisp and woolly like that of the negro. Their lips are thick and their nostrils wide, yet very few would be mistaken for negroes. They have large foreheads and are very intellectual, and exceedingly fond of debate and argument. They take, no thought for the morrow. They are not revengeful in character; are hospitable, social, and fond of joking.

The Kaffir mother is kind and indulgent to her children, but twins are never desired, and when they appear, one is always sacrificed. The excuse for this is that, otherwise, something unlucky would happen to the family. Sons and daughters are treated pretty much alike. The sons are respected because they are to become warriors, and the daughters are prized because they can be sold for wives, thus becoming a source of wealth. A girl is worth from eight coins, and if very handsome twice that number. The Kaffir is free from all anxiety as to what will become of his children when grown. They have no artificial wants to work for, nor is the battle of life so sharp that there is a contest between men and men for the best places. Infanticide is unknown. There is no respect for the aged. Gray hairs are dreaded, and looked upon as a sure sign of debility.

When the young men and maidens are in the bloom of youth they afford physically as splendid specimens of humanity as can be found anywhere. Their limbs have never been distorted by clothing, nor their forms by lacing. Each muscle and sinew has had fair play, the lungs have breathed fresh air, and active habits have given to the form a rounded perfection rarely seen elsewhere. Those who admire the human form as seen in ancient sculpture, may, among the Kaffirs, see similar forms breathing the breath of life, living statues in bronze. The only defect in their bodies is that they are a little too square-shouldered, but instances are frequently found where the slope of the neck to the arms is exactly in accordance with the rules of classic art.

The young men are very swift on foot, and possess enormous endurance. Travelers often employ them as letter-carriers, and they will take a gait half between the run and a trot and hold it to a distance of fifty, sixty, or seventy miles, almost without cessation. They perform the journey with wonderful celerity and think a couple of shillings quite sufficient pay for it. They go barefooted, yet the soles of their feet are so tough that they are rarely hurt. Among these people the foot assumes its natural proportions. The toes are never pinched by boots or shoes, and corns are unknown. Indeed diseased feet are something that Kaffirs are as unused to as they are to clothing. The foot is wide and full across the toes and the gait perfection itself.

The constant activity of the Kaffir, together with their temperate mode of life, keeps them in perfect health. They are free from most of the minor ailments that afflict civilized people and mar so much their happiness. They survive injuries that would be almost instantly fatal to Europeans. The whites who adapt their mode of life with them become quite as enduring as the Kaffirs.

The young Kaffir women are as remarkable for the beauty of their forms as the young men, and their trifling dress allows it to be shown to the best advantage. Some of the young Kaffir girls are in form so perfect, that they would have satisfied the fastidious taste of the classical sculptor. Unfortunately, this singular beauty of form is very transient, and when they have attained the age at which a white girl is in full

* The Uncivilized Races, by J. G. Wood, M. A., F. R. S. London: Rutledge & Son.

Digitized by Google

perfection of health, the Kaffir girl has lost her grace, and her beautiful form has become flabby and shapeless. A girl at twenty looks old enough to be forty. The chief drawback of their beauty lies in the fact that their faces are never handsome, for the cheek bones are too high and their noses too broad, as well as the lips too thick. The old have few or no charms as in civilized life, for they have no moral, intellectual, and spiritual beauty to take the place of lost beauty of form and grace of motion. One writer has spoken of the Kaffir women, and said, "The young girl is a sylph, and the old woman a hag."

In consequence of the different habits of life, the men and women seem hardly to belong to the same race. As a rule, the men are fine looking—fit models for the sculptor. They are tall, commanding, elastic, muscular and noble, hardly inferior to Europeans, often quite their superiors. The women on the other hand are stunted, bowed, by reason of the heavy weights they bear, and rapidly lose the symmetry of form they are noted for in their youth. They are awkward, unsightly, homely, and, nearer than any thing else, resemble, says one observer, an old, decrepid, dried, withered monkey. There may be exceptions to this rule. A rich chief may take pride in freeing his wife and daughters from the Kaffir's lot of toil and drudgery, not so much from parental love or kindness, as from motives of self-interest. The greater price which a girl who is strong and athletic brings over one who is bowed, is the motive which actuates them in relieving any members of the family from toil.

The Kaffir is very fond of dancing, and as the climate is hot and they exercise most violently, perspiration becomes abundant, and the odor is very offensive to a delicate nostril. They wear no clothing but an apron and ornaments, and when the perspiration becomes intolerable, they scrape it off with an instrument resembling a strigil. During the dance they make all the noise they can, both by the rattle of their beads and by their voices.

The diet of a Kaffir is principally milk mixed with meal. He can rarely afford meat, yet when he kills a cow, he gluts himself on it to his heart's content for the time, and then eats no more perhaps for years. They never eat new milk, but curdle it, drawing off the whey and preparing the balance so as to resemble cream in its consistency. To them this is the staff of life.

Horses have been introduced by the English, and the Kaffir has proved himself to be a superb rider. Where horses have not been introduced, they ride the ox, guiding him by means of a stick in his nose.

It is an interesting sight to see the Kaffir at his meals. Being very social they eat in groups, as Americans do, but having no tables they squat around a fire in a circle, or in several circles should there be many of them, all facing inward. Then the pot of meal is put over the fire to boil, and while it is cooking they indulge in song in the most uproarious manner, gesticulating vigorously and bringing their elbows to their sides for the sake of emphasis. When the porridge is ready, the chief man present takes a spoon and helps himself to a spoonful of the food and then passes the same spoon to the next one, and so on till each has had his or her spoonful, when the process is repeated.

The Kaffir has a great repugnance to sick people, and is very loth to touch the bodies of the dead, and sometimes they will throw the sick into the river and let them perish, in order to save themselves from touching the body after dead. Why, say they, should it make any difference whether the sick who must die live an hour or a day more or less. The old and infirm are often abandoned in the woods to perish, with fire and food enough to last for a day or two. They do not complain of this, but accept it as their lot, and as the practice of their people; and when these abandoned ones have been found by missionaries, who have offered to rescue them, they stoutly refuse, declaring that they had rather die than be saved only to go through the same ordeal again.

Human life among the Kaffirs is not very highly valued. At the funeral of the mother of Tchaka, a despotic ruler, every male present was ordered to be put to death, and it was estimated by Mr. Flynn, who was present, that over 7,000 were slaughtered. Not satisfied with this, Tchaka ordered that every one who did not attend the funeral should also be killed, and that the earth should not be cultivated for a year, and then, to cap the climax, ordered that if any child should be born, both it and its parents should die. Often, old and worn-out people are killed, to get them out of the way.

When we contemplate such horrors, we do not wonder that the Good Spirit who reigns over the mysteries of earth and seas allows savage nations to be blotted out before the progress of civilization. If a nation or a tribe can not conform to the genius of humanity and adopt the best modes of living and acting, nature seems to say, Let it be blotted from the face of the earth, not perhaps immediately, but in process of time —to make way for better people.

Digitized by Google

That Great Cure-all, Righteousness.

BY S. S., OR SIMPLE SIMON.

DEAR EDITOR OF THE HERALD OF HEALTH:

I DEEPLY sympathize with you in your efforts to improve the physical condition of our people, by teaching us how to cure disease, and, most of all, how to prevent it. We are truly in a deplorable condition; from the sole of the foot to the crown of the head men are sick: corns on the toes, baldness on the head, sickness at both ends, and more or less all the way between; but what shall we do about it? I have been now for more than three years on the watch for some grand remedy or prevention, that I wished to have given to the world in your columns. And I purpose briefly and sorrowfully to tell you the result of my investigations.

I first turned to systems of medicine; had great confidence in Allopathy: this was the treatment under which men were to be cured and their health preserved—good solid doses that should fix things.

A case came under my observation. A young person was in a terrible state of debility—great pain in stomach, gnawing, biting, burning like fire, etc. "A clear case of cancer in the stomach," so the doctor said; so we all believed. Not much to be done for the patient; she became insane; was given up; left pretty much alone except a little nursing, and—got well; has gone to work; has a good appetite—stomach remarkably easy for a three-year old cancer.

Next turned to Homeopathy. I was well acquainted with a young man who came home from the Army sick, and so remained. The doctor said it was nothing but liver complaint; would be up again shortly, so he said to the last. Perhaps he will, but it will be only because the resurrection takes place sooner than is generally expected in these parts; for we buried poor Harvey, a victim, so it seemed to my unpracticed eyes from the first, of consumption.

So I turned from this *pathy* and continued my search.

Now I have found it! An old man more than ninety years old walks up and down our streets with a firm step. He is straight as an arrow, although over six feet high, and stronger, apparently, than most men at fifty. I inquired his habit of life, and learned it to be this: He sleeps on a wicker bed, and goes out every morning in winter, sometimes with the thermometer twenty degrees below zero, with nothing on but pants and shirt, barefooted and bare-headed, to a snow-bank some rod or more from the house and washes his head and neck in the snow, and then slowly walks back again. This must be the kind of treatment necessary to secure health and longevity; but before I gave it my unqualified assent, got another and much younger man to try it. And, alas! he was laid up with colds and chilblains all the rest of the winter.

I gave up my hopes in this direction with reluctance; there was something grand and heroic in the thought of living to be ninety years old, and nobody knows how much longer, conquering the hardest frosts without the aid of shoes or stockings, and being nobly indifferent to feather beds and mattresses, but I became convinced that this treatment was not the grand cure all—it wouldn't answer for delicate females; besides, mornings, with the mercury twenty degrees below zero are not always to be had even in this climate.

Next, I turned to bathing and dieting, reluctantly, it must be confessed; for if there is any thing that I enjoy, it is beefsteak. A case under my own observation again discouraged me here. Boarded in a family with a young man of good habits, regular as a clock. He was a Scotchman, and out of respect for his native land, I suppose, confined himself to oat-meal, with now and then a few other vegetable products by way of variety; when he was sick he soaked in order to get well; and when well he did the same, in order to be better. Somehow, in spite of all his washing and dieting, he became sick; broke out all over with boils; a cough set in, and he is now in his grave.

Since then I have seen a man rubbed by a magnetic "*manipulator*" until he was raw, and another one drenched with the syrups of a clairvoyant without a particle of benefit, and my investigations and my hopes are exhausted together.

What shall we do, Doctor? Must we learn a little about ourselves, exercise a little common sense, learn what is good for us, and not trust too much to any system? And, after all, wait for our perfect deliverance from sickness and pain; for the coming of the new heavens and the new earth, wherein dwelleth that grand cure-all, Righteousness? I begin to think so.

Digitized by Google

THEORIES PUT IN PRACTICE;
Or, Extracts from the Diary of a Physician's Wife.

EDITED BY MRS. H. C. BIRDSALL.

FRIDAY, *September* 22.

MRS. NORTHRUP and her sister, Miss Nellie Bowers, called yesterday afternoon, and from the time they came until they left they were constantly talking of their servants. Mrs. Northrup is a very intelligent-looking woman, and I think is really so; and she has probably fallen into this habit quite unconsciously to herself. I have met her at a number of places, and her favorite topic of conversation is always the faults of her servants, and the trials of their mistresses. The servant question is a very vexatious one, but I believe people make too much of it. And mistresses do so many things, unwittingly, to spoil their "help." One thing in particular, that operates very largely in rendering servants inefficient, is a kind of fear that their mistresses entertain of them.

A lady, already having had some trouble with servants, succeeds in finding one who pleases her. Her greatest dread is that this one may leave her, and she therefore begins to make compromises, easing her work here, giving her an extra privilege there, until the girl, at length, if she is ordinarily bright, learns that she can have the domestic affairs pretty much as she likes.

Saturday, September 23.—Henry has brought me to-day a sewing-machine, as a birth-day gift. It is of the Wilcox & Gibb's make. Aunt Minerva looks upon the advent of the machine with disapproval, for it adds to her conviction that I shall soon have nothing to do, and she thinks me idle enough already, in that I do not spend all my time in the stereotyped, old-fashioned woman's labor. Henry and I are going to drive over to father's soon, and shall return late to-night.

Sunday Afternoon, 24th.—Aunt Minerva, having become accustomed to the routine of her church here in Lightwood, we see very little of her on Sunday. She attends a prayer-meeting at 8½ A. M., Sunday-school at 9½ o'clock—(how I pity her class of young girls) then to the morning service; stays during the intermission to a Bible-class; attends an afternoon service at 1½, and an evening one at 7½ o'clock. The time that she spends at home is passed in the most gloomy and severe manner, glancing at us if we venture a smile or playful allusion, as if we had broken the whole table of Commandments.

How pitiful it is that the followers of the same loving, charitable Master should be kept so far apart by prejudice, education, natural temperament, etc.! I hope the time may come when Aunt Minerva will understand us better. Surely, we need not complain at being misunderstood, when so many better people than we have been maligned.

Good Dr. Hutton, a man of great spirituality, had at one time living in his family a distant relative, of the Methodist persuasion. During the last illness of this lady, a prominent female member of the Methodist Church came in to pray with her departing sister. In the course of her prayer she waxed louder and louder, until the attention of the whole household was attracted. Gathering in the upper hall, Dr. Hutton and his family heard themselves prayed for in the most earnest manner, as being still in the bondage of sin. Repeatedly was the petition made that Dr. Hutton might be converted. Another instance, of rather an amusing nature to outsiders, occurred last winter in this village. One evening the Baptist minister came into a Methodist revival meeting, and had hardly comfortably seated himself, when he was astonished by a prayer from his Methodist brother in the ministry for his speedy conversion. The Baptist brother did not lose his opportunity, but gave the gathered assembly an earnest and spicy exhortation upon the duty and advantages of charity.

No body of Christians can claim to be free from this fault; they all have their bigots, and it will always be so until individual Christians obtain a clearer idea of Christ's beautiful and tender liberality.

Monday, 25th.—At father's, on my birth-day, I received a number of useful presents, of the labor-saving class. The buggy was quite full of them when we came home..

Yesterday, at church, we heard of young Mr. Osborn's discharge from the bank, on account of his persistence in his bad habits. What a pitiable prospect for his wife! They had no means of support but his salary, and they have two children, mere babies. Henry spent part

Digitized by Google

of yesterday afternoon with him, trying to induce him to take a firm stand against his evil habits, and Dr. Hutton was also with him. Aunt Minerva did not let the occasion slip, but discoursed to me severely upon the sin of Sunday visiting.

Friday, 29th.—Madge must have spent her time since she came to us in finding new and inconvenient places for the culinary articles. She is certainly very ingenious and successful, and I think is constantly improving in the art of disarranging things. She often reminds me of my delight, when at school, at reaching the rule of permutation in my old Greenleaf's arithmetic, and finding that a small number of things would undergo so many changes of position. My only regret was that Mr. Greenleaf had not made more of the fascinating example.

Madge's skill in the practice of the rule of permutation suggests the thought that she has been deceiving us as to her want of education, and that she is a ready und accomplished mathematician. When I go into the kitchen to cook, I find the necessary articles so displaced that I have to spend some time in looking for them. There is no use in sending Madge for them, as I can find them sooner than she. While going through the search I often think of an example like the following, and how interesting it would have been to me in my school-days. In the pantry, opening out of the kitchen, are twenty-three nails. Upon these nails are hung two sauce-pans, three iron spoons, one potato-masher, one egg-beater, one toasting-fork, one cake-turner, one bunch of muffin-rings, four tin dippers and measures, two skimmers, one steamer, colander, one strainer, and four baking-pans. If a person should remove them without noticing their order, what would be the possibility of her replacing them in the same position they were in at first?

If Madge would only stop at this series of changes, I might become accustomed to it, but once a week she has a zealous "clarin' up," when she sometimes removes a portion of the articles to remote corners of upper shelves, and even sometimes to a small milk-room, which was used by the family who lived here before us. When I discover this kind of change I immediately insist upon the return of the traveled tins to their row of nails, and this of course necessitates another change.

Saturday, September 30.—There are two ladies among Henry's patients, who have young babies, only a few weeks old, and I have been so interested in their different management. Mrs. Ellis is in a continual state of tribulation about her's; it is a great, fine, healthy child, but if it only sneezes she is alarmed, and consults her different female friends. She keeps it in one room, carefully shielded from even a breath of air, wrapped up like a mummy, and surrounded with cups, bottles, night-lamps, etc. Catnip tea, soothing-syrups, and about every thing she has ever heard of, have already found their way down the poor child's throat. She used to be very particular about her personal appearance, but now she entirely neglects this, and may be found at any time in a wrapper, with disordered hair, and with as anxious and careworn an air as the President of the United States would be justified in wearing. I ran in yesterday, and found her in a great state of excitement, because the baby had the *snuffles!* She wanted to know if I ever heard of a baby dying of this disease; and after her mind was a little relieved she asked further advice. I felt very delicate about giving her the advice upon my tongue's end, but she had given me the opportunity, and I improved it by saying: "Mrs. Ellis, I hope you will not think me presuming in what I say; you might easily do so, because I am young, and not having any children of my own, might be supposed not to know any thing about them. But I have had some experience in taking care of my sister's children, and I know that you are making yourself a great deal of unnecessary trouble, and denying yourself much enjoyment which you might just as well have." And then I went into particulars, advising her to take the baby about the house, to spend her evenings down stairs with her husband, etc., all of which advice she received so pleasantly that I am sure I have given no offense, and may have done some good.

Mrs. Mason is a perfect contrast to Mrs. Ellis. She is a little, young creature; has seen very little of children, being an only daughter, but she has so much healthy, practical common sense in her composition that she, so far, makes an excellent nurse and mother. She is so small and youthful in her appearance that, seeing her with her baby, one involuntarily thinks of a little girl playing with her doll; but her play is of a most orderly and systematic character. She is thoroughly warm-hearted and motherly, but she knows that it is not essential to make herself a slave to her child. She seems to have hit the happy medium between excessive devotion and carelessness.

Monday, October 2.—Henry read to me to-day

Digitized by Google

an item from a reliable newspaper, which, if true, may account for Dr. Sike's possession of a diploma. We could not understand his having one, for his practice among the people shows his entire ignorance of what to do for the sick. This paragraph made the statement that there was one place in our country at which medical diplomas could be bought, and no questions asked as to the qualifications of the buyer, just as in England sermons are made an article of merchandise.

Wednesday, the 4th.—To-day I received the first instalment of money from Aunt Betsey's estate. The first thought is how to dispose of it. There is no difficulty in finding objects to bestow money upon, but it is difficult to make the right choice among them. Another question arises: Is it better to use one's money in *personal* charity, or to give it to organized associations for doing good? It seems to me there are strong arguments in favor of each side of the question, and my plan will be to give in both ways.

Thursday, October 5.—Mrs. Fidder, of Burtonville, surprised us to-day with a visit, none the less welcome because unexpected. She is a constantly amusing person, but so good that nobody ever has an unkind word to say of her. Mr. Fidder is as amusing as his wife; their very faces are mirth-provoking. They brought us some butter and fresh eggs from their farm. Mrs. Fidder came to the door loaded, exclaiming, "Here, Annie; I've brought you some of my nice butter, jest's as yaller as gold, an' sweet as roses. I told Samooel we must bring you something to remember us by. An' what do you think? We've all been sick with the measles. Ruby Jane, Aurora Maria, and Semanthy Belinda was the worst of any; but we've all had a sick time of it." So the day passed in a continual string of news and simple remarks, about all sorts of subjects. But I feel as if a day spent with Mrs. Fidder was a good investment of time, for two reasons; one that it does a person good sometimes to laugh, as I have to-day, and the other that her kindness and lovingness are contagious. Her youngest child, Selencia Philena, she brought with her, but we saw little of her, as Madge took possession of her, and kept her in the kitchen most of the day. Mrs. Fidder noticed my new sewing-machine, and remarked, "So, you've got a sewin'-machine; and, did you ever! I've got one, too. Samooel said I'd done the sewin' for eleven children long enough, and one day he came in a bringin' in a machine, and a long-haired man that he called the agent. An', laws sake! the agent, he talked away as slick and smooth as could be, and sewed all the scraps the children would bring him full of cotton. He said he was instructin' me, an' I kept a sayin' 'yes, yes,' jest's if I understood every thing he said, an' all the time I was a thinkin' about the dinner. After he was gone, and the girls an' me had got tidied up, I sot down to the machine, took the little book of directions out of the drawer, and began to read: 'Put the robbin on the winder,' was the first words. 'Well, what does that mean?' says I to myself. I guess there must be a sewin' bird to this machine,' an' I set to work an' looked all through the drawer, but I couldn't find no sewin' bird; an' then I looked in the book, an' I read jest's plain as ever: 'Put the robbin on the win-der.' An I jest had to give it up. As luck would have it, Cousin Florinda came over the next day, an' when she looked at the book, says she, a laughin', 'How stupid you was; 'tisn't 'robbin on the win-der' at all, it's 'put the bobbin on the wind-er.'" And then she showed me all about it, and now the machine goes like a book, an' 'tain't no trouble at all to make things on it."

Mrs. Mackenzie called while Mrs. Fidder was here, and it was difficult to control my propensity to laugh at the contrast. Mrs. Mackenzie is a woman of very narrow capacity, capable of appreciating nothing but social position, and stiff precision of manner. She looked at Mrs. Fidder as if she had just escaped from a menagerie, and all the time, dear, unsuspicious Mrs. Fidder was talking to her in her illiterate but warm-hearted way, without any consciousness of Mrs. Mackenzie's feelings.

The little Selencia Philena was called in from the kitchen, to exhibit her accomplishments to Mrs. Mackenzie, but no amount of coaxing from her mother could draw forth "Twinkle, twinkle, little star," from the child's mouth. It was evident that she, with true child's instinct, felt the coldness and artificialness of this woman, where the mother did not perceive them.

Sunday, October 8.—This afternoon, after church, I went to see little Mary Morgan, the child of very poor parents, who has been sick, and a cripple, since she was a year old. She is now nine years of age. She is a remarkable instance of contentment and patience, and I was struck by her satisfaction in and enjoyment of the few poor little playthings which she had. One's first impulse is to supply such a child with the many toys that a few dollars could

Digitized by Google

buy, but I am satisfied it is not the right course. When she found herself supplied with the *much*, the spell of her sweet "contentment with little" would be broken. Judgment must therefore be employed in making her one of the objects of Aunt Betsey's charity. Better food she must have, more nourishing and strengthening, and an occasional toy or book; and rides she must have, and flowers. And this reminds me of the plan that has been floating in my mind for some time, of having a gentle horse, and a low, broad-seated carriage for my own use. I might confer a great deal of pleasure, and accomplish real good in the way of making people more healthy, by giving rides to those who have not the means to provide themselves with them.

And how much this matter of good health has to do with our happiness! Some people need to think more of the subject, and others less than they do. Health may be considered in such an unhealthy way as to become the subject of one's gloomiest thoughts, and it may be thoughtlessly or wilfully neglected.

How to Prepare Cow's Milk for Babes.

BY A MOTHER.

A LADY, who was unable to suckle her babes, reared a large family of healthy children, according to the plan so carefully laid down by Dr. Cummings, in his little volume called "Food for Babes," published by Randolph, New York, 1859. This work being out of print in this country, and her copy nearly worn out in service, she offers a synopsis of its contents to THE HERALD OF HEALTH, for the benefit of those needing such information.

The book has been recently republished in Scotland, and it is hoped that it may reappear in this country, for there is much useful matter in it not to be found in the outline here given. Happy the mother who can suckle her own child! But how can a feeble woman whose digestion hardly suffices for the support of her own body be an efficient nurse? Her milk is likely to be deficient in important materials. A strong, healthy woman, supplied with as much wholesome food as she can eat, can not do more than supply her child; and generally loses weight while suckling. A vigorous child takes about three and one-half pounds of milk daily; or twelve hundred pounds a year. Supposing a woman to weigh one hundred and thirty-two pounds she must give nine times her weight in the course of the year, and, as many mothers give less than half this amount, their children must suffer, unless a good substitute be found. This can be found only in the milk of animals, and not in starch, flour, or similar substances.

ARTIFICIAL HUMAN MILK.

The question is how to modify cow's milk to make it suitable for a new-born infant; it having been found to disagree in its pure state. There is in the first place too much casein, or cheese, in cow's milk, and the child can not digest it; to reduce it to the true proportion, nearly twice as much water as milk is necessary; to be exact, it must be eighteen parts of water to ten parts of milk; but this would reduce the quantity of butter also without which the child would not thrive. The milk to be diluted must therefore contain more butter than ordinary milk, which must be obtained by setting aside, say, three quarts of milk, and at the end of four or five hours remove the upper quart; the upper third of any quantity of milk containing fifty per cent. more butter than the ordinary milk of the cow. The same result can be obtained by taking the "strippings," or latter half of the cow's milking. This milk, when diluted, with one and a half parts water, and properly sweetened, resembles ordinary human milk.

VARIOUS DILUTIONS FOR VARIOUS AGES.

Mother's milk for new-born babes is so peculiar as to have got a special name, *colostrum*. It gradually loses these peculiarities. For colostrum, or milk prepared for the first two weeks of a child's life, must contain more butter—the upper eighth, instead of the upper third must be used. From two quarts of milk, which has stood four or five hours, skim off carefully half a pint; or the last tenth of milk just stripped from a cow. For example, if a cow gives five quarts, the last pint may be used. This milk must be largely diluted with water, according to the following schedule. Milk is to be made more nutritious as the child advances in age, regard being had not to mere age, however, but to the condition of the child; the schedule being ar-

Digitized by Google

ranged to suit vigorous children, and will not suit feeble ones, who must be kept back on the scale.

SCHEDULE.

Age.	Milk. *Gills.*	Water. *Gills.*	Whole Quantity. *Gills.*
2 to 10 days	1¼	3¼	4½
10 to 20 days	1¾	4¼	6
20 to 30 days	2½	6	8½
1 to 1½ months	3	6¾	9¾
1 to 2 months	3½	7	10½
2 to 2½ months	4	7½	11½
2½ to 3 months	4½	do.	12
3 to 3½ months	5	do.	12½
3½ to 4 months	5½	do.	13
4 to 4½ months	6	do.	13½
4½ to 5 months	6½	do.	14
5 to 6 months	7	7	14
6 to 7 months	7	7	14
7 to 8 months	8	6	14
8 to 9 months	8¼	6	14¼
9 to 10 months	8½	6	14½
10 to 11 months	8¼	6¼	14½
11 to 12 months	9	5½	14½
12 to 15 months	9¼	5¼	14½
15 to 18 months	9½	5	14½
18 months	10	5	15

Eight large spoonfuls are about a gill.

REGULATIONS OF THE QUALITY OF THE MILK.

If the milk be too strong, indigestion will follow, and the child will lose instead of gaining strength. When particles of casein, or curd, pass through his bowels unaltered, a milder quality or lower grade should be substituted. A feeble child of six months may require the food suited to a vigorous child of six months. For constipation, increase the richness of the milk, put in more cream. In cold weather, or if milk is kept on ice, it may stand an hour or two longer before the upper third is removed; or the upper fourth may be taken, or set five quarts instead of three to get one quart.

The water used in diluting milk should not be hard; nor should it be boiled. Add it to the milk, and heat it by putting the bottle in warm water.

SWEETENING.—Use loaf sugar, enough to make it as sweet as undiluted new milk, a teaspoonful to a quart. If too sweet, it will cloy the appetite, and not enough food will be taken.

TEMPERATURE.—The milk should be heated to one hundred degrees Fahrenheit; test it once, and try it on the cheek; which should regulate it subsequently.

The mode of feeding should be by suction from a bottle; with the long rubber tubes which are attached to the improved nursing-bottles, the infant can lie down, and will fall to sleep quietly in his crib.

QUANTITY.—For the first ten days, about one to one and a half pints a day should be given; before the end of the first month the child will take more than a quart daily; at the age of three months he may require two quarts daily. After that time the quality will change more than the quantity. The child will need half a pint at a time every three or four hours, which should be sucked in about ten minutes, and he will pass six or eight hours at night without feeding.

The bottles should be annealed by being put into cold water and boiled three or four hours, and the most scrupulous care observed in cleaning them.

WHAT THE BRAIN FURNISHES.—The brain is the great electrical reservoir of the body and furnishes electricity to all the nerves, without which not one of the numerous functions would be performed. Every nerve, however small, constitutes a perfect magnet, and in health represents the two forces, positive and negative, in equilibrium. A disturbance of these electrical forces in the atmosphere is the cause of the convulsions of nature. When it moves according to natural laws, it bids the seed to arise from the earth, to bring forth its flowers and its fruits, to breathe its balmy fragrance over the bosom of nature. When its equalization is disturbed we see it flashing in the clouds, and hear its thundering voice roaring above us, and yet that same voice showers down upon us the blessing of the rain-drop. It is this same electrical power from whose lips falls the dew when night covers the earth with her sable mantle, and the same agent which basks in the sunbeams, while they impart a fragrance to the flowers, and the luscious taste to the fruits. It is the loss of this power that causes our death. So all the organs of the body are affected, controlled, and acted upon by this subtle fluid. We know that the nervous fluid and electricity are one and the same, for by severing the hypogastric nerve digestion will cease because deprived of its vital force from the brain; but if a current from a battery is applied to the nerve below the separation, digestion will go on uninterruptedly. Experiments made in Paris proved that digestion can be carried on in animals even after life is extinct, by a proper application of the galvanic current.—*Mrs. S. E. Merrit, M. D.*

Digitized by Google

STUDIES IN HYGIENE.

THE SEVEN BEST DISINFECTANTS, AND HOW TO USE THEM.—

PERMANGANATE OF POTASH.—One part of the pure salt is dissolved in one hundred parts of water. Where the crude material is used, five to ten parts of it to one hundred of water will suffice. This disinfectant acts upon liquids, and has little effect on solids.

CARBOLIC ACID WATER is obtained by dissolving one part of pure crystallized carbolic acid (which can be rendered fluid by immersion in hot water) in one hundred parts of water. Crude carbolic acid should be taken in double the quantity.

CARBOLIC ACID POWDER is prepared by mixing one hundred parts peat, gypsum, earth, sand, sawdust, or charcoal powder, with one part carbolic acid dissolved in water. Double the quantity of crude acid must be taken.

CARBOLIC ACID WASH.—Mix one part carbolic acid with one hundred parts milk of lime.

CHLORIDE OF LIME.—One part in one hundred of water.

SOLUTION OF METALLIC SALTS.—Better to prepare saturated solutions in water and frequently stir.

SUEVERN'S MASS is composed of one hundred parts of slaked lime, fifteen parts coal tar, and fifteen parts chloride of magnesium dissolved in water.

The above list of disinfectants and their preparation will be found highly serviceable and should not be forgotten. In many cases it may be worth more than the entire cost of this magazine for a year.

FACTS ABOUT SLEEP. — My own researches on the proximate cause of sleep—researches which of late years have been steadily pursued—lead me to the conclusion that none of the theories as yet offered account correctly for the natural phenomena of sleep; although I must express that some of them are based on well-defined facts. It is perfectly true that exhaustion of the brain will induce phenomena so closely allied to the phenomena of natural sleep, that no one could tell the artificially-induced from the natural sleep; and it is equally true that pressure upon the brain will also lead to a state of sleep simulating the natural. I example, in a young animal, a pigeon, I can duce the deepest sleep by exposing the brain the influence of extreme cold. I have ha bird sleeping calmly for ten hours under the le influence of cold. During this time the state the brain is one of extreme bloodlessness, a when the cold is cautiously withdrawn and t brain is allowed to refill gently with blood, t sleep passes away. This is clear enough, a the cold, it may be urged, produces contracti of the brain substance and of the vessels, wi diminution of blood, and with sleep as the r sult. But if when the animal is awaking fro this sleep induced by cold, I apply warmth, f the unsealing of the parts, a little too freely, i that is to say, I restore the natural warmth to quickly, then the animal falls asleep again un der an opposite condition; for now into the re laxed vessels of the brain the heart injects bloo so freely that the vessels, in like manner a when the frozen hand is held near the fire, be come engorged with blood, there is congestion there is pressure, and there is sleep.—*Dr. B. W. Richardson.*

POLITICAL HYGIENE. — Dehortations against war and its concomitants, rapine, and its cruelty, must always be commended; but o still greater moment should be the discouragements held forth against the nursing of prejudices, and an extreme sensitiveness to imaginary insults, under the workings of which a people sometimes snatch at an excuse for war. It can not be expected that the whole population of a country should be put under a cooling regi men, and lose a little blood from the arm, for the purpose of reducing the national fever; bu derivatives might be usefully employed which would turn public excitement into the walks o peaceful ambition, by the cultivation of the art and sciences, and the erection of public works useful and commemorative. At any rate, it would be very desirable for rulers of the state and other members of the government—legis lators, and especially political orators and agita tors—to submit themselves, in seasons of threat ened moral epidemics, to a dietetic course, in which artificial stimulants, and particularly whisky, should find no place. Voltaire wit tily said that wars have been brought on be

Digitized by Google

cause a minister of state could not procure a stool. Some years back, at a time when the question of boundary between the United States and Canada was warmly discussed, a war speech, which alarmed the whole country, was made in Congress by an eminent political leader and orator, who was intoxicated at the time.—*Medical Times.*

NAKED TRUTH.—If the great Truth so beautifully incarnated in the Parable of the Prodigal Son had been presented in a naked, abstract form, how much of its power would have been lost! How little of it would have been secured! But, embodied as it is, in one of the sweetest stories ever told, it will be cherished as long as there are human hearts and human sensibilities and sympathies to cling around it; and they *will* cling around it, with the perennial greenness and freshness of the ivy. "Love thy neighbor as thyself." How plain and simple and reasonable this precept now seems to us! But its truth had been but feebly felt and dimly recognized, even by the greatest legislators, philosophers, and moralists of the ancient world. It was not until the divine Nazarene *lived* it, and through the concrete form in which he presented it to the world, of the story of the good Samaritan, breathed into it a fructifying power, that it bloomed into a celestial beauty and filled the earth with a celestial fragrance.—*Cornell Era.*

PROLONGED VIGILS.—Leibnitz sometimes passed three consecutive days and nights in the same chair, resolving a problem that interested him; an excellent custom, as Fontenelle observes, to accomplish a labor, but a very unhealthy one. The Abbe de La Caille, a famous astronomer, had a fork invented in which he adjusted his head, and in this position passed the night in astronomical observations, without knowing, as a man of wit observes, any other enemies than sleep and the clouds, without suspecting that there could be any more delightful way of employing these silent hours which revealed to him the harmony of the universe. Thus he contracted an inflammation of the lungs which carried him off in a short time. Girsdet did not like to labor during the day. Seized in the middle of the night by a fever of inspiration he arose, lit the chandelier suspended in his studios, placed upon his head an enormous hat covered with candles, and in this strange costume he painted for hours. No one ever had a feebler constitution, or a more disordered state of health than Girsdet.—*Medical Independent.*

EATING TOO FAST.—Eating too fast, generally involves eating too much—more than is needed for the support and nutrition of the body, and the reason for this is, that the organs of taste which are our guide in this matter, are not allowed sufficient voice; they are not allowed time to take cognizance of the presence of food ere it is pushed past them into the recesses of the stomach. They do not therefore have opportunity to represent the real needs of the system, and hence allow the crowding of the stomach. I hold that thirty minutes should be spent at each meal, and spent too, in chewing the food a good portion of the time, and not in continued putting in and swallowing, but in pleasant chat and laugh instead of a continuance of the intense nervous pressure of the office or or library. If you lay out to spend thirty minutes in this way at your meals, you may rest assured you will not eat too much, and that what you do eat will be in the best conditions for appropriation to the needs of your system. You will be healthier in body, happier in mind and more vigorous of brain—for there are few things that so clog the brain as a meal of half eaten food put into the stomach.—*Dr. J. H. Jackson.*

OPEN THE DOORS.—Where there are children, it is of great importance that rooms and entries should be of the same temperature, for certainly a large proportion of the chest and bowel affections of the young can be traced to a change in temperature, especially where the little ones are in the habit of passing from overwarmed rooms into somewhat underwarmed entries.

There is no need to dilate on the necessity of ventilation; but even where stoves are used, and a certain ventilation is thus afforded, our remarks hold true, for there is no doubt that all ordinary modes of burning anthracite coal pour into our rooms so much of the inodorous, tasteless, poisonous carbonic oxide, that we can hardly have too much air with which to dilute it.

So we put in a plea that instruction be given to our young folks somewhat different from that which their forefathers received. Teach them by all means to be obedient and docile, but forgive them if doors be left ajar; nay, more—teach them to leave them open.—*Medical Times.*

WHY is a man in fever like a burning candle? He is light-headed.

WHY is a man who has no children invisible? Because he's not a parent.

Digitized by Google

RECIPES FOR WHOLESOME COOKING.

LEMON PIE--A Correction.

In the March number of THE HERALD OF HEALTH we published a recipe for making Lemon Pie, which we hope none of our readers will ever try. The idea of using a "cup of vinegar" for each lemon is quite too absurb for any thoughtful person to practice on. Printers and proof-readers, like all the rest of the world, are sometimes human, and when they are, some very queer blunders are made, as in this instance, when *vinegar* was substituted for *sugar*. If our friends will try the recipe with sugar instead of vinegar, they will, we think, like the pie. We republish the recipe below as it should have been published.

LEMON PIE.—For each peeled and grated lemon add one tea-cup of sugar, and one table-spoonful of corn-starch dissolved in cold water. Over this pour a tea-cup of boiling water.

CRUST.—One part white flour, one part graham flour, one part corn-meal. Shorten it with butter or condensed milk, reduced one-third. Use two crusts.

The above recipe for lemon pie is used in our Institution, and a majority of our guests will testify as to the excellence of lemon pie made in this way.

ANOTHER RECIPE.—Mrs. H. C. Birdsall sends us another recipe for making Lemon Pie, which she informs us is excellent. We give it below:

Take two lemons, two eggs, one cup of sugar, one cup of water, and one large table-spoonful of flour. After grating the peel, take off and throw away the white rind, and cut the lemon in small pieces, carefully picking out the seeds. After the under crust is laid in, sugar it well. Bake with two crusts.

ANOTHER CORRECTION.—In the recipe of Mrs. Lizzie R. Bronson, "No. 10, Cracked Wheat," for a "*quart* of cracked grain," read "a *pint*."

GRAHAM CRACKERS.

Wet the best of graham flour with cold milk, adding about a fifth proportion of thick cream or a little butter if cream is not to be had. Mix as soft as can be handled; knead very thoroughly, say fifteen or twenty minutes; roll thin; cut in three-inch-square cards; lay, so they will not touch each other, on a hot sheet-iron pan, and bake quickly, say ten or fifteen or twenty minutes, according to thickness. Handle carefully while hot, and pack away when cold in tin cans or stone jars in a cool, dry place.--*F. J. B., in Laws of Life.*

NOTE.—For the convenience of those who have not an opportunity of weighing the ingredients for the soups, it may be stated, that one large table-spoonful will be about equal to one ounce; and one tea-spoonful to a quarter of an ounce. But weighing should be resorted to, whenever it is possible.

SOUPS.

Generally the American people are not fond of soups perhaps because they are seldom well made, and when they are they are often complicated and expensive, requiring much money, time, and attention to prepare them. These difficulties are avoided in the following recipes, and a few trials will enable any one of ordinary understanding, who will follow the directions, to produce cheap, wholesome, and agreeable soups, without shins knuckles, scrags, bacon, or drippings.

No. 1. PEA SOUP.—Put one pint of split peas, which have been previously soaked in cold water four hours, into two quarts of pure soft water. (Distilled, or filtered rain-water is preferable when it can be obtained.) Let them boil for one hour, then add one carrot, one parsnip, one turnip, two onions, a small head of celery, and a little mint, all cut small, and boil the whole another hour. Strain the soup from the vegetables, and thicken it with a little Indian-meal, previously mixed in cold water; boil the whole for ten minutes more, and serve in a tureen with toasted or plain wheat-meal bread. (Mix the vegetables well, and put them into a mold or a basin and then into a vegetable-dish, and serve it with steamed or baked potatoes, which are better than when boiled in water.)

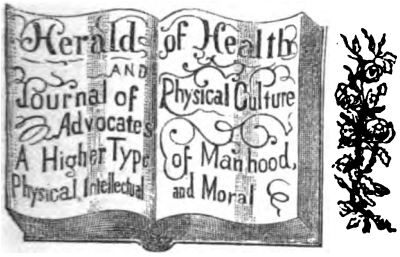
No. 2. BEAN SOUP.—Wash and pick one pint of white beans; steep them twenty-four hours in pure soft water, put them into a stew-pan (earthen, enameled is best), set them on the fire in two quarts of water, let them boil for two hours, then add two onions, one parsnip, one carrot, a little parsley and thyme cut small, a little cold boiled rice, and a little salt. Boil the whole gently for another hour, and serve it the same as pea soup.

No. 3. BARLEY AND BREAD SOUP.—Take three ounces of barley, one and a half ounces of stale bread-crumbs, one and a half ounces of butter, one-half ounce of salt, and one-quarter ounce of parsley. Wash and steep the barley for twelve hours, in one-half pint of water, to which a piece of carbonate of soda, the size of a pea, has been added; then pour off the water not absorbed, and add the crumbs of stale bread, three quarts of boiling water, and the salt. Digest these in a salt-glazed covered jar, in the oven, or boil them slowly in a well-tinned covered pan, for from four to six hours, adding the chopped parsley, with the butter, thirty minutes before the expiration of the time of boiling.

No. 4. HOTCH-POTCH SOUP.—Take four large turnips, one pound of carrots, one onion, one lettuce, and parsley. Put four quarts of water into a pan, set it on the fire, and put in the carrots and turnips, part of which must be grated, and the remainder cut in small square pieces with the other vegetabels, all cut small; season, and let all boil very well together slowly. Young green peas may be added, part of them to be put in with the other vegetables, and the remainder about an hour before the soup is ready.

Digitized by Google

EDITORIAL DEPARTMENT.



NEW YORK, APRIL, 1871.

WATER.

"To the days of the aged it addeth length;
To the might of the strong it addeth strength;
It freshens the heart, it brightens the sight;
'Tis like quaffing a goblet of morning light."

☞ THE PUBLISHERS *do not hold themselves as indorsing every article which may appear in* THE HERALD. *They will allow the largest liberty of expression, believing that by so doing this magazine will prove to be more useful and acceptable to its patrons.*

☞ *Exchanges are at liberty to copy from this magazine by giving due credit to* THE HERALD OF HEALTH AND JOURNAL OF PHYSICAL CULTURE.

TOPICS OF THE MONTH.

BY M. L. HOLBROOK, M. D., EDITOR.

WEEDING OUT THE COWARDS.—There is a large tribe of savages in Africa who devote themselves all their lives to the arts of war. The king claims the services of all the males, and most of them belong to his army. The warriors go into battle nearly naked, and their only protection is a shield made of the hide of the ox, and their only weapon a sort of javelin, which they hurl with great dexterity at the enemy. In battle, the young men are put in front, that they may have a chance to distinguish themselves and be promoted. Promotion consists in being allowed to bear a white shield instead of a black one, to stand in the ranks of the brave men, and to be allowed to marry a wife without paying for her, as those not in the service must do. After a battle, the king reviews his soldiers, promotes all who have been brave, but without ceremony kills all who have been in any way cowardly in their behavior. The cowards are not tried by any law, but are simply pointed out by those who have observed them, and are at once executed. They march to their fate without resistance, knowing that there is no reprieve. Thus cruelly and unmercifully do savages weed out the cowards and worthless soldiers, and secure a brave class of men with which to conquer their enemies.

There is no doubt but that the physical vigor always noticeable among savages is in a great part due to the elimination of the weak and effeminate by some such means as that practised by the Zulu tribes of Africa. It is a savage and fearful way of promoting the physical well-being of the race, and we almost wonder that a similar method was long practised among the Greeks, whose superior physique was, perhaps, due quite as much to the barbarous practice of weeding out the feeble and infirm children, as by their superior methods of physical culture.

Among civilized races, on the other hand, exactly the reverse methods are taken with those who are vicious, idle, cowardly, and, we might truthfully add, worthless. We build hospitals for the sick and infirm who have no homes of their own to live in. Our imbecile population are educated in schools adapted to their needs. We burden ourselves with the paupers of intemperance, want, and misery, and build them poor-houses, where they may live in tolerable comfort, and, if sick, our best physicians try to prolong their lives to the last moment.

It seems to be a chief peculiarity of our gospel of love, that we can not do too much for the unfortunate. We can not be happy ourselves if those around us are miserable. We

Digitized by Google

must bind up the broken hearts and heads, and leave vengeance in the hands of God. Still, notwithstanding our efforts to reclaim those who are worth little or nothing to civilization, Nature does something in the way of elimination, so that very few of the vicious leave offspring of their own kind to curse the world. According to Darwin, malefactors are executed and imprisoned, so that they can not transmit without hinderance their bad qualities; melancholy and insane persons are confined, or commit suicide; violent or quarrelsome persons come to some bad end. Restless men, who will not follow any occupation, go to new countries as pioneers. Intemperance kills its victims early. Profligate women bear few or no children, and profligate men rarely marry, and the same is true with those who are weak of constitution, or suffer with bodily infirmity.

Thus we see that Nature, in her own quiet way, helps to weed out the worst classes and assists human progress, and how infinitely more perfect is her way than that of the savage who kills on the spot all the cowards, or that of the Greek who does not allow weakly and deformed children to live.

It is very true that multitudes of the good also leave no offspring, a fact bitterly regretted, and, as has been observed by many writers, the degraded often become parents of large families, but, according to the author before mentioned, their children rarely all live, and in a generation or two, unless isolated from civilization, they become extinct. According to Mr. Greg, "the careless, squalid, unaspiring Irishman may multiply like rabits, yet the ambitious, self-respecting Scotchman, who marries late and has but few children, outstrips him in wealth and intellect, and power, if he does not in numbers. The Irish increase in numbers nearly six times as rapidly as the Scotch, but the latter far exceed the former in thrift.

Thus it is that Nature manages her affairs. Slowly, but surely, the good, the brave, and the strong win and inherit the earth, while the wicked, the weak, and the vagrant perish and are forgotten.

THE OLDEST DOCTOR IN AMERICA.—We have recently noticed the great vigor of German soldiers and French statesmen at very advanced ages, but America is not to be beaten in regard to the vigor of its old men, as the following case will attest.

The Richmond and Louisville Medical Journal states that the oldest practising physician in America is Dr. Theophilus Clark, of Tinmouth, Vt. He is ninety-eight years of age, has been practising continuously sixty-six years, is hale and hearty, and has no thought of giving up business yet.

We may, in this connection, mention M. Thiers, who, as President of the new Provisional Government of France, is again brought conspicuously before the public, is seventy-three years old; yet, but for his white hair, no one would suppose him more than sixty; and the vivacity of his movements, his remarkable activity, and his full, healthy face indicate the fully rounded prime of manhood rather than its decline. Nothing in his appearance exhibits the scholar, the orator, or the statesman; rather he has the practical, matter-of-fact aspect of a lawyer. The most striking feature of the man is a pair of lustrous, piercing, eyes, which seem not only to see every thing, but to see through whatever they are fixed upon. He combines boldness with caution, sagacity with decisiveness, the dash and brilliancy of his race with a conservatism solidified by experience; and having the confidence of all parties, he seems to have been providentially spared to render the most important service in the regeneration of his country.

The case of the famous Dr. Ricord is another instance of great vigor at advanced age. In the terrible sortie of November the 30th, the most distinguished services to the wounded were rendered by this renowned man. Having established his headquarters in a ruined hut, he awaited the arrival of the *brancards* with their unhappy freight. As each poor sufferer was brought in, he gently but rapidly relieved him of his clothes, dressed his wound, or applied the splint to his shattered limb, as the case might be, placed him on his shelf, and had him con-

Digitized by Google

veyed by ambulance wagon to the steamers which were moored on the Marne, by Joinville. As soon as the boat had taken in as many as it could hold, it steamed swiftly down stream to the bridge near the Bastille, whence the *brancards* bore the patients to the hospitals or to the private houses which had been prepared for their reception. For hours and hours Dr. Ricord continued thus to exert himself; according to one eye-witness, he "created amazement by his ubiquity." He is over seventy years old.

A WHOLESOME FAMILY.—There is now living in the northwest part of the town of New Haven, a venerable, but hale and hearty couple who have been blest far above the common lot of mortals. Mr. Ira Ward and Mrs. Ward have raised a family of three sons and seven daughters, the youngest of whom is over 26 years of age. All are married and in good circumstances, and are persons of the most temperate habits. There are seventeen grand-children and two great-grand-children. What is most remarkable is the fact, that through all these years, there has been but one death—that of a child—throughout the entire family circle, extending from Vermont to Missouri. Hale and hearty on the old homestead yet live the progenitors of this large family. Mrs. Ward still "does her own work" about the house, with not a little of the activity and tidiness which characterized her more early years, when all the "boys and girls" who are now so far away, were at home and "made the house so noisy there was no living with them." They have been spared to see the utmost wish of their hearts realized in their children, and now blessed with competence, they are gently descending the down-hill of life, amid the respect and good wishes of their friends and neighbors, and the affection of their children.

Such instances of wholesome families are rare, but exceedingly beautiful. They show the possibilities of human nature under favorable circumstances. With proper attention to the laws of health, longevity, as well as genius, is hereditary.

DOES IT PAY TO BE SICK?—The Medical and Surgical Reporter estimates the cost, to the people of the United States, of medical services and medicines, at $100,000,000, and adds $25,000,000 for the quack medicines swallowed "Let the people," it says, "study these figure awhile, and then reflect that probably one-half, or certainly a large fraction, of this expense, is incurred by a deliberate infraction of the laws of health; that, if they tippled less, smoked less, overworked less, were less 'fast' and less self-indulgent, they would save some thirty or forty millions a year."

If the cost of the loss of time, loss of happiness, loss of ability to do and dare was added to the above, there would be no counting the expense of sickness. And then add to this the expense of those indulgences that make us sick! What slate would hold the figures! The truth is, sickness is the most expensive nuisance on the face of the globe. There may be instances where it makes people better, but generally it makes people selfish, sad, misanthropic, nervous, mean, and miserable. The best way to make ourselves happy and good is to keep ourselves well. Then we are apt to be sweet and kind and wholesome. Moral reform societies and tract societies might learn a lesson from this fact, and do more good with less money than they are now doing.

MINISTERS' SALARIES.—It is reported that the salary of Henry Ward Beecher is $20,000 a year. None too much, we say, for the work he does. If ministers were better paid they might do better work, and the profession attract a better class of minds. Moral power, like intellectual, ought to receive its reward. The idea that money honestly earned would corrupt the profession is too false to be thought of. Ministers with good salaries will be healthier and happier, and preach a purer, sweeter religion than they can while their temporal wants are not half supplied. Pinch the clergy and you curtail their power, for money represents power. The meager pay that ministers get has no doubt kept thousands of talented

Digitized by Google

men from the profession. It is true that many ministers do not earn much. It is not every man who has a right to preach, but such as have should be paid more than those of any other profession, because their labor is of a higher order, requiring a higher order of talent to perform it.

College Dormitories as Affecting the Health and Morals of the Students.—The Cornell Era informs us that dormitories are becoming less popular than formerly, and will in time cease to be a requisite of a college. It says: "It has long been a question with college authorities whether it is best to feed and lodge their students. Thus far in their history American colleges have tried, and the majority at the present day practise and uphold the dormitory system. But, if we judge correctly, there is a growing sentiment in favor of abolishing dormitories and college boarding-houses, and of quartering students among the private families of the town where an institution is located. This opinion should be fostered, for it is calculated to promote the true interests of the student. Where hundreds of young men are living together in close quarters, separated in a great measure from the restraining and refining influences of the family circle, invariably their manners suffer. The tendency is more or less to develop clownishness and rudeness. We do not say that all become boorish and rough, but there is danger of it. It is argued by the advocates of the dormitory system that its temptations are more than offset by its advantages; among which are the independence and responsibility resulting from the isolation of the student, the public sentiment created by the college world to keep him within proper bounds, and the equality of footing on which all are placed. They claim, too, that the distribution of students through the community is attended by far greater extremes of vice than can occur within the precincts of the dormitory. In regard to the self-respect arising from the occupation of a separate room, we fail to see why it is not as great in the case of him who resides among the members of actual society, as in his who lives in a society more or less artificial and conventional, such as inevitably springs up where elements are found so discordant and heterogeneous in character as those in ordinary dormitories. As to the public sentiment, it seems to be a well-substantiated fact that the average tone of a moral community is apt to be higher than that of a large number of youths of similar passions gathered under one roof. The equality which is claimed is, so far as our observation has gone, a feeble argument; cliques are as likely to be formed in dormitories as outside. It may be conceded, however, that the extremes of misconduct are greater outside than under the supervision of proper officers; but this is more than compensated for by the general average of behavior and morals which is secured by mingling with the world and giving the character a natural development—one which will fit the possessor for the actual things of life. Far better will it be for education when the energies of our fast increasing number of colleges shall be concentrated, and applied only to the most worthy purposes, and not frittered away for purposes which can be otherwise provided for."

For our part, we hope that the dormitory system will cease to exist. Dormitories have outlived their highest usefulness in most places, and the sooner discontinued the better. College students, like all others, need good homes to live in while studying, and these can never be furnished in the dormitory.

Mixing with Strangers.—The effect of mixing with new people, who have new ideas and new methods of thought, is very salutary. Always to see the same people, do the same things, feel the same way, produces a stagnant condition of the mind and heart that is very distressing to behold. There are thousands of invalids who might be greatly benefited by getting away from home, if only for a short time, to mix with strangers, and be touched with the magnetism of the great world as it courses in its accustomed rounds. And there are mental and

Digitized by Google

moral invalids who need the same change to get their minds and hearts enlarged and let in a little more of the great light of life. Outside influences are very valuable to those who at home have been well trained by healthful influences in early youth, so that they can avoid the snares and pitfalls into which those who go blindly often fall.

Does Sickness and Suffering Make People Better?—Regarding this Mr. Beecher says: "Suffering is not the element that conquers the world. Joy has been the great power in the world, and will be to the end. Suffering is the undertone; but the melody is carried far up, and that is joy. Christ was a healthy man. He did not do or experience what would be called unmanly in another. That he foresaw the future there is no doubt; but we are not at liberty to say that he habitually foresaw. He came from the temptation of the wilderness victorious, and soon thereafter he was found at Cana at a wedding, of which the festivity probably lasted fifteen days, and there is no hint that he did not take part in the rejoicing like the rest. He went to the synagogue as we go to church; he was called to teach as a leading man, and he so impressed the crowds everywhere that they crowded around him as a victor. A man who is habitually sad does not attract little children, and yet they ran after Jesus. All the signs tell that he was a sweet-blooded man. I believe that he had the serenest, sweetest heart, the deepest nature, that he was the most loving, joy-producing being that the eye of man ever rested on. Suffering did not limit, or canker, or palsy him; it was accepted by him. It is enough to witness the sight of the most joyous being in heaven, willing to suffer, that all the poor, the needy, the suffering, may henceforth have companionship and sympathy.

Herbert Spencer.—It is said that the health of that philosophic writer, Herbert Spencer, whose works have been much read in this country, and whose essay on physical education has produced so much of an impression on the large class of teachers in this country, is himself suffering from too close application to study and writing. He is said to be in indigent circumstances. Americans ought to make up a purse of five thousand dollars or more and present it to this worthy man, for his services in the cause of education alone.

No Colds on Mount Washington.—Mr. Nelson, one of the party who is spending the winter on Mount Washington, reports that there is no suffering from colds there, yet the thermometer has often varied one hundred and twenty-one degrees in two days, and often stands below zero. The parties go, bareheaded from a hot room, and without gloves or overcoats, out of doors, where the thermometer is ten degrees below zero, yet do not catch cold. The wind often blows at the rate of nearly one hundred miles an hour, and active exercise out of doors is very fatiguing. Digestion is rapid, and abundant food is necessary.

Deaths from Snake-Poisoning in India.—Dr. Fayrer has obtained returns from a number of districts in India relative to the frequency of death from snake-bites in that country. The result is truly appalling. It appears that the mortality from this cause over parts of India equal to about half the area of Hindoostan amounts annually to 11,416 cases, made up of 6,645 in Bengal, 1,995 in northwest provinces, 755 in the Punjab, 1,205 in Oude, 606 in the central provinces, 90 in Central India, and 120 in British Burmah. Dr. Fayrer estimates the entire mortality from snake-poisoning in Hindoostan as 20,000 annually. In order of destructiveness the cobra takes the first place, and the krait, or Bungarus coeruleus, the second.—*Medical Times.*

What has become of all the famous India snake charmers, of which we have heard so much?

Digitized by Google

How to Treat the Sick.

TREATMENT OF SCARLET FEVER.—I noticed an article on the contagiousness of scarlet fever, and also the means to prevent its being carried to other persons, etc., all of which I think very advisable. But I propose to briefly give from my own experience a statement of the most successful treatment of the disease, when contracted, for, in spite of all prophylactics and the utmost care, the disease is slaying its tens of thousands every year throughout the world. About the year 1849, the disease prevailed as an epidemic in northeastern part of Ohio, and was very fatal. I was then practising, or attempting to treat it. I was losing one-half of my cases (and, by the way, I was as successful as any of my medical brethren), and my heart sickened at the thought of so terrible a mortality, and so little success. I was using all the regular, as well as other common sense means, with the result above stated. The year previous, I had seen in a medical paper that a certain Dr. Morril of South Carolina had been very successful in treating scarlatina by bathing the throat and neck with hog's lard. The thought occurred to me that if it was successful thus far, why not bathe the whole surface of the body, as the inference was that the fever spent itself upon the lard, instead of the fat of the system, by a process of inunction. I think the hog was made for some useful purpose, and as I do not favor eating it, believing it to produce a full, gross habit of a positive character, predisposing to disease, I was glad to get a chance to test its use, not merely to the throat and neck, but to the whole surface. I was attending a family of three children, two of them boys, nine and eleven years, and one girl seven years old. The two boys were quite sick; one had been sick four or five days, and the other, two or three days. The disease seemed as unyielding as any I had found up to that time. I told the parents, should the daughter take it (she was then well, but they were very solicitous about her, because she was an only daughter), I wanted them to melt a sufficient quantity of hog's lard, and bathe her from head to foot with it every four hours, until I could see her. After each bathing, to wrap a linen sheet loosely about her, in bed, or let her lay between linen sheets, and give her nothing but cold water to drink. She was a fine, fat, hearty-looking child of moderately full habit, one in which the disease, I have no doubt, would have been very violent. On my next visit, the following evening, I found Mary sick, having had a very violent attack of vomiting about 7 o'clock that morning (by the way, an attack with vomiting was considered the very worst form), and the treatment I ordered had been followed to the letter. When I saw her she seemed quite comfortable. Her mother stated that, almost as soon as she had finished applying the lard, she ceased vomiting and went to sleep, continuing to sleep during the day, and occasionally calling for drink. I ordered a continuation of the same treatment till my next visit. The following day, to my great satisfaction, Mary was, or seemed to be convalescing. She got well in six or nine days, while her brothers lingered for weeks, and one of them never recovered.

Since the occurrences mentioned above I have repeatedly tried the lard, and almost always with success, if called in time. I regard the treatment as most favorable, for, in nine cases out of ten, it will arrest the disease by enabling nature to throw off the virus or poison causing the malady. I would advise a gargle of salt water, and perhaps some other things that the condition of the patient may require. I think I may say without exaggeration, that I have successfully treated thousands by the above mode almost exclusively. The precise action of the lard on the system, I do not claim to be competent to determine. The fact was exemplified to my great satisfaction, and, to me, it has disarmed the disease of a great part of its terror, for to

Digitized by Google

know how to counteract or treat any disease so that the per cent. of loss is average, is to destroy it, in a great measure.

I have thus given what I believe to be facts, and have, from year to year, as the disease made its appearance treated it with more than average success, when compared with other infantile diseases. I herewith intrust the statement to your disposal, Mr. Editor of THE HERALD OF HEALTH, if you deem it worthy of publication in your valuable journal.—*James M. Hole, M. D.*

A CURE FOR EVERY DRUNKARD.—

1. Rise in the morning of each day at a given time.

2. Dress warmly, especially the feet, legs, hands, and arms.

3. Walk as far as you can with ease, and this briskly.

4. Eat breakfast at 8 o'clock and make your meal heartier than at dinner.

5. Regularly every day take a bath, at a temperature of 85 degrees in a warm room, the best time to take it is about 11 A. M.

6. After it walk one-fourth to one-half mile and go to bed, and lie from one to two hours.

7. Between rising and dinner take a ride in a wagon.

8. 3 P. M., dine. Eat farinaceous and fruit foods largely, and less meat than at breakfast. Drink nothing at dinner. From 4 to 6, walk briskly as far as you can with ease.

9. During the evening play games, sing, dance, and do things that amuse.

10. At 9 P. M., summer or winter, go to bed.

Also.

(*a*) Break up all old associations.

(*b*) Keep away from old resorts.

(*c*) Quit chewing and smoking tobacco, for this, blunts the *moral* sense—and makes the imagination dull. Liquor makes the ideal faculty wild and unsettled, while tobacco makes it obtuse.

(*d*) Never forget that if you are to be a new man you must have new *ideas*, and these must be such as to make you discard the use of alcohol in all its forms. Do not take it as a medicine any more than as a beverage, for it will reawaken the old desire in the one case as readily as in the other.

(*e*) If you know enough about the needs of human nature to *pray*, I advise you to do so, asking help from God. Prayer is not against, but in accordance with natural laws, and to get strength of will, and clearness of judgment, with thoroughness of purpose infused into you through spiritual influence is not only possible but sure, if you ask aright. "Ask and you shall find, knock and it shall be opened unto you." Place yourself under Divine guidance and you will get help.—*Dr. J. C. Jackson.*

CURE OF ERYSIPELAS.—The treatment of this disease hygienically, should be governed by the degree of intensity indicated by the symptoms. To allay the heat, redness, and swelling of the inflamed part, it must be kept well covered with tepid, cool or cold wet-compresses, often changed and re-wet; or as some prefer, the parts may be covered with a cranberry or tomato poultice, renewed every one, two, or three hours, as seems requisite; the fever and heat of body must be controlled by the wet-sheet pack, sitz or sponge bath. The abdominal wet-girdle in connection with the two latter sometimes will be found sufficient. The bowels must be kept open by warm water enemas, the thirst allayed by the imbibing of pure cool water, the temperature properly regulated and plenty of pure fresh air supplied by proper ventilation. These means, accompanied with good nursing, quiet, cheerfulness, and abundance of patience on the part of the attendants will prove successful in curing the great majority of cases.—*Dr. J. C. Whitaker.*

We have known this disease to be broken up in its first stages by a single Turkish bath.—ED. H. OF H.

WHY is a madman like two men?—He is one beside himself.

Digitized by Google

ANSWERS TO CORRESPONDENTS.

BY A. L. WOOD, M. D.

How to Prevent Spring Sickness. There are a great many people who are subject to a "bilious attack" every spring, and who expect it as a matter of course. Now there is no more need for people being thus sick in the spring, than at any other time of the year, if they only know how to live. This periodical sickness can be prevented simply by regulating the diet. Not that all persons who have been subject to such attacks year after year, for a long time, can always overcome the difficulty at once. We are all such creatures of habit, that when any thing becomes established in this way, there is a strong tendency to its return at the regular time, even after the producing cause has ceased to operate; consequently in bad cases it sometimes takes several years to overcome it entirely. Under a proper regimen the attacks will grow less severe every year, until they entirely disappear.

During cold weather people eat larger quantities than usual of carbonaceous food, such as fat meats, sugar, butter, bread, cakes and other preparations of white or superfine flour, nuts, fats, syrup, etc. Of course, a much larger quantity of carbonaceous food is required by the system in cold weather than in warm, but as a general thing people eat too much of it, clog up their systems with the excess and overburden the excretory organs, particularly the liver, in vain efforts to get rid of it. Those who take a great deal of out-door exercise are usually enabled to work it off, and seldom suffer much in consequence, except in hot weather; while those who lead a sedentary in-door life suffer most. When warm weather comes on in the spring, people require much less carbonaceous food, but instead of changing their diet as the weather changes they continue to eat the same kinds of food they have been eating during the coldest weather of the winter, and the consequence is that the already overburdened liver is unable to bear up under this extra load, and utterly refuses to perform its function until it has had a chance to rest and to throw off its accumulated burdens. Now, to prevent this state of things two things are necessary. First, people must eat a less proportion of carbonaceous food at all times. Second, as the weather grows warmer in the spring they must eat a much less quantity of it than they do in cold weather, and substitute instead more vegetables and acid fruits. Every family should have a large supply of canned fruits and green vegetables to use at this time of year. For a single article there is nothing so good as tart apples, and they should be used in unlimited quantities.

Lead Water-Pipes.—"Will you be good enough to inform me through the medium of your journal, whether the water drawn from the hot-water pipes in dwelling-houses contains any thing poisonous, either from the lead pipe or the copper boiler, and whether any harm to the system would attend the use of it when used as enemas in cases of constipation? I ask this question because many persons have not the facilities for heating cold water."

Water that stands in, or passes through lead pipes is rendered more or less poisonous according to the length of time it remains in contact with the lead and the quality of the water. The softer the water the greater will be its action upon the lead. The injury which would result from its use for enemas would be very slight, as but a small quantity would be absorbed, still it is better to use water which is not open to this objection if it can be obtained. An invention is greatly needed which shall supply a material for the conveyance of water upon which neither water nor any of the substances usually contained in it shall have any effect. The best thing, as yet, appears to be tin-lined lead pipe.

Eating Fruit in the Evening.—"I am troubled with dyspepsia, and would like to ask if you think the practice of eating apples in the evening, an hour or so before retiring, is hurtful—breakfast and dinner being the only meals?"

I think the practice of eating ANY THING, but an hour or two before retiring is hurtful,

Digitized by Google

especially for a dyspeptic. Of course it is not nearly as bad when no supper is eaten as when the three regular meals have been taken. For most persons fruit is less objectionable at night than the kinds of food usually eaten. If you eat three meals a day, take the third meal earlier in the evening, whether it be composed of fruit or not. Fruit should not be eaten between meals, but be made a part of the regular meal, and then the larger the proportion of fruit the better.

How to Give Children an Appetite.—A noted itinerant M. D. health lecturer, in a lecture recently delivered in this city, gave the following advice for the treatment of children who do not have a good appetite, but who simply nibble at a little of this thing and a little of that, and do not relish any thing unless it be some extra nice titbit. His advice to the parents of such children was to put upon their plates at each meal a quantity of food sufficient for the needs of strong, healthy children, and *make them eat it.* No advice could be worse than this. Children should never be forced to eat, but should be placed in such relations to life that they would always have a good appetite when the regular meal-time came, and relish plain, healthful food. Give children an abundance of out-door exercise, fun and frolic, make them regular in their habits, and feed them only upon plain, nourishing food, and they will never need complain of their lack of appetite; but keep them in school five or six hours a day and, confined to the house the rest of the time, frowning down every attempt at play, feed them upon rich food, fine-flour bread, hot biscuits, pies, puddings, cakes, etc., let them eat candies, nuts, fruits, and any thing else they can get hold of at any and all hours between meals, give them tea and coffee to drink, and you need not expect they will have an appetite, but you may expect they will be pale, weak, and sickly, and if you follow the prescription of the above mentioned traveling M. D., and force food down their throats without changing their conditions of life, you need not wonder if they leave you to mourn their early death. To cram children with food when their appetite does not crave it, is simply murder, slow, but no less sure, and how a man claiming to impart health instruction to the people can recommend such a thing is past my comprehension. The true way is to so change the conditions of life as to create a demand for food, then force will not be required to make the child eat.

Sleeplessness and Indigestion.—"How should sleeplessness in a very young babe be treated? also what will cure indigestion and acidity of stomach?"

Cure the indigestion, and the sleeplessness will disappear. To do this feed the baby less frequently, and do not allow it to take any thing whatever into its stomach except milk, and that only at certain stated times, not less than three hours apart. If the acidity does not soon disappear, extend the time to four hours. Be sure and be regular in the times of feeding. It is very important.

Tropical Fruits.—"Do you recommend the use of tropical fruits by dyspeptics—lemons, oranges, and bananas in particular?"

In this climate the fruits of the temperate zone are generally preferable to those of the tropics. The tropical fruits which we get here are picked before they are ripe, and lose much of their freshness before we get them. The riper and fresher fruit of any kind is the better. If we were in the tropics and could get its fruit ripe and fresh from the tree, it would be better than any of our fruit here, if it had to be shipped there to be eaten.

Vinegar.—"I thought you condemned the use of vinegar, and did not use it in your Institution, consequently, I was much surprised to see in the March number, a recipe for making lemon pies in which vinegar was mentioned as one of the ingredients. How is it?"

We *do* condemn the use of vinegar, and do *not* use it in our Institution. Its appearance in the recipe, was owing to a mistake of the printer. The word vinegar should have read sugar. In my opinion, vinegar is more injurious than an equal quantity of pure, unadulterated whisky.

The Turkish Bath for Lunatic Asylums.—The Lunatic Asylum at Cork, Ireland, with accomodations for five hundred patients, has the Turkish Bath. Since its introduction the cures have been 40 per cent. while before they were only 20 per cent. Why will not the asylums in this country introduce them, and cure twice the number of patients they now do?

Digitized by Google

NOTICES OF NEW PUBLICATIONS.

INSANITY IN WOMEN. The Causation, Course, and Treatment of Reflex Insanity in Women. By Horatio R. Storer, M. D., LL. B. Boston: Lee & Shepard.

A book written with perhaps a pardonable conceit, but with the evident earnestness of conviction. Should it be eventually decided by the Faculty that the premises here laid down are just and rational, a corresponding mode of treatment will unquestionably follow; but till such time we believe the statements and suggestions are calculated to awaken suspicion, if not bring odium upon institutions of great and incalculable benefit to the public. In thus throwing data to the unscientific mind it is, as it were, a betrayal of the sanctity involved in the relation of Patient and Physician Assume such ground and follow accordant treatment, and abuse will creep in, public faith will be unsettled, and a long retinue of evils succeed.

We do not apprehend the ideas are at all new to the experienced practitioner, but he very wisely keeps such knowledge somewhat in the background, and by no means converts it into a vortex, swallowing up all other ideas of cause of disease, or modes of treatment. The statistics are not sufficiently broad to be as yet satisfactory, but the indications are certainly in favor of the theory. Such being the case, the question at once resolves itself into one of a great moral import. If insanity in woman be in the majority of cases caused by some disturbance of the *reproductive organs*, it is quite as much a theme for the moralist as for the medical man. We do not accede the point that this is the case with one sex more than with the other; if men seem to be more immediately made insane by intellectual pursuits, by lack of the like stimulus, by domestic infelicity, or commercial misfortunes, the same causes that are supposed by Dr. Storer to be nearly universal in producing mental alienation in women, may lie undiscovered in the background in men. The brain may yield only a sympathetic indication in the one case as in the other.

It is true, in the woman the process of reproduction is protracted, complicated, and of a more disturbing tendency, yet we believe that all the processes of nature are so handsome, wholesome, and so made up of delights and compensations, that to a womanly mind, a healthful organization, and sound spiritual instincts, these disturbing causes are not only neutralized, but converted into a source of enlightened happiness. It is the perversion of what is just and beautiful in human organization that leads to sorrow, insanity, and death, not the natural exercise thereof. To a healthful woman maternity is a natural and wholesome instinct. She should marry, expecting child-bearing to follow, just as much as her love lends dignity and purity to the marital relation. If she is unprepared for this result, let her not marry. There is a terrible significancy in the somewhat coarse saying of Sterne, in speaking of a woman past the prime of life, who had entered the marriage relation. He said, "How a woman past child-bearing can ask the blessing of God upon her concupiscence is past my comprehension."

"Guard thy heart with all diligence, for out of it are the issues of life." We are not altogether of the earth, earthy. If men and women were no better than the beasts that perish, the abuse of what should be holy in our organization would not be followed by that terrible scourge, insanity. Bestial lives would be succeeded by bestial death, not by a foretaste of spiritual death in the eclipse of the mental faculties. "Know ye not that your bodies are the temples for the Holy Ghost to dwell in?" and who shall dare profane this holy temple, by unhallowed practices, by "strange fire" upon its altar, by ill-regulated passions, inordinate desires, and sensual evasions of its predestined laws? If insanity be on the increase, so are the vices, which our Author asserts to be the cause. It is the utter, entire reform in Press, Pulpit, and Social Life, that is now demanded, more than Asylums, Hospitals, and Prisons.

Look in the advertisements of our papers, look at the "personals," look at the police reports, and no other testimony is needed to prove the truth of the wide-spread and open immorality pervading all classes. "What is the worst person in the world?" asked the great moralist, Johnson.

"I suppose a person without *conscience*," some one replied.

"Or without *shame*, which I suppose means the same thing," answered Sir Joshua Reynolds, the plausible surfaceman.

"How can you say that?" asked Johnson, "when *conscience* refers to God, and *shame* only to man?"

It would seem that conscience and shame also are fast going by the board, if one may judge of what one sees and hears.

There can be no doubt that many cases of insanity may be traced to the unnatural lives which many married women live, whose repugnance to maternity becomes in itself almost an insanity. Such women should not marry at all. There is an indecency in the steps they take to avoid a natural consequence of the marriage relation, which in itself involves paternity and maternity. Let men and women form copartnerships for business and social intercourse, if they will, but do not substitute marriage for this. Children keep the world always young, and the mother of children is a nobler, sweeter, more gracious and appropriate representative of a true womanhood, and younger looking also, than the cadaverous, mawkish, discontented woman, who becomes prematurely wrinkled and old, by her state of conjugality unreflected by the graces of maternity. Madame Bonsparte, the Mother of Wesley, Elizabeth Fry, Mary Washington, and others that might be named, with their dozen or more of children, were wise and beautiful representatives of the sex. Their clear heads, and wholesome bodies were in no danger of insanity. Men and women who obey the laws of life are rarely troubled with abnormal states of the mind, but while our literature is of the exciting kind that now prevails, and all the vices of vanity, and ostentation incite our youth to extravagance and crime, it is hopeless to expect that our hospitals, asylums, and prisons will be free of their victims.

The cases cited by our author are melancholy in the extreme, and show conclusively that the brain may be apparently healthy, and yet give utterance to the most appalling language—the images, and the language of the

Digitized by Google

foul spirits that wait upon impure passions, and misdirected impulses.

There is no reason why a medical writer should not be clear and luminous in style. If writing for the initiated much technicality may be observed, but in proportion as this prevails the work is spoilt for the common reader; but there is no excuse for cumbersome phraseology, and bungling, inverted paragraphs, of which a tyro in literature would scarcely be guilty, as in the work before us.

I Can. I Can't. I'll Try. New York: Leavitt, and Allen Brothers. Illustrated.

A series of stories illustrative of the faults, trials, difficulties, and triumphs of a Christian, cultivated household. There is sufficient contrast of character to afford a lively interest, from the staid, discreet Daisy to the dashing Nelly—the pious Arthur to the adventurous Charles; and the petted Lucy comes in for a share, as indicating that the most loving character can become detestable by suspicion and distrust, and that the warmest affections of the heart, unless regulated by the principles of justice to others, and self-sacrifice in ourselves, become inverted, and a fountain of gall and bitterness. Daisey's wise "never mind" to Lucy is very apposite, and her modest "I'll try," full of pith and moment. The series are well adapted to Sabbath-school, as well as home reading.

How Could He Escape? A Temperance Tale. By Mrs. Julia McNair Wright. Published by The National Temperance Society, 172 William Street, New York.

This is an exceedingly well-written story, with pregnant thought and wholesome ideas, designed to advance the cause of Temperance. The character of Mary Devenport, the woman of sound morals and lack of religion, or spiritual ideas rather, stands forth like a piece of rude, handsome sculpture. Perhaps we should not sympathise with the author's views in this relation, but it was needful to the catastrophe of the story, that an author thus mentally constituted should make her own standpoint, and draw her own inferences; though we much doubt if a young man, subjected to the wholesome training of Guy Devenport, would so lamentably fall, unless he had from some cause inherited the poisonous appetite, and its concomitant *insane* fruitage. The work is interesting and vivid, if not philosophic.

Life, and Alone. Boston: Lee & Shepard.

A weird, disjointed, disagreeable, improbable story, the staple of which is school-day life, and Italian perfidy and vindictiveness. The scene is laid partly in Italy, mostly in England. Its most prominent and most revolting feature is, that in the process of family troubles and concealments, a brother and sister become entangled in a warm attachment for each other, and but for timely disclosures would have perpetrated an *incestuous* marriage.

The public mind has been made too familiar by certain publications with these horrible ideas, and however glossed over by invented circumstance in a work of fiction, and however concealed by fine-spun sentiment, they are no legitimate subject for literary art. No publisher is justified who throws such poison before the public mind, corrupting as it is to the sources of thought, and casting suspicion upon the holiest sentiments of the human soul. That such enormities have existed is no excuse for familiarising them to the brain; rather are they to be met with that silence which best expresses human execration.

THE PUBLISHERS' DEPARTMENT.

Facts for the Ladies.—I beg to state that I have used my Wheeler & Wilson Sewing Machine, in family sewing, *fourteen years*, without even the most trifling repairs, and it is in so good condition that I would not exchange it for your latest number, (now upwards of 360,000). One needle served me more than a year for fine sewing.

New York. Mrs. ANNE WARNER.

I have used my Wheeler & Wilson Sewing Machine for the last twelve years, and it had had already been in use two years when I bought it. I have had it doing all kinds of shop-work, from seven in the morning until six and sometimes ten o'clock at night, continually going. I have never sent it for repairs, and I think it is now in as good order as when it came out of your store, and I would not exchange it for any you have.

Staten Island. HENRY WRIGHT.

Books C. O. D.—Parties who order books will find it cheaper to send the money with the order, than to order C. O. D., as in this case the cost of collection will be added to the bill. This is considerable, when the money has to be returned from a distant point. Those who order C. O. D., should send one-fourth the value of the order in advance to insure prompt attention.

Interesting to Ladies.—I have owned and used a Grover & Baker Sewing Machine for eight years, during which time there have been no repairs needed on it, which I could not do myself. I can stitch, hem, frill, braid, puff, cord, tuck, bind, hem-stitch, and embroider on it, with great ease and facility. I have used the Wheeler & Wilson, and other machines. I can do a greater variety of work on the Grover & Baker than on either of the others, and the machine is much more simple and easily managed.

MISS C. H. YOUNG.

Ravenna, O.

Job Printing.—We are prepared to execute in neat, substantial styles, various kinds of Job Printing: such as Pamphlets, Circulars, Envelopes, Billheads, Letter-heads, Cards, Labels, Small Handbills, etc., at the same rates as in all first-class New York printing establishments. Stereotype work done to order.

Talks to My Patients.—Mrs. Gleason's book, advertised and noticed elsewhere, is meeting with a good sale. We can supply it to subscribers and agents in any quantity. A good many ladies are selling it with success. We should like to have in every town a good Lady Agent. For particulars of agency, write to the Publishers.

Digitized by Google

CLUBBING

WITH OTHER MAGAZINES.

We will send *THE HERALD OF HEALTH* and any one of the following Journals one year for the sum below mentioned. The order and money for both must be sent at the same time.

THE HERALD OF HEALTH, $2 00, and

Atlantic Monthly	$4 00 for	$5 00
Harpers' Monthly	4 00 for	5 00
Harpers' Bazar	4 00 for	5 00
Harpers' Weekly	4 00 for	5 00
Phrenological Journal	3 00 for	4 00
Our Young Folks	2 00 for	3 50
New York Tribune	2 00 for	3 35
American Agriculturist	1 50 for	3 00

Cash Clubbing Rates.

1 Subscriber	$ 2 00
4 Subscribers	7 00
10 Subscribers	15 00
25 Subscribers	25 00

Single Numbers, 20 *cents.*

Address WOOD & HOLBROOK, Publishers,
15 Laight Street, New York.

A Good Sewing Machine is given free for a club of 30 subscribers and $60. This premium is very popular. If there is a poor, deserving family in your neighborhood help it to get a good sewing machine by subscribing at once. Perhaps your minister's wife wants one. If so, help her to get it, by helping her to get up a club. The Empire is one of the best sewing machines in use, and we are sure that it will give you good satisfaction.

Advertisements.

☞ ADVERTISEMENTS of an appropriate character will be inserted at the following rates: Short advertisements, 25 cents per line; thirteen lines, for three or more insertions without change, 20 per cent. discount; one-half column, $12; one column, $22; one page, $40. All advertisements must be received at this office by the 5th of the month preceding that on which they are to appear.

Saratoga Springs Remedial INSTITUTE.—New improvements, in modern and elegant style. DRS. STRONG, its Proprietors, are graduates of the Medical Department of New York University, and give special attention to **Lung, Female,** and **Chronic** Diseases.
Among its *special appliances* are the Turkish, Sulphur, Air, Russian, and Electro-Thermal Baths, Equalizer or Vacuum Treatment, Swedish Movement Cure, Hydropathy, etc. etc.
Indorsed by Bishop Simpson, Professor Taylor Lewis, L. L. D., Rev. T. L. Cuyler, D. D., etc. etc.
For description of our appliances, diseases treated, references, etc., *send for circular.* a-tf

"Amer. School Inst.," founded 1855, *Is a reliable and practical Educational Bureau*
To aid those who want well-qualified Teachers;
To represent Teachers who seek positions;
To *give* parents information of good Schools;
To sell, rent, and exchange School Properties.
Sixteen years have *proved* it efficient in securing "THE RIGHT TEACHER FOR THE RIGHT PLACE."
J. W. SCHERMERHORN, A. M., Actuary,
Xf-11t 14 *Bond Street, New York.*

Are You Going to New York

If so, and you wish to stop where you can *FEEL AT HOME*, and get *GOOD FOOD HEALTHFULLY PREPARED*, and *PLENTY OF IT*,

Go to the Hygienic Institute,

Nos. 13 *&* 15 *Laight Street.*

Horse Cars pass near the door to all parts of the city, making it a very convenient stopping place for persons visiting New York, either upon business or pleasure. Open at all hours, day and night. Board by the day or week, at reasonable rates. Rooms can be secured in advance by writing. Address

WOOD & HOLBROOK, Proprietors,
Nos. 13 & 15 Laight Street, New York.

500 Volumes in One.

AGENTS WANTED

FOR THE

Library of Poetry and Song,

Being Choice Selections from the Best Poets,

ENGLISH, SCOTCH, IRISH, AND AMERICAN,

With an Introduction by

WILLIAM CULLEN BRYANT.

Under whose critical supervision the volume was compiled

The handsomest and cheapest subscription book extant. Over **800** pages, beautifully printed, choicely illustrated, handsomely bound. *A library of over* **500** *volumes in one book*, whose contents, of no ephemeral nature or interest, will never grow old or stale. It can be, and will be, read and re-read with pleasure, as long as its leaves hold together.

"A perfect surprise. Scarcely any thing at all a favorite, or at all worthy of place here, is neglected. It is a book for every household."—*N. Y. Mail.*

"*We know of no similar collection in the English language which, in copiousness and felicity of selection and arrangement, can at all compare with it.*"—*N. Y. Times.*

Terms liberal. Selling very rapidly. Send for Circular and Terms to J. B. FORD & CO., **39 Park Row, New York.** a-Xlt

Slow Horses Made Fast AND FAST HORSES MADE FASTER.—A complete and practical guide for increasing speed, including the "secrets" sold at high prices, exposures of falacious theories and faulty appliances. With full and reliable expose of the secrets and tricks of jockeys, and much other matter invaluable to all who have any thing to do with horses. Numerous engravings.
"A series of very interesting and instructive articles."—ROBERT BONNER in New York Ledger.
Only Fifty Cents of Booksellers or by mail.
JESSE HANEY & CO., 119 Nassau Street, N. Y.
xm-2t

Ladies desiring to procure a FIRST-CLASS Sewing Machine against easy monthly instalments, may apply to 294 Bowery, N. Y. a-6t

Digitized by Google



A CHICAGO WEEKLY OF CHOICE, STIRRING, AND ELEVATING LITERATURE for old and young. A friend to all true religion and reform. Not sectarian in religion or politics. A paper for the people. Should be in every family in the land. Contains sermons of London's great preacher, C. H. Spurgeon. Contains latest news and market reports up to time of going to press One of the cheapest and liveliest papers published. Only One Dollar a year; Six Months, 50 cts.; Three Months, 25 cts. Publisher of Game of "SOCIETY, OR THE SOCIAL CONFLICT BETWEEN GOOD AND EVIL." Address

Xn-6t E. C. EGGLESTON, Editor Life Boat.

New Views of Temperance!

HEAR BOTH SIDES!!

ALCOHOL AS MEDICINE, and how its use affects the Temperance cause.

A DISCUSSION between an M. D. of Newark, Ohio, and Thos. F. Hicks, M. D.

TESTIMONIALS.

"It is emphatically *a book for the times*, and should be read by every one, especially, Temperance men. We advise our readers to send for it."—*The Nation* (Boston).

"It should be in the hands of every thinking man and woman. Every Good Templar Lodge and every Temperance Organization should be supplied with copies."—*Temperance Wreath.*

"This discussion is worth a wide circulation."—*Phrenological Journal.*

"A close, incisive argument followed by a strong array of weighty testimony from prominent authors.... Invaluable to thinkers, writers, and speakers as a book of reference."—*Temperance Press.*

"The subject is of great importance. More so than is generally appreciated even by Temperance advocates; and the form in which it is here presented, that of debate, is calculated to make its discussion interesting. We commend it to the friends of Temperance."—*Indiana Radical.*

Price 25 cents, post-paid. Five copies for One Dollar. Address T. F. HICKS, M. D., Syracuse, N. Y. m-3t

Cheapest and Best in the

COUNTRY FOR THE PRICE!—Every Boy and Girl, every Parent, every Sunday-School, Day-School, and Temperance Society should subscribe for

The Young People's Helper,

a Monthly Paper for American Boys and Girls; 16 large pages, illustrated; 50 CENTS A YEAR. Stories, music, poetry, dialogues, puzzles, etc., in every number. Eight years established. The best paper parents can give their children. Pure, fresh, original, lively, vigorous, instructive, and entertaining. *Two-thirds the subscription price in premiums!* Every body sends for it. Samples free. AGENTS WANTED everywhere.

Z. POPE VOSE, PUBLISHER,
a-3t Rockland, Maine.

Ventriloquism—Best Book

at *lowest* price. A real self-instructor, with numerous examples for practice and exhibition, also tells how to make and use the famous Magic Whistle. Only 15 cts. of Booksellers or by mail. JESSE HANEY & CO., 119 Nassau St., New York. "The boys have so often been humbugged by advertised instructions in ventriloquism that they will be thankful to Mr. Haney for furnishing at such trifling cost a book from which the art can really be fully and easily learned by any one."—*N. Y. Eve. Free Press.* xm-2t

See Book Advertisements,

read them carefully, and then ask yourself if you can use your money to better advantage than to purchase, read, and become possessed of information highly important to your well being for ever.

WOOD & HOLBROOK, 15 Laight St., N. Y.



The Bee-Keepers' Journal

and National Agriculturist.



☞ **Sample Copy sent free;** OR THREE MONTHS of 1870 FOR TEN CENTS; or FOUR MONTHS FREE to new subscribers for 1871, and TWO FINE ENGRAVINGS, or choice of a BOOK, from "BOOK LIST," Free to each subscriber.

The Journal and National Agriculturist is a large Illustrated Double-Quarto Forty-Column Paper, containing Five Departments, viz.: BEE-KEEPING, AGRICULTURE, HOME and FIRESIDE, LADIES' and YOUTHS' DEPARTMENTS, making it the CHEAPEST and BEST AGRICULTURAL and FAMILY PAPER in AMERICA, for only $1 A YEAR.

WANTED--Agents everywhere, Old or Young, Men or Women. Five Commissions given in the five branches of our business. Two ten per cent. allowances to pay traveling expenses. Most BEE-KEEPERS and FARMERS will join a club for the JOURNAL, at $1 a year, with THE INDUCEMENTS OF FOUR MONTHS FREE, and TWO PORTRAITS or A BOOK included, and yet we pay agents a LIBERAL COMMISSION, in cash or premiums, in every branch.

ONE YEAR FREE to the agent sending us THREE new subscribers; or free and valuable premiums from the "PREMIUM LIST," (or 25 per cent. cash) to agents sending clubs of ten or more subscribers; or ONE YEAR FREE with the PHRENOLOGICAL JOURNAL and PACKARD'S MONTHLY (price $3), for $3; or the RURAL NEW YORKER ($3) for **$3 25;** or the AMERICAN AGRICULTURIST ($1 50) for **$2;** or with any other VALUABLE PAPER, as per our Clubbing List, with the principal papers in the United States. **100 Papers at Club Rates.** All explained in Sample Copy, Free. Address

a-X1t H. A. KING & CO., 240 Broadway, New York.

Healds' Hygeian Home.

WILMINGTON, DELAWARE.

DRS. PUSEY and MARY H. HEALD opened their new institution for the Hygienic treatment of invalids (without medicine), JAN. 1, 1871.

Dr. M. H. Heald (formerly Dr. York) was widely known to Hygienists during several years' practice at Our Home, Dansville, N. Y. Dr. P. Heald has also had large experience in the Hygienic system of treatment.

The building, beautifully located in the suburbs of a most delightful and healthful city, near the romantic and historic Brandywine, and overlooking the Delaware River, is entirely new, and was planned expressly for a "Cure." Every apartment is warmed by *Steam-heated Air*, and *thoroughly ventilated*, thus giving a *pure* atmosphere, free from all gas and dust, and insuring the comfort and welfare of winter guests. The best appliances provided for Water and Sun Baths, Swedish Movements, etc. Mrs. H. will devote especial attention to lady patients, giving them the benefit of kindly sympathy as well as of experience and skill. The Hygienic diet supplied, will include the choicest fresh and canned fruits and vegetables, and varied farinaceous preparations.

Railroad communication North, South, East, and West.

☞ For Circulars, etc., address, with stamp, HEALDS' HYGEIAN HOME, Wilmington, Delaware. a-1t

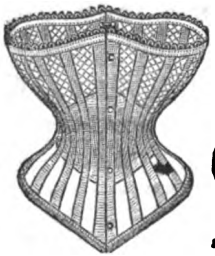
Digitized by Google

COLGATE & CO.

RECOMMEND THEIR NEW

"RONDELETIA" Toilet Soap.

Sold by Dealers in Perfumery and Fancy Goods and First-class Grocers.



Fanning's Patent

KID FITTING

DEMI-SKELETON

CORSET.

The most easy, graceful, and sensible Corset ever introduced.

Sample Corsets sent by mail, prepaid, on receipt of Two Dollars. For circular, prices, etc., address

WORCESTER SKIRT CO., Worcester, Mass.

FRESH GARDEN AND FLOWER, FRUIT, HERB, TREE & SHRUB, and EVERGREEN SEEDS, postpaid by mail. 25 different packets of either class for $1·00. The six classes $5 00. Catalogues gratis. Agents wanted. Seeds on commission. B. M. WATSON, Plymouth, Mass.

REDUCTION OF PRICES

TO CONFORM TO

REDUCTION of DUTIES.

GREAT SAVING TO CONSUMERS

BY GETTING UP CLUBS.

☞ Send for our New Price List, and a Club Form will accompany it, containing full directions—making a large saving to consumers and remunerative to club-organisers.

The Great American Tea Co.

31 & 33 Vesey Street,

P. O. Box 5643. NEW YORK.

A Great Offer HORACE WATERS 481 Broadway N.Y., will dispose of One Hundred PIANOS, MELODEONS, and ORGANS of six first-class makers, including Waters', at extremely low prices, FOR CASH, DURING THIS MONTH, or will take a small portion cash and balance in monthly or quarterly instalments.

J. J. H. GREGORY'S

SEED CATALOGUE.

Having in former years introduced to the public many new and rare vegetables, I am again prepared to supply Vegetable and Flower Seed of the purest quality. My Annual Catalogue, which abounds in fine engravings, contains not only numerous novelties, but all the standard vegetables of the farm and garden (over one hundred of which I grow on my three seed farms), and a carefully selected list of flower seed. Catalogues free to all.

All my seed is sold under three warrants—

1st: *That all money sent shall reach me.*

2d: *That all seed ordered shall reach the purchaser.*

3d: *That my seeds shall be fresh, and true to name.*

JAMES J. H. GREGORY, Marblehead, Mass.



THEA-NECTAR

IS A PURE

BLACK TEA

with the Green Tea Flavor. Warranted to suit all tastes. For sale everywhere. And for sale wholesale only by the *Great Atlantic and Pacific Tea Co.*, 8 Church St., New York. P. O. Box 5506. Send for Thea-Nectar Circular.

THE

FLORENCE

SEWING MACHINE CO.

Have removed their NEW YORK Office to

39 Union Sqr., Broadway

Agencies wanted where not already established.

Illustrated descriptive catalogue of Flower and Vegetable Seeds, 100 pages Mailed for 25 cents! Henderson & Fleming 67 Nassau St. New York

$250 A MONTH, with Stencil and Key-Check Dies. Don't fail to secure Circular and Samples, free. Address S. M. SPENCER, Brattleboro, Vt.

$5 TO $10 PER DAY. MEN, WOMEN, BOYS and GIRLS who engage in our new business make from **$5 to $10 per day** in their own localities. Full particulars and instructions sent free by mail. Those in need of permanent, profitable work, should address at once. GEORGE STINSON & Co., Portland, Maine.

WM. J. CARLTON'S

LISTS OF

Advertising Mediums.

150 Religious Papers.
50 Agricultural Papers.
15 Literary and Illustrated Papers.
30 Magazines.
25 Family Secular Weeklies.
30 Secular Papers around New York.

Any of the Above Lists Sent on Application.

Address WM. J. CARLTON,
Advertising Agent,
39 Park Row, New York.

Actual vs. Short Weight.

Aside from the impure substances from which are made the majority of Baking Powders, a large proportion are SHORT OF THE WEIGHT represented upon the package. We not only claim that DOOLEY'S YEAST POWDER is free from any injurious substances and that each package contains FULL WEIGHT, but that the quantity required to produce the desired result in the kitchen is from twenty five to fifty per cent. less than those of ordinary manufacture. Manufactured by DOOLEY & BROTHER, 69 New St., New York, and for sale at retail by all respectable Grocers.

TO THE WORKING CLASS.—We are now prepared to furnish all classes with constant employment at home, the whole of the time or for the spare moments. Business new, light and profitable. Persons of either sex easily earn from 50c. to $5 per evening, and a proportional sum by devoting their whole time to the business. Boys and girls earn nearly as much as men. That all who see this notice may send their address, and test the business, we make this unparalleled offer: To such as are not well satisfied, we will send $1 to pay for the trouble of writing. Full particulars, a valuable sample which will do to commence work on, and a copy of *The People's Literary Companion*—one of the largest and best family newspapers published—all sent free by mail. Reader, if you want permanent, profitable work, address E. C. ALLEN & CO., AUGUSTA, MAINE.

Digitized by Google

"*The leading educational journal of the country.*"

The National Teacher.

Subscription Price, $1.50 a Year.

THE NATIONAL TEACHER is a national edition of THE OHIO EDUCATIONAL MONTHLY, and is designed for general circulation. It is devoted to the educational interests of the country at large, and its miscellany is a valuable record of school progress in the different States.

THE NATIONAL TEACHER is strictly an *educational* journal. It aims to elucidate the elementary and fundamental principles of education; to present improved methods of instruction and discipline; and to advocate needed reforms in school organization and management. Its corps of contributors contains many of the ablest and most practical educational writers in the country, and their contributions are devoted to the discussion of those live educational questions which are of practical interest to teachers and school officers of all grades.

N. B.—No pains will be spared to secure for its pages the most advanced views and the ripest experience of the country in school instruction and management.

Each number of THE TEACHER will contain about Forty Pages, exclusive of advertisements. The first volume, beginning October, 1870, will end with the December number, 1871. All who subscribe before the edition of the first three months (October, November, and December, 1870,) is exhausted, will receive Fifteen numbers, making a volume of about Six Hundred Pages, and all for $1·50.

*** An extra copy will be sent one year gratis for every five subscriptions at $1·50 each. No club terms, and no person is authorized to receive subscriptions at less than $1·50 each. Special terms will be allowed agents, on application to the Publisher.

☞ A sample copy will be sent free on the receipt of a stamp to prepay postage.

Address the Editor and Publisher,

E. E. WHITE,
Columbus, Ohio.

Xa-1t

THE INDEX,

A WEEKLY PAPER DEVOTED TO

FREE RELIGION,

PUBLISHED BY THE INDEX ASSOCIATION, AT TOLEDO, OHIO.

TWO DOLLARS A YEAR.

THE INDEX accepts every result of science and sound learning, without seeking to harmonize it with the Bible. It recognizes no authority but that of reason and right. It believes in Truth, Freedom, Progress, Equal Rights, and Brotherly Love.

The transition from Christianity to Free Religion, through which the civilized world is now passing, but which it very little understands, is even more momentous in itself and in its consequences than the great transition of the Roman Empire from Paganism to Christianity. THE INDEX aims to make the character of this vast change intelligible in at least its leading features, and offers an opportunity for discussions on this subject which find no fitting place in other papers.

FRANCIS ELLINGWOOD ABBOT,.....*Editor.*

OCTAVIUS BROOKS FROTHINGHAM, THOMAS WENTWORTH HIGGINSON, WILLIAM J. POTTER, RICHARD P. HALLOWELL, J. VILA BLAKE, WILLIAM H. SPENCER,
Editorial Contributors.

CASH PREMIUMS.

For 75 Names.....50 Dollars in Greenbacks
For 50 Names.....25 Dollars in Greenbacks
For 25 Names.....15 Dollars in Greenbacks
For 10 Names..... 5 Dollars in Greenbacks
For less than 10 Names, a Cash Commission of Twenty per cent.

INDUCEMENTS.—We would invite special attention to the very liberal Cash Premiums we offer above.

Whoever collects $150.00 for 75 subscriptions, is authorized to retain $50.00, forwarding $100.00.

Whoever collects $100.00 for 50 subscriptions, is authorized to retain $25.00, forwarding $75.00; and so on.

Now it can not be very difficult, in a town of any considerable size, to get twelve subscriptions a day for one week, if the agent uses ordinary business energy. Yet he would be paid about $8.00 a day—as much as his representative in Congress receives for work not always, we fear, so useful!

"A word to the wise." Who will canvass for THE INDEX, and at the same time earn as much as the Hon. Mr. ——?

N. B.—*Names need not all come from one postoffice.* We will send the paper wherever directed, and let the names count as clubs.

N. B.—The subscription price of THE INDEX is TWO DOLLARS a year in each and every case, *invariably in advance.* Address

FRANCIS E. ABBOT,
Xa-1t LOCK BOX 38, TOLEDO, OHIO.

The Illustrated Excelsior

MAGAZINE has been reduced from $2.50 to $1.00, and is now ONE OF THE CHEAPEST IN THE WORLD. The illustrations alone are perhaps worth more than the cost, and the beautiful STEEL ENGRAVING of Evangeline, postage, etc. being sent, is GIVEN. Size of paper on which the steel engraving is printed is 2 feet by 19 inches. The Magazine contains STORIES, PICTURES, PUZZLES, MUSIC, A LADY'S DEPARTMENT, with illustrations of ladies patterns; a YOUTH'S DEPARTMENT, etc. etc.

I hereby specially offer the Magazine for ONE YEAR, also this splendid STEEL ENGRAVING, for the regular subscription price, $1 00, and 8 cents for postage and packing of engraving on roller. Sample copy 10 cents.

Address the Publisher, C. L. VAN ALLEN,
Xf-4t 171 Broadway, New York.

THE ELMIRA WATER CURE WILL be re-opened May 1st for the reception of patients, being under the general care of Dr. S. O Gleason and Mrs. R. B. Gleason, M. D., assisted by Miss L. Z. Brooks. Address for Circular, with Stamp, S. O. GLEASON, M. D., Water Cure, Elmira, New York. my-tf

Digitized by Google

Empire Shuttle Sewing Machine

Patented Feb. 14, 1860, and Sept. 18, 1866.

Received the First Prize at the Great Fair of the American Institute, in New York, Oct. 26, 1867, and highest premium for the Best Manufacturing Machine at the Paris Exposition, July, 1867.

No. 1, FAMILY MACHINE.

This machine is constructed on a new principle of mechanism, possessing many rare and valuable improvements, having been examined by the most profound experts, and pronounced to be simplicity and perfection combined.

The following are the principal objections urged against Sewing Machines:

1. Excessive fatigue to the operator.
2. Liability to get out of order.
3. Expense, trouble, and loss of time in repairing.
4. Incapacity to sew every description of material.
5. Disagreeable noise while in operation.

The Empire Sewing Machine is exempt from all these objections. Address the EMPIRE SEWING MACHINE CO., 294 Bowery, N. Y.

For 35 Subscribers and $70,

to THE HERALD OF HEALTH, we will send an Empire Sewing Machine worth $60.

WOOD & HOLBROOK.
f-tf 15 Laight Street, New York

Fresh Garden, Flower, Fruit,

Herb, Tree and Shrub, and Evergreen Seeds, prepaid by mail, with directions for culture. Twenty-five different packets of either class for **$1.00**. *The six classes* **$5.00.**

20,000 lbs. Evergreen and Tree Seeds; Apple, Pear, Cherry, &c.; Grass Seeds; Beet, Cabbage, Carrot, Onion, Squash, Turnip, and all Vegetable and Flower Seeds, in small or large quantities; also Small Fruits, Stocks, Bulbs, Shrubs, Roses, Verbenas, &c., by mail, prepaid. New Golden Banded Japan Lily, 50c. Priced Descriptive Catalogue sent to any plain address, gratis. Agents wanted. Wholesale List to Agents, Clubs and the Trade. Seeds on commission.

B. M. WATSON, Old Colony Nurseries and Seed Warehouse, Plymouth, Mass. Established in 1842. m-2t

"Bradbury Piano."

☞ From personal acquaintance with this firm we can indorse them as worthy of the fullest confidence of the Christian public. We are using the Bradbury Pianos in our families, and they give entire satisfaction.

Persons at a distance need feel no hesitation in sending or their illustrated price list, and ordering from it.

MRS. U. S GRANT, Washington, D. C.
S. P. CHASE, Chief-Justice, Washington, D. C.
D. D. PORTER, Vice-Admiral, U. S. Navy.
M SIMPSON, Bishop M.E. Church, Philadelphia.
S. HAWK, St. Nicholas Hotel, New York.
THEODORE TILTON, editor of The Independent.

The best manufactured; warranted for six years Pianos to let, and rent applied if purchased; monthly installments received for the same. Old pianos taken in exchange. Second-hand pianos at great bargains, from $50 to $200. Send for illustrated Price List.

F. G. SMITH & CO.,
late Sup't for and successor to Wm. B. Bradbury,
m-1y 427 Broome Street, New York.

Hunting, Trapping, and

FISHING MADE EASY—New, reliable, and gives more matter than any dollar book, *double* amount of any 25ct. book, including preparation and use of bait, traps, &c, all modes of preserving and preparing skins and furs, and much other practical and valuable information—just what is wanted. Price *lower* than *any other*; *none* (even at $2 or $5) *more* reliable; none at less than $1 *as* reliable and complete. Examine at any Bookstore and prove. Only **20** cts. of Booksellers or by mail.

JESSE HANEY & CO., 119 Nassau Street, N. Y.
xm-2t

List of Articles for Sale by

WOOD & HOLBROOK, No. 15 Laight Street, New York

BACON'S HOME GYMNASIUM, with book of explanation and 100 cuts, $10.

———Trapese Adjustment, with 32 illustrations, $3 50.

———Swing Adjustment, for children, $1 50.

Each part sold separately. The whole, $15.

This is the most valuable piece of Gymnastic apparatus for home use ever invented. Any one can use it. For weak chests, backs, and sides its use is the best remedy known. A half hour's use of it daily would prevent and cure many cases of dyspepsia and consumption.

SYRINGES.—The best styles in market. Usual style, by mail, $3. For children, with Eye and Ear Douche for sores, etc., $2. The Spray Syringe, $5. The Trade supplied.

BOUND VOLUMES.—We still have a few Bound Volumes for 1863, 1864, 1867, 1868 and 1869 for sale, postpaid, by mail, for $3 Soon it will be impossible to obtain them.

HERALD OF HEALTH COVERS—so that every one can bind their numbers and preserve them neatly. 50 cents.

BREAD PANS—for making light, aerated Bread without soda, saleratus, yeast, or other poisonous compounds. Only by Express, $1 25.

HAND MILLS—for cracking Wheat, making Rusk, Hominy, etc. By Express, $3.

BEST GRAHAM CRACKERS—per barrel, $10 Half barrel—38 lbs., $6.

ELECTRIC MACHINES—Kidder's, best Manufactured, $20 to $22.

FILTERS.—Kedsie's, Family Size, $10 50.

Hygienic Home Water Cure,

637 California Street,
SAN FRANCISCO, Cal.

This is by far the most extensive and complete Health Institute on the Pacific Coast, based strictly on the Hygienic principles of treatment.

Dr. Smith has built and arranged the Home with special reference to its supplying the place in San Francisco that the Laight Street House and Hygienic Institute furnishes to the friends of Health Reform in New York city. The Medical Department is ample for the cure of all who may desire hospitalities, and the Boarding Department is well arranged for the accommodation of the friends of Hygiene throughout the coast. All are cordially invited to visit our healthful Home.

BARLOW J. SMITH, M. D.,
Consulting Physician.
R. S. MACBETH, M. D.,
aug-tf Attending Physician.

BOOT AND SHOE STORE, No. 415

Canal Street. Ladies', Gentlemen's, Boys', Misses' and Children's Boots, Shoes and Rubbers, in all their varieties, always on hand. Work made to order, and Repairing done on the shortest notice and reasonable terms.

DAVID WALKER,
n-1y No. 415 Canal, corner Sullivan Street.

D. H. PRIME, *Printer, at the Hygienic Institute, N. Y.*

Digitized by Google

INSTITUTE DEPARTMENT.

☛ In this Department we purpose giving, from month to month, a description of the various agencies we employ in the treatment of disease, the reasons why we use them, their effects in different diseases, occasional reports of cases, and various items of interest in regard to the institution.

We Never Give Poisonous Drugs!



Poisons Never Cure Disease!

THE NEW YORK HYGIENIC INSTITUTE,

Nos. 13 & 15 LAIGHT STREET, NEW YORK CITY.

A. L. WOOD, M. D., Physician.

The objects of this institution, which has been in successful operation for more than twenty years, are two-fold, viz.
1. The treatment and cure of the sick without poisoning them, by Hygienic agencies alone.
2. To furnish a pleasant, genial Home to friends of Hygiene throughout the world, whenever they visit this city.

CURE DEPARTMENT.

Thousands of invalids have been successfully treated at this institution during the past twenty years, and its fame extends wherever the English language is spoken. Its appliances for the treatment of disease without the use of poisonous drugs are the most extensive and complete of any institute in America. They comprise the celebrated

Turkish Baths, Electric Baths, Vapor Baths, Swedish Movement Cure,

MACHINE VIBRATIONS, the varied and extensive resources of the WATER CURE, LIFTING CURE, MAGNETISM, Healthful Food, a Pleasant Home, etc., etc. Particular attention is given to the treatment of all forms of CHRONIC DISEASE, especially of Rheumatism, Gout, Dyspepsia, Constipation, Torpidity of the Liver, Weak Lungs and Incipient Consumption, Paralysis, Poor Circulation, General Debility, Curvature of the Spine, Scrofula, Diseases of the Skin, Uterine Weaknesses and Displacements, Spermatorrhea, etc. Any one wishing further information should ☛ *SEND FOR A CIRCULAR,* ☚ containing further particulars, terms, etc., which will be sent free by return mail.

BOARDING DEPARTMENT.

We are open at all hours of the day and night for the reception of boarders and patients. Our location is convenient of access *from* the Railroad depots and Steamboat landings, and *to* the business part of the city. Street cars pass near the doors to all parts of the city, making it a very convenient stopping place for persons visiting the city upon business or pleasure. Our table is supplied with the Best Kinds of Food, Healthfully Prepared, and Plenty of it. In these respects it is unequaled. Come and see, and learn how to live healthfully at home. Terms reasonable.

Drs. WOOD & HOLBROOK, Proprietors.

Digitized by Google

A NEW CATALOGUE OF BOOKS

Published by WOOD & HOLBROOK, 15 Laight St., N. Y.

MINNESOTA AND ITS CLIMATE,

as adapted to Consumptives, Invalids, and all who wish to make the State a Home. By LEDYARD BILL, Author of "A Winter in Florida." Price $1.25, postpaid, by mail.

This delightful book, while a godsend to invalids and consumptives, will be found equally interesting to sportsmen and settlers, who would find a home in this far-famed State. It contains a beautiful view of Minnesota Falls, and also chapters on the climate of all those places which are most desirable as resorts for invalids, including Florida, Nassau, the Adirondacks, California, the White Mountains, etc. etc. This work, and the one on Florida should be in the hands of every one who wishes to find the best resorts for health.

A WINTER IN FLORIDA. By

LEDYARD BILL. With illustrations by Forbes, comprising views of the old city of St. Augustine, and the Natural Scenery and objects in Eastern Florida. Tourists, Sportsmen, Invalids, and all who would escape the rigors of a Northern Winter, or find a Home in a delightful clime, should read this book; so also those who would know all about the resources of the country, and its adaptation for Horticulture, Orange culture, and for cheap and desirable homes. It contains 250 pages. Price $1.25, by mail.

The author justifies the predictions of the climate, saying that it is so delightful that no disease can experience it without favorable effect.

SEXUAL PHYSIOLOGY. — This

work contains the latest and most important Discoveries in the Anatomy and Physiology of the Sexes; Explains the origin of Human Life; how and when Menstruation, Impregnation, and Conception occur; giving the laws by which the number and sex of offspring are controlled, and valuable information in regard to the begetting and rearing of beautiful and healthy children. With 80 fine engravings. *Agents wanted.* Send stamp for Circular. Price, by mail, $2.

It is high-toned, and should be read by the members of every family. As an evidence of its popularity, we may remark that Eleven Thousand Copies have been sold, and the demand is still unabated. If a copy of this work could be in the hands of every young man and woman, it would not only make them purer and better, but give them a knowledge all should possess.

PHYSICAL PERFECTION. — Con-

taining Chapter on Structure of the Human Body; the Perfect Man and Woman; the Temperaments; Laws of Human Configuration; Embryology; Childhood; Effects of Mental Culture; Moral and Emotional Influences; Social Conditions and Occupations; Effects of Climate and Locality; Direct Physical Culture; Practical Hygiene; Womanhood; the Secret of Longevity; the Arts of Beauty; External Indications of Figure, etc. etc. Beautifully Illustrated with 100 Engravings, and handsomely bound. Price, by mail, $1.25.

This work has been through many editions, and has given great satisfaction to thousands.

TALKS TO MY PATIENTS.—Hints

on Getting Well, and Keeping Well. By Mrs. R. B. GLEASON, M. D.

Women Agents wanted everywhere. Thousands of copies of the work are being sold. Full contents, and terms of agency sent on application. Price, by mail, $1.50.

This book is designed mainly for women, of all ages. It treats principally on the Diseases of Women, and includes chapters on Child Bearing, and the Care of Children. Harper's Magazine, in reviewing the work, says:

"Mrs. Gleason is able to say something to wives and to mothers which no man could say. There can be no difference of opinion about the value of the practical suggestions she affords, which are characterised by sound philosophy and clear, good, sterling common sense. We wish the chapter, "Confidential to Mothers," might be published as a tract, and sent to every mother in the land."

Mrs. Dr. Sayles, after reading it, says, "I would rather have written that book than been queen of the greatest empire on this small globe of ours!"

No woman can read it without being made wiser and better, and without being better qualified for all the duties of life.

MORAL, INTELLECTUAL, AND

PHYSICAL CULTURE; OR, THE PHILOSOPHY OF TRUE LIVING. By Professor F. G. WELCH, Superintendent of Physical Culture in Yale College. It contains over 400 pages, and is beautifully bound. Price, by mail, $2.25.

This book is the most perfect Encyclopedia of Gymnastic exercises of the most approved method in existence. It tells in plain language how to do every thing, from the building of a gymnasium and choosing apparatus to doing the exercises. The series of exercises with the Indian clubs alone, is the best ever published. Those who want a work on gymnastic culture should not fail to get this one. Dr. Dio Lewis says, "This is an admirable guide to physical culture."

THE TREE OF LIFE; or, HUMAN

DEGENERACY, ITS NATURE AND REMEDY. By ISAAC JENNINGS, M. D. Price, by mail, $1.50.

This work, prepared by a conscientious and philanthropical thinker, is full of interest to all who are seeking light on the important questions of which it treats. It is deeply religious in its tone, and contains a multitude of valuable hints on the treatment of diseases by natural means. Any person sending us a new subscriber for THE HERALD OF HEALTH and $2, shall have this work FREE.

THE NEW HYGIENIC COOK-

BOOK. By Mrs. M. M. JONES. This work contains several hundred recipes for cooking the most palatable and wholesome food without the use of deleterious compounds. Also, directions for Washing, Ironing, removing Stains, Canning Fruit, etc. Price 30 cents, postpaid. Several thousands have been sold.

WOMAN'S DRESS; with numerous

Engravings, showing how Woman's Clothing can be made beautiful, healthful, and comfortable. Price 30 cents.

Any or all of the above works sent free, by mail, on the receipt of the price.

ATTENTION! Buyers of Lands in Southern Minnesota. Climate, mild and proverbially healthy. Water, soft and pure. No fever and ague. Sold only to actual settlers, on easy terms. Any one wishing to purchase can obtain circulars and Maps, address ROBERT CAMPBELL, No. 153 Broadway, New York.

D. W. BRIGHAM, Agent, Bricksburg, N. J.

Digitized by Google

OLD SERIES—VOL. 51. NEW SERIES—VOL. 17.

BOSTON MEDICAL LIBRARY ASS. THE JUL 23 1894

HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE.

ADVOCATES

A Higher Type of Manhood—Physical, Intellectual, and Moral.

TO EDITORS. WILLIAM CULLEN BRYANT'S letter on pages 225-226. If copied, it should be credited to THE HERALD OF HEALTH. Will you not tell your Readers that we give each of our Subscribers for 1871 a $1.50 book entitled "PHYSICAL PERFECTION" Terms $2.00 a year, and 20 cents extra

CONTENTS FOR MAY, 1871.

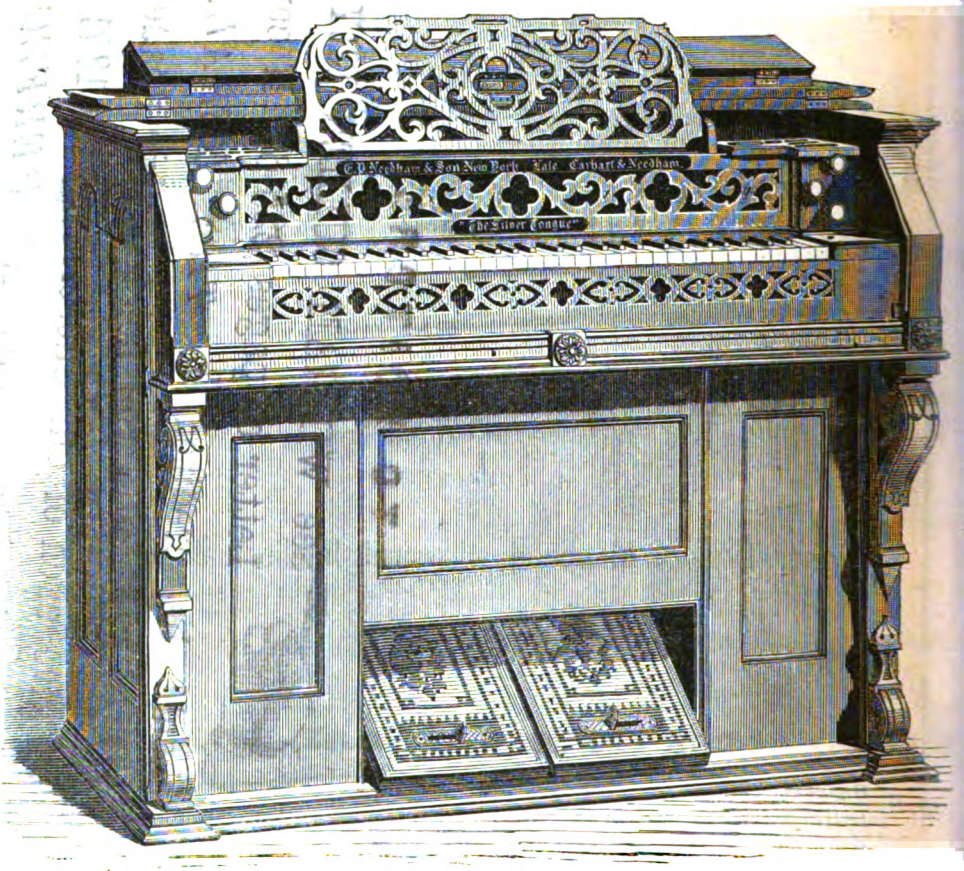
GENERAL ARTICLES:	Page
Intemperance and National Integrity—*Aaron M. Powell*	193
Toning the Mind—*Rev. John Monteith.*	197
The Education of Our Daughters—*Mrs. R. B. Gleason,* M. D.	201
Theories Put in Practice, or Diary of a Physician's Wife—*Mrs. H. C. Birdsall*	205
At the Cross (A Poem)—*Elizabeth Oakes Smith*	208
Railway Traveling—*Rev. Charles H. Brigham*	210
The Neglected Rich—*F. B. Perkins*	215
Let Her Speak (A Poem)—*Mrs. M. A. Kidder*	216
Generative Expenditure and Longevity—*E. Ray Lankester,* B. A.	217
Studies in Hygiene—How to Enhance Personal Beauty, etc.	220
Recipes for Wholesome Cooking—Soups and Salads	224

EDITORIAL DEPARTMENT:	
An Interesting Letter from William Cullen Bryant	225
Objection to Women Doctors	226
Laws of Fermentation—Hebrew Customs—Rabbi Isaacs—Lectures	227
A Hindoo at an English Dinner Table—Climates for Invalids	228
Bones Influenced by Food—Is it Air, or Something Else?—Preserved Meat	229
HOW TO TREAT THE SICK:	
Cold Water Treatment of Typhoid Fever	232
ANSWERS TO CORRESPONDENTS:	
Chills and Fever—Flatulence, its Cause and Cure	232
Cause of Poor Teeth—Lemons and Biliousness—Cure for In-growing Toe-Nails—Climates, Spirometers, etc.	233

NEW YORK:
WOOD & HOLBROOK, PUBLISHERS, 13 & 15 LAIGHT ST.
GENERAL AGENTS—AMERICAN NEWS CO. . . NEW YORK NEWS CO.
$2 per Annum. Single Copy, 20 Cents.

Digitized by Google

SYMMETRICAL, SONOROUS, SUPERB!



THE "SILVER TONGUE" ORGANS.

E. P. NEEDHAM & SON, 143, 145, and 147 East 23d Street, New York.

FOR PRICES AND DESCRIPTION OF STYLES SEND FOR CIRCULARS.

CLIMATES FOR INVALIDS.

Including a careful description of the Climate, Soil, Water, Air, Scenery, and Natural Advantages of MINNESOTA, for Tourist, Invalid, and Emigrant; including carefully prepared notes of the Climates of Florida, Nassau, Fayal, California, the Adirondacks, etc. etc., together with Hints to Invalids of the inestimable value regarding the best places to visit, etc. etc., in one neat illustrated volume of over 200 pages, handsomely bound. By LEDYARD BILL. Sent, postpaid, by mail, for $1.25.

A WINTER IN FLORIDA;

Or, Observations on the Soil, Climate, and Products of our Semi-Tropical State, with Sketches of the Principal Towns and Cities, a brief Historical Summary, and Hints to Tourist, Invalids, and Sportsmen. By LEDYARD BILL. This work is replete with information for all classes. The adaptability of the climate to invalids is carefully treated. The chapter on Orange Culture is alone worth the price of the work. Sent by mail, post paid, for $1.25.

Any person ordering both of the above books at one time, can have them for $2.00. Both books are illustrated.

WOOD & HOLBROOK, Publishers, 15 Laight Street, New York.

Digitized by Google

THE HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE.

VOL. 17, No. 5.] NEW YORK, MAY, 1871. [NEW SERIES.

PUBLISHED MONTHLY BY WOOD & HOLBROOK, 13 & 15 LAIGHT STREET.

A NEW DISCUSSION OF TEMPERANCE PROBLEMS;

COMPRISED IN A SERIES OF TWELVE ESSAYS CONTRIBUTED BY OUR BEST THINKERS AND WRITERS.

No. VII.—INTEMPERANCE AND NATIONAL INTEGRITY.

BY AARON M. POWELL.

SOBRIETY and intelligence, on the part of its citizens, are indispensable to a prosperous, enduring nationality. In this country, we are still experimenting with, and approximating to, Republicanism. Our success is by no means fully assured. A chief source of our national weakness is Intemperance. Our political history furnishes only too many painful illustrations of its deplorable effects in the deterioration of individual and official character. How has intemperance impaired the usefulness of many of our public men! We need but remember the names of Silas Wright and Daniel Webster as instances of such deterioration and bankruptcy. Familiarity with vice deadens our sensibility to its destructive consequences. When a President is assassinated the whole nation shudders with horror. But Senators, Representatives, and others intrusted with grave public responsibilities, under the slower poison of the intoxicating cup, one after another surrender, are eclipsed in political oblivion, and go down to death in dishonor, and the mournful tragedy, often as it is repeated, excites but a passing comment. Very recently an Illinoi Senator, a man of fine talents and generous sympathies, has left the United States Senate, sadly blighted by strong drink. The Congressional Temperance Society was not inaugurated one hour too soon. Great indeed was, and continues to be, the need thereof. In the old-time courts of kings and queens, drunkenness was bad enough. It is more mischievous still in a Democratic-Republican Congress. Deputed as the guardians of important trusts, involving the rights and interests of millions of constituents, how disastrously are these trusts frequently betrayed by Senators and Representatives who are "muddled," reckless, or stupefied, from the use of intoxicating drinks! Little better than insanity, much of the time, is the mental condition of men who abandon themselves to the use of strong drink and to the habit of intoxication. How utterly unfitted are they, in the absence of self-control, for the duties of legislation, involving the present and future welfare of this and succeeding generations! What American does not yet blush with shame at the

Digitized by Google

memory of our late "accidental" President on his "swinging circle" tour of shameless debauchery, and in his periods of frenzy and intoxication at the capital as well! Little less than miraculous was our national deliverance from the peculiar perils of an administration which had for its head a man so notoriously drunken and profligate.

But it is not alone or chiefly from intemperance within the ranks of public, representative men that our greatest national danger lies. It is rather from intemperance among the voters and masses of citizens that we have most to fear. Citizenship in a republic, with its rare opportunities and corresponding responsibilities, calls for a high order of character, for a noble type of manhood and womanhood. The voter is the principal; the legislator the agent. If the agent be drunken and incompetent he may be dismissed and his place filled by a better. But the voter of a republic is himself a sovereign. Intemperance, with its consequent incompetency among the voters of a nation, is therefore attended with the gravest peril. Republicanism in all our large cities is to-day a confessed failure. The birthright of citizenship is bartered for strong drink. The grogshops rule. Elections have become a farce. Voters go through the motions but to follow a prior edict of the grogshop. The preliminary canvass indicates the probable number of votes which will be necessary, and from the pliant material which intemperance furnishes "repeaters" are manufactured. However enthusiastic the rural districts, the grogshops of the metropolis can manufacture or manipulate votes equal to the emergency, and neutralize their heaviest majorities. The small number of twenty-seven thousand votes, if rightly distributed in certain States, it has been computed, would have changed the result of the last Presidential election, making Seymour instead of Grant the President. If the need could have been anticipated in advance, the grogshops of New York alone could easily have proved themselves equal to the emergency. Nor will their ambition for political conquest long be satisfied with municipal and State affairs—nothing short of acknowledged national supremacy. The rum interest cares nothing for the purity of the ballot-box.

The formation of powerful "rings" and monopolies is a growing and evil tendency of the present period. Of these one of the most vicious, powerful, and threatening is the immense commercial interest represented in the liquor traffic. In New York City alone two hundred million dollars are thus invested! As we write, ten million dollars, we are assured, are represented in the lobbies of the Massachusetts Legislature in behalf of the beer manufacturers only! What an overwhelming pecuniary strength is therefore represented by the thousands of millions invested in all the various kinds of intoxicating liquors throughout the country! By it both the great political parties are subordinated, society is demoralized, crime is stimulated, and in its presence superficial, popular religion is dumb.

Inevitably the cause of Temperance is intimately related to and involved in politics. Politicians for the most part are shy of it, and many Temperance men are prone to avoid and postpone the issue, in their political relations. It is the proper function of government to so regulate affairs, wherever it assumes to interfere at all, as to promote the general welfare. In view of the consequences of the liquor traffic it would be clearly at fault if it declined all interference. It does not, however, decline to interfere. It has long taken cognizance of the manufacture and importation of intoxicating liquors, in connection with the public revenue. It exacts license of dealers and puts certain restrictions upon the traffic. If therefore the Government may interfere for any regulation of the liquor traffic, it may and should so interfere as best to promote the public good. It is an established principle of the Temperance movement that total abstinence from all intoxicating drinks as a beverage is physiologically the wisest, and morally the safest rule of individual conduct. Society is but an aggregation of individuals. If total abstinence is right for the individual, the duty of the State, if it interfere at all, is PROHIBITION. License is, however, the present practise of the Government. That it does not promote the public welfare need not here be argued. That it is a prolific source of public demoralization, instead of promoting the general welfare, no intelligent, thoughtful man or woman will deny. License is the policy advocated, or acquiesced in, by both the two great political parties. All citizens who are in the ranks of either of those political divisions are responsible for the perpetuation of legalized intemperance. The ballot is the representative of the power of citizenship. It is the means which the voter employs to determine, so far as he individually can, the policy and character of the organized government of which he is a constituent part. It is a rare opportunity; it is attended with a corresponding responsibility. How is this opportunity used, this responsibility met, by the Temperance men who are voters?

Digitized by Google

We scarcely need to remind our readers that, in its political aspects, the Temperance cause at the present time is in a discouraged, languishing condition. Prohibition, where it has been attempted, has lacked an adequate public opinion to insure thorough, efficient execution. "Local option" is a partial expedient from which, of course, in its very nature, only partial, and to radical Temperance men and women, unsatisfactory results could be realized or expected. As both a State and national policy, the license system generally prevails. Revenue is exacted of manufacturers and dealers. In turn the Government pledges to them immunity from interference, and the Temperance movement is defied, and the community demoralized. In the support of this legalized intemperance, both of the great parties are involved. While Temperance men, therefore, continue to vote down their own avowed principles, it is not at all surprising that they should be at a political disadvantage and under a cloud. Thousands of members of the different Temperance organizations, while advocating total abstinence in the meeting or lodge, at the polls, where, most of all, their action is fraught with direct good or evil results to the cause, vote to perpetuate drunkenness and all the crimes and casualties which attend it. They attempt to build up a protective Temperance wall of virtue with one hand, while at the polls they continue to overthrow it with the other. Launched upon a flood-tide of intemperance, with one oar they pull up stream; with the other, down! If, under such circumstances, there is progress in either direction, it is, of course, backward, rather than forward. Though the pledge, the speech, the sermon, the prayer are for Temperance, they are nullified by the vote, which indorses the license platform, which sends to the Legislature members to perpetuate, and chooses officers to execute, the license law. Herein is the fatal weakness of the Temperance movement. It is the want of intelligent, conscientious discrimination at this point which hinders its progress, and lessens the value of the service rendered in its behalf by many of its well-meaning friends. The avowed enemies of the cause are powerful, and unscrupulous; but in the political aspect, the unconscious enemies of its own household are among those by whom it is damaged most seriously. While the votes of Temperance men are given to perpetuate legalized intemperance, little relatively can be done toward reconstructing the State upon the only safe and true principle of prohibition and of total abstinence from all intoxicating drinks.

What then are the political duties of Temperance men and women? We include women in our inquiry, for, though now unjustly proscribed at the polls, they are not without political influence, to be wisely or unwisely exerted; and we confidently anticipate the period in the near future when their votes may, and we trust, in a large preponderance, will be given in behalf of prohibition. The hour is ripe for a forward Temperance movement. The general discussion has already consumed the life-time of one generation. In the light of that lesson of history which teaches that this is the average period required for the initiation and successful consummation of any great reform, is it not time now to begin to see some more definite and encouraging results than have hitherto been attained in the prosecution of the Temperance reform? The first political duty is to sever those relations which compromise and nullify one's principles. If the party is wedded to license and intemperance, and refuses to be divorced, the radical Temperance voter has no place left in its ranks in which he may properly stand. He must come out of it, that he be not a partaker of its iniquity. He must have the strength of character to stand alone, if need be, for a time. It is the first step which costs. It is no easy matter to step out of the ranks of the majority into what, at the outset, to superficial observers, is a forlorn, hopeless, useless minority. Down stream dead fish float easily; it takes live ones to go up. There exists to-day, latent, unemployed, or misdirected, a vast amount of political strength in the various Temperance organizations. Their membership is counted by thousands and hundreds of thousands. At present this reserve strength, which should be sacredly consecrated, in political, as in other relations, to the total abstinence, prohibitory policy, is, for the most part, subservient, in one or the other of the two great parties, to license and to legalized intemperance. We do not expect or affirm that a majority party in support of Prohibition can be on the instant summoned into being. But we do affirm, most earnestly, that the necessary preliminary steps can and should now be taken. The issue between the friends and opponents of Total Abstinence and Prohibition should be avowed, and uncompromisingly joined in the sphere of politics.

First, the *individual;* next, the *Prohibition League;* finally, a *Prohibitory Party.* The individual voter who signs the Total Abstinence Pledge should reflect that he violates the spirit of that pledge not less in voting for license leg-

Digitized by Google

islation than if he were to put the intoxicating cup to his own, or direct it to his neighbor's lips. By the agency of his ballot he authorizes the sale of intoxicating drinks, and, with governmental sanction and protection, opens wide the door of temptation. His weaker brother enters therein and is sacrificed. Better not vote at all than to vote for the platform and candidates whose avowed policy is to perpetuate the evil we deplore.

We counsel the immediate and general organization among the friends of Temperance of *Prohibition Leagues*. Their members should be pledged not alone to total abstinence from all intoxicating liquors personally, but to an uncompromising support of *Prohibition* in politics, as against license, or an unrestricted liquor traffic. Where two or more agree, such a league is possible. Once formed, it becomes a nucleus about which additional political strength can be gathered. With such increase, the Leagues become the substantial basis of the party of Prohibition. If either of the existing parties will adopt prohibition in good faith as its principle, and choose candidates pledged unqualifiedly to its support, very well. The Temperance movement has asked this reasonable service of them, and hitherto they have declined. Let, therefore, Prohibition Leagues be organized now, and the members thereof concentrated into a new, distinct political force. The numbers may be small at first. But, as God is, and truth is on the side of Temperance, they will increase. In many localities there is already political strength enough, latent in the existing Temperance Societies, the Good Templars, the Sons of Temperance, and kindred organizations, if concentrated as we propose, and thrown as a unit for Prohibition, to hold the balance of political power. Thus concentrated and employed in real earnest, the Temperance movement has already a sufficiency of accumulated political capital to command an immediate respect in legislation, State and national, such as has never hitherto been accorded to it. The Prohibition League may begin this preliminary work of concentration at once, in every neighborhood, town, and city. The machinery for action at the polls may be called into existence as the election approaches. The time for discriminating action is at hand. Inebriate asylums are good to alleviate suffering, and to aid in curing the disease and insanity which the legalized liquor traffic stimulates. Prohibition is fundamentally important to *prevent* the suffering which the asylum is invoked to cure. The "moral agitation" movement, not long since inaugurated in Massachusetts—a revival of the old Washingtonian method—if vigorously prosecuted, and discriminating in its teaching, will be timely and valuable help. But moral agitation in behalf of the Temperance cause can not properly overlook political complicity for the perpetuation of intemperance. Temperance men can not masquerade in two characters. They can not be saints morally, while they are politically sinners.

We welcome all helps in the creation of Temperance public opinion. In this, Temperance Societies, of all kinds, clergymen, churches, physicians, teachers, editors, good citizens everywhere, have a work to do. Opinion is the fountain of political power; but the channel of concentrated action should be opened. We summon, therefore, the earnest and uncompromising friends of Temperance to at once begin the work of organizing PROHIBITION LEAGUES, as the basis of the party of the near future, which is to crystalize opinion into statutes for the suppression of poisonous dram-drinking, for the preservation of national integrity, and the promotion of a true civilization.

AN INTERESTING QUERY ANSWERED.—The subject is a very important one, as experts are often called upon to decide whether a given blood-stain is or is not human. Many enthusiastic microscopists have full confidence that nothing is easier than to decide the matter by looking through their instruments, until finding themselves cross-questioned by a sharp lawyer.

Human blood is easily distinguished from that of many mammals, birds, reptiles, and fishes, by the size and form of the globules; and tests both chemical and microscopical, have been proposed for distinguishing human blood from that of some of the domesticated animals. In medico-legal cases, such, if good, would be of the utmost importance, but it is generally conceded that none exist which can be admitted as absolute. If an observer had given him blood from man and the dog, without knowing any circumstance which would lead to an opinion as to the origin, there is no valid sign which would justify him in going into court and saying which was and which was not human. The test of odor given off when sulphuric acid is added to the blood, however successful it may have once been in the hands of some experts, has not, after many years, come into use, and that of the size and appearance of the globules also fails, as the globules of some of the domesticated animals offer the same characteristics as those of man. —*Naturalist.*

Digitized by Google

Toning the Mind.

BY REV. JOHN MOXTEITH.

THE somewhat startling statement has been made that every man is unsound. A genial writer, who discourses "Concening Screws," says this statement is to be limited to *mental* unsoundness. Whether this writer had just turned from reading the last acquittal of a murderer by a jury, we may not know; but if these jury trials furnish any solid data on the subject, we may rightly infer that men and women generally are treading on the brink of insanity.

It is not quite clear that either the writer referred to, or the judicial decisions which provoke our sneers, are all wrong. The color, if not the substance of truth, is here. The causes of the abnormal condition are found in the elements that compose our lives. Scarcely a day passes that does not contain enough of worry, disappointment, or defeat, seriously to disturb the mental balance of a great many people. The real fact, however, is not that insanity or organic unsoundness is thereby entailed, but a simple disturbance or destruction of the mind's temper or tone. Behind mere health, not the cause but the condition of strength and activity which constitute health, is this tone, which is nothing more nor less than that normal ring or vigor, like the temper of the truest steel, which fits the mental faculties to achieve their own health.

In most people this condition is lost by sheer neglect or abuse. Very few ever reflect upon the fact that the habit of the mind should be the object of as much care as the condition of the body. Few indeed have ever become sufficiently acquainted with themselves to know just where their mental weaknesses lie; or just how much the spirit will bear without breaking; or how to guard against the mind's unfortunate moods; or how, when a fit of mental sickness is on, to nurse and tone the inner man (which is too often the inner baby) as a mother nurses an infant. The consequence of this ignorance is, that the mind is grossly overworked, greviously wronged, wickedly neglected, and becomes at once the originator and supporter of a whole brood of bodily infirmities. And what is doubly astonishing is, that the persons whose business requires a constant use of the mind, are the very ones to whom the crime of neglect or abuse too often belongs.

This significant sentence occurs in Benton's "Anatomy of Melancholy:" "Other men look to their tools—a painter will wash his pencils; a smith will look to his hammer, anvil, and forge; a husbandman will mend his plow-irons and grind his hatchet if it be dull; a huntsman or falconer will have especial care of his hawks, hounds, horses, and dogs; a musician will string his lute;—only scholars neglect that instrument, their brain and spirits, which they daily use, and by which they range over the world, which by much study is consumed."

Neglect of the regular care of our mental habits results partly from a false idea of education—conceiving of the work of fitting the mind for a whole life's campaign as ending with a prescribed course of training; partly, too, from the notion that the mental mood depends entirely on the physical condition, and as a consequence, stimulants and narcotics are the most suitable agents to convey tone to the mind.

Many whose sole occupation is thought-work are accustomed to treat the mind as a perpetual motion that feeds itself with the power it expends. They crop the spiritual soil as some farmers crop their acres, requiring it, without renewing its energies, to yield successive returns, until, like an old Virginia or Missouri plantation, it is thoroughly "skinned." It is an offset to absolute impoverishment, as well as a relief to the world for whom their products are furnished, that these uncured minds are connected with bodies that are subjected to regular habits. American literature owes a debt of gratitude to bath-tubs, oat-meal, gymnastics, and well-regulated living generally; but it holds a heavy debt against that neglect that refuses to apply directly to the worn spirit the elements of a new life which lie within its reach.

We must be careful to discriminate between toning and feeding. The mind may receive a constant income of material, more than replenishing the vacancies caused by repeated outgo, still it is only gorged, not recreated or enlivened. The curse of the current literature is, that too much of what is written is a grist discharged from a mental hopper, and not only so but it is often a grist that has been ground in a similar manner many times before. A mind in perfect health will produce no more than is the legitimate increase of itself—an increment con-

Digitized by Google

taining a portion of its own vitality, a measure of its own individuality, an offspring of its own substance.

Too much of the unhappiness of life comes from a mind that is not impelled by a healthy force of its own, but is ready to be distracted by anxiety, to fall an easy prey to misfortune, or to be slowly eaten up by worrying.

The problem of both happiness and usefulness is best solved by knowing how to keep the mental particles in a proper cohesion, and how to maintain and cultivate that *virtue*, which, in the old Roman sense, is the soul of manhood.

The influence of this normal tone, or the want of it, is readily felt by any reflecting mind. There are times when one can not write or speak, or even act as the occasion requires, not because he does not *know* how, but because he does not *feel* how. The power of instinctive adaptation is gone. He is wholly unequal to the crisis. He takes his pen to write, he has a dim conception of an idea that ought to come, but will not. He may be called upon to utter his sentiments, and he finds a whole treasury of precious material locked, and the key is gone. When the occasion is over, this wealth lies about him like sprinkled gold dust, and he fairly sinks under the chagrin that gathers upon him.

If Sir Wm. Hamilton is to be believed (and experience appears to second his theory), "the infinitely greater part of our spiritual treasures lies always beyond the sphere of consciousness, hid in the obscure recesses of the mind." The point is to get these hiding-places to give up their substance when it is wanted. This point is gained, not by increasing the possessions of the mind, but by changing the relations of what it already has. There are some soils that possess all the main conditions necessary to produce a luxuriant crop, yet they are almost barren. What they need is not more volume but a new treatment—fertilizing, under-draining, subsoiling, or pulverizing—which shall operate as a tonic to bring the already present elements into healthy action. The mind, particularly that of a student or a thinker, frequently, indeed regularly, requires something of the same sort. Intellectual possessions are useless until they are vitalized and resolved by individual intellectual vigor. The elements of success are too frequently absconding thoughts or nuggets of knowledge, or even impulses which lurk away in "obscure recesses," only to return when some special influence shall have brought the demanding power and the supplying capacity into wakeful sympathy. It is claimed that this sympathy can not be secured at will. This may be true. But it is very certain that many questionable devices are resorted to for the purpose of bringing the lagging faculties to given work. Were we to invade the sanctums of some who furnish to the world rare intellectual products, we should be amazed to see how even genius depends upon the inspiration of certain old women's appliances, or certain deleterious agents.

There are eloquent preachers, who, possibly laying too much literal stress upon the utterance of the Prophet Isaiah, "How beautiful are the *feet* of him that bringeth glad tidings," or yielding unconsciously to the principle held by the inventor of Prindle's steamer, that cooked food is the more profitable, regularly produce their hebdomidal nourishment for their people by the application of steam or hot water to their feet. Others never get the mind at work except by the aid of the cigar, or the inevitable *quid*. And men as great as Coleridge, Lamb, and Burns have fed their fires with opium, or the "cup that cheers," and then—"inebriates."

There is a prodigious amount of humbug about the "divine afflatus" which one of our humorists calls the *divine flatness*. The thing sought in this breeze of inspiration so superstitiously "waited for," is simply a healthy condition of the mental faculties, a condition whose cause is only and entirely human.

Every mountain climber knows what this influence is, when, after toil and weariness in resisting the force of gravitation he comes suddenly to some jutting cliff that plunges upon his vision a picture of surpassing beauty, starting into instant action every mode or faculty of the mind, and emptying all the "obscure recesses." Then he feels that he can speak or write, or even play the poet.

This sudden thrill may well illustrate the possibility of stirring the stagnant depths of the spirit, but the means used to produce the inspiration are far too extraordinary to be practicable. The mountains will not come to us at our bidding, nor can we all, Mahomet-like, go to the mountain. A simple process must be quite as effectual. The mind must, and can be taught to recover its better states by a systematic culture, and a thorough discipline. With this training, very simple remedies, and those not brought from far, prove to be equally efficient to accomplish the desired result.

The readiest cure for the worn spirit of a student is a change in his book diet. Robert Hall administered to himself almost regular doses of Lord Bacon, and Robertson of Brighton recurred constantly to his well read authors,

Digitized by Google

which he could well nigh count on his fingers.

The mind that endeavors to brace itself for unusual effort, commonly seeks its tonics in a sphere higher than that which bounds its ordinary activity, like that One who took his wearied soul to the mountain top, just previous to his most responsible undertakings. A merely jaded mind invariably descends to a lower sphere for relief. Newton, Scott, Cowper, Burns, and Dickens, found abundant revivification in the society of dogs. Dr. Chalmers secured the same object by a nightly roll and tumble on the floor with his children.

Usually, when the machinery of the mind runs hard from any cause, the proper remedy is not books, but something totally different.

Reading is apt to continue in use the faculties that are tired. What is demanded is an entire change of sphere, calling into play an entirely different set of faculties. Just here arises the necessity of amusement in its strict sense, as distinguished from mere physical recreation —something that shall *muse away* the mind from its wearying tasks.

The world scarcely knows how much of the good Dr. Lyman Beecher gave to it is really to be credited to his old fiddle. It can not for a moment be supposed that the Doctor found any amusement in his saw-horse. It requires a horse of another kind for that. An earnest Philadelphia clergyman, whose untimely death by accident is now lamented, found that nothing would restore the equilibrium of his whole being like a daily game at billiards. How many have found relief in chess, a game susceptible of the severest thought, yet bringing the strain upon a different side of the mind, and, to some experts, with the most delightful fascination. Indeed, some of those sports that are, for the time, prodigiously exhausting, prove to be equally rejuvenating. Among these is field-sporting, and particularly wing-shooting. How much relief Robertson received from this sport, far more English than American, is evidenced in his biography, which describes him as sitting for hours in a barrel waiting to "draw his sights" on some wary duck.

Society and solitude are both generous nurses, and each has its peculiar dependents.

It is wisely said, "As iron sharpeneth iron, so a man the face of his friend." Nothing corrodes a man's spirit more than loneliness. There is a certain sense in which humanity is a whole of which each individual is an integral factor. Like the parts of a finely adjusted machine, some spirits are made to move together with the intimacy of cog wheels. If we could only get the human race properly grouped, and make them stay so, we should largely increase the aggregate happiness. Promiscuous society wears the soul by too much friction; intimate friendship redoubles its strength by adding another self. It is having constantly to meet and conduct ourselves agreeably with those general and indefinite individuals known as "Tom, Dick, and Harry," that kills us. Doubtless there is some precious ore in every human breast that would bless our poverty if we only had it; but the process of sinking the shaft through the strata of strangeness, conventionality, and outward uncongeniality wears us out. What we need is to approach a few spirits by the adits we have already made and worn well.

Vigor of mind tends to decrease, and the individual type to become dull, because of the decline of friendship and the higher order of conversation. There are too few *coteries* among congenial spirits like those which brought Cowper and his friends, and Lamb, Hazlitt, and Wordsworth into daily intercourse.

The importance of definite friendship grows as you reflect upon it. Not only are there bright minds that would be brighter with frequent friction of kindred spirits, but the masses of toiling, struggling beings who drag their life as a heavy burden, are waiting for nothing as for particular sympathy; not the corporate pity of a benevolent association, that so often contains a measure of contempt, but a fellow feeling that comes from a particular interest in themselves, as well as their circumstances.

Society and Solitude have each their own patients, and the one will sometimes kill where the other will cure. It would never do to cramp Wordsworth into the crowded streets of London, nor to scatter Charles Lamb among the hills of Grasmere, or the objects of the Descriptive Sketches. Yet it may be questioned whether a certain amount of nature alone is not necessary to the healthy tone of every spirit. Certain it is that Nature is a most generous and constant nurse. She has a pad to put just where the heavy burden galls the mind, an elixir to spread a new life over every desponding heart.

"She has a world of ready wealth
Our hearts and minds to bless,
Spontaneous wisdom breathed by health,
Truth breathed by cheerfulness."

Many very good people have witnessed with horror the exodus of the multitudes from the

Digitized by Google

heat of any large city to suburban groves and gardens, whensoever the summer Sunday morning brings the suspension of work. Various devices have been attempted by which to seize these wandering souls and confine them in the religious crypts and holy cells of too many of our city churches. Still they go, and the throng increases with each successive year. These life-ridden spirits simply obey a law of their being, that impels them to restore the waste that a week of confinement and hard work have left. They follow often that teacher which "breathes truth by cheerfulness;" they crave

"One impulse from a vernal wood,"

that shall carry alacrity to the slow, heavy toil of the cheerless week. If the churches ever design to bring these restless beings within the range of "better influences," they must abandon the conceit of medieval gloom in the edifice, song, and sermon, and more closely imitate the healthful cheer and tonic inspiration of Nature's cure.

Variety of food has as much to do with the healthy tone of the spiritual as the physical condition. It is by no accident that we live in a world where the healing leaves of good books, where beauty of flower, and sunset, and sky, and landscape, and happy faces, is so abundant, and so cheap. A little of each administered daily with that physical exercise which is necessary to obtain them, will greatly help to keep the mental machine in prime order. Here right about us are a hundred hands ready to lay hold of the great loads of care and let them down easily, so that they leave without grazing us. Here are the particular applications that will bring the royal specific to each particular ill.

To gather stimulus for special responsibility, we sometimes resort to helps that are in their nature quite unlike the duties that presses us. I know of at least one preacher who, before the work of preparing for Sunday has begun, seeks to regale his spirit with the works of the best masters in galleries of art. Another visits a stock farm, where, among Morgans, and Golddusts, and Shorthorns and Cottswolds, and the great variety of bipeds and four-footed beasts, all in a high state of development, he brings back the flush of Hebe to every fiber of his spiritual nature, and comes to the work of Sunday with the vigor of an athlete.

It is with a profound respect for the advice of the fathers who have gone before us that I suggest a mode of preparation for spiritual and mental duty, quite at variance with, if not directly opposed to that which they insisted upon. Very natural was it for them to recommend devotional seclusion as the only proper preparative for the experience and responsibilities of life. Their advice rests on the assumption that there is an antagonism between things spiritual and things temporal. But upon the broader basis of St. Paul, who says "all things are yours," religious culture embraces all things that minister vigor and healthy tone to the mental functions, or in any way fit us for duty and trial. In this view, the closet and the field are closely allied; the Bible and Nature speak the same thing, and the sports and amusements that have too long been branded as "worldly," become, with the more private exercises of a devotional mind, the co-builders of a higher manhood.

The great problem of life is not how to abolish its duties or difficulties, nor even its petty annoyances; but rather how, amid all these, to keep body and soul in the easy exercise of their respective functions, and to throw a pleasant aspect over all gravities. A little study will soon convince us that if the world we live in is properly used, it will command for us its richest treasures, and in the long run of a short life we shall always find riches ready to help poverty, cure to remove disease, happiness to supplant misery, and, for the mind at least, all remedies and maladies placed in the most glorious juxtaposition.

OUR KITCHENS.—You are fortunate if your kitchens have a sunny outlook. A south window catches all the precious winter sunshine, and is not as uncomfortable on account of heat in the summer as an east or west window. Sunshine goes a great way toward furnishing a room, as well as driving care, fatigue, and disease away from those who live and work in it. Of course you may not all have model kitchens though you may so much desire them, and just here comes to my mind this quaint old rhyme, which applies to housekeepers for aught I see as much as to any other class.

"For every evil under the sun
There is a remedy or there is none.
If there be one, try and find it,
If there be none, never mind it."

—*Mrs. Katy Jackson, in Laws of Life.*

EVERY productive occupation which adds any thing to the capital of mankind, if followed assiduously with a desire to understand every thing connected with it, is an ascending stair whose summit is nowhere.—*Froude.*

Digitized by Google

The Education of Our Daughters.—Third Article.

BY MRS. R. B. GLEASON, M. D.

EYES.

TROUBLE with the eyes is becoming very common among our pupils in advanced classes. The normal eye is capable of an almost infinite variety of uses. It can see near and far with equal facility, but like any other organ, if used almost exclusively in one direction, it loses its range of ability. Hence, if kept too constantly on the printed page, the range of vision is impaired, and it may become near-sighted by much reading of fine print.

Even small children injure the eye by an unnecessary infinity of detail in their lessons, which requires too close and constant use of the eye. For instance, No. 5 Geography, for use in our schools, is excellent for reference when reading, but it is a waste of valuable eyesight for any child to hunt out and memorize so much, in the way of rivers, towns, etc., which will so soon be forgotten. H. W. Williams, M. D., in the January number of The Atlantic says: "One of the first rules laid down by a teacher to his pupils should be *not* to keep their eyes fixed upon their books. Apart from the probable injury to the eye itself, by too close application, I am satisfied that lessons, especially those requiring thought, can not be as well committed to memory when the eyes are fixed upon the page, as if they are permitted to wander. The eyes must, of course, look at the book often and long enough to take in the idea, but if they are too steadily kept there, the perceptive power seems to occupy itself with the visible objects to an extent which is unfavorable to other mental processes. A distinguished engraver once said to me, "I know now how to make a face think." And he explained that the secret lay in giving a certain expression to the eyes by causing their axes to have a very slight divergence from each other. This corresponds with my observation, and this *position of thought* is exactly the opposite of that assumed by the eyes when looking at a book.

We have long known that the eye is often injured by looking at the sun, in case of an eclipse, without the aid of smoked glass, the perceptive power being impaired by excess of light and heat. It is also often injured by looking at small objects with too little light, as, for instance, reading fine print by moonlight. But we are yet to fully realize how often the eyes are injured by strong gas-light. It is often too intense, and has a flicker which is particularly trying without a shade. Those accustomed to gas or kerosene, find it difficult to see by candles or any light less brilliant. But those who have habitually used candles, can not only see well with less light, but their eyes last longer without the aid of glasses than those who have rejoiced in the flood of light which the gas-burner emits.

When the optic nerve has become supersensitive to light, a good candle is a great relief. Of course, it will not make the room bright as gas or kerosene, but will furnish light enough for reading, and the soft light will be much less trying to the eye.

Twilight is very grateful to the eye if we rest in it, but very trying if we read or sew in the transition stage from day to night, or night to day. The use of artificial light at early morning is very bad for the eyes, much more so than at evening. To go from sound sleep and deep darkness into the light of gas, especially for study or piano-practice, is very injurious.

Within a few weeks, several young ladies have consulted me in regard to their eyes, where they have been seriously and permanently injured by piano-practice at early morning in the gas-light. As the music can not be changed to suit the exact focus of the eye, it is the more likely to become injured in this way, than in most other ways.

The study of any foreign language is much more trying to the eye than the reading of one's own. The words lack the familiar look, and hence they are not so easily recognized. The searching for words in the dictionary is particularly hard for the eye, and if the alphabet be dissimilar to ours it is still more trying. Hence, those who have weak eyes, and those who don't want to have them, should avoid piano-practice and lexicons by artificial light, especially at early morning. Those whose eyes are in any degree sensitive, will accomplish more in the week or month to study only by daylight, and during the evening avoid gas and give themselves up to plain knitting and cheerful conversation; for deep study, close thought

Digitized by Google

even, if the eye is not used, tends to determine the blood to the head, and makes the eye worse if it be inflamed or painful. Embroidery, or even any kind of worsted work, is bad, as bright colors tax sensitive eyes very seriously.

Reading from a moving page is also trying to the eyes. Many persons who have traveled much, tell me they have permanently impaired their sight by reading on the cars. Young ladies who go out to walk with a book cheat themselves in two ways. The exercise they get is not good for any thing, and the moving page and the brighter light than within doors, injures the eye. To make bodily exercise profitable the brain must rest from books, and send its nervous and circulatory force into the muscular system.

Double Latin is often taken to make up arrears, or to be ready for an advanced class, and by this course many eyes are impaired for life.

English Literature, in which almost all young ladies are greatly interested, is a strong temptation to over-study. There is so much that can be read, that they want to read, to be ready for the next recitation, that the hours for sleep are too often curtailed. The preparation of the class essay is a great stimulus, for as the predecessor furnished one that was excellent, the successor wants a better. Young ladies should remember that they can not complete English literature at college, and they had better save their eyes so that they can continue it in years to come. It is comparatively little that they can do in this department in connection with so many other studies, without neglecting other duties and impairing their health. Indeed, they should regard their four years course as a period of incubation, expecting to come out, not with dim eyes and distracted nerves, but in the full possession of all their powers, so that they can keep growing intellectually, learning for years to come.

Those having weak eyes ought to room alone, that they may regulate the light to suit their comfort. Strong light in the room, even though the eye is kept shaded or closed, tires and gives pain when the optic nerve is sensitive. Such need to sleep all they can, and if they retire before their room-mates, they are often kept awake, and the presence of the light wearies even the closed eyes.

DIET.

Students who apply themselves closely, need to be well nourished. It requires good food and a great amount of it to make the brain work well, and not impair the body. Sedentary habits often induce indigestion; therefore, many have supposed the less they ate the more they could study. About twenty-five years ago earnest persons with limited means worked and studied very hard, and ate and slept very little. Many a good constitution was thus ruined. Nervous dyspepsia was often induced by overwork and lack of suitable nutrition. The more abstemious they were as to food, the less able they become to dispose of what was taken. Many of our ladies *not* pinched by poverty or pressed by hard work, lose their appetite by too little exercise, too little sleep, and too much study. This course, if long continued, will induce indigestion. The nervous system being exhausted through brain-work, has not power to carry on the bodily functions, and the victim wonders that she should have any stomach trouble when she had eaten so very sparingly. The truth is, limited nutrition has induced indigestion.

The morbid appetite of school-girls, for which they are often blamed, or ridiculed, is a nervous disease brought on by impaired nutrition. There is a lack, a longing, "a sense of goneness," which craves but lacks relish for healthful food. Men suffering from this, take to beer and alcoholic drinks; women more often to tea and coffee in excess, and school-girls to chalk, slate-pencils, cakes, candies, etc. A busy brain, as well as an active body, requires beef, bread, oysters, eggs, vegetables, and fruit, all well cooked, and plainly prepared. Physiologists are making investigations as to what food is suited to supply brain and nerve-power, and physicians are talking of remedies best able to restore it when lost, and perhaps in years to come, we may have a bill of fare exact and definite for those who wish to work with the head, and another for those having hand-labor. But certain it is that those of intense mental activity ought not to be helped on, and hurried on, by stimulants, or they will die before their time. Stimulants may be useful for emergencies, for sickness, or for advancing years, but young life, with its enthusiasm, does not need the aid of tea, coffee, or acohol, unless impaired by sickness or over-work. These will help one through a hard lesson, or a night's gayety, but if it be persisted in, it is at the expense of strength for the years that follow. Tea makes our girls over-excitable, wakeful, nervous. Coffee induces constipation, yellow skin, and mental depression. Washerwomen take their strong tea and "wash it off," work it off through the muscular system, and are ready to sleep. Our sensitive girls take it and are bright for study, for social life, but are wakeful after, and they come to

Digitized by Google

live on tea and coffee, and care less and less for plain nourishing food. There are few chronic individuals so hard to cure as those who have long studied with too little food and too little sleep. If girls must study too hard, if women must work when they are not able, or if they must be social and gay when they do not feel so, then tea is their best aid, the stimulus safest and best, and very efficient if not relied upon constantly. If needed, it is best in the morning. At night it makes one wakeful, and hence should not be used, save when we *must* sit up, and then it is as good as the Irishman's whisky, which was "victuals, and drink, and lodgings." But if used two or three times a day, then something stronger is wanted for extra occasions, for emergencies.

School-girls remain plump and fresh sometimes when they are but imperfectly nourished. The brain work brings a determination of blood to the head, which gives a flushed face. Beside this, those of studious habits are likely to suffer from torpidity of the excretory organs, hence the system is plump from being loaded with effete material which should have been thrown off by way of the skin and bowels. Thus, what seems to be strength, is merely weight, weariness, an excess of adipose, with a poverty of muscular tissue. In such cases there is a craving for something to eat, but a lack of appetite for regular rations. The whole system is surcharged with impurities which should have been thrown off, and this depresses the appetite and disturbs digestion.

Half the complaints of school-girls about food are the result of lack of relish. Then they feel half famished and nibble cakes, crackers, and candies between meals, or have a box of "goodies" from home, and these will certainly destroy all desire for bread and meat. Of course in supplying a table for large numbers there must be a lack of deference to individual tastes, which can only receive attention in the home circle. But the need of change in occupation, quite as much as in food, causes nine-tenths of the trouble about fare. Over-study, over-anxiety, too little sleep, too little exercise, too much sugar take away the appetite, and those who can not eat should not study, for nerve-power is thereby permanently impaired.

EXERCISE.

Our girls, amid the multiplicity of muscular work have less strength than time, for mental activity. They have no elasticity, no exuberance of life, to expend in sheer physical exercise. There is no fun and frolic left, and they ask with a forlorn face, and languid air, "Can't I be excused from exercise?" and look as if they wanted to lean up somewhere and think, like Mark Twain's mule, in which case I fear their thoughts would be neither brilliant or cheerful. Young ladies out to walk, with ribs compressed, arms pinioned, staid as a funeral procession, going from a sense of duty, or in response to school order, get a little fresh air, but much less than they would if there was freedom of chest, and fun and frolic to prompt the free inspiration, the exhilarating exercise. The discipline at our military schools is found excellent to develop the chest, improve the step and general bearing, and to correct physical defects, etc. Gymnastics—Dio Lewis's system—should do the same for our girls; but, to accomplish this work, the young lady should not only have her period of daily drill, of an hour or so, but should be dressed so that she can breathe deep, and sit erect, without whale-bones or braces, and walk without hinderance at all times. Instead of this, after the exercise to expand the chest, she goes straight into the compressors again. While in uniform, she is careful to stand straight, to walk erect; but when once "be-furbelowed," the *dress* is *all*, the position nothing. Some of our schools have very fine facilities for physical culture. But the pupils are usually too hurried, too tired with their lessons, to get much benefit therefrom. Gymnastics, riding, skating, rowing, etc., must consume both time and strength. For instance, a mother asks me if riding lessons will not be of advantage to her daughter? Upon examination I find the young lady is already so burdened with lessons, that she is worried and nervous, and can not eat or sleep as much as she ought. Horseback exercise would do her good if she could take a good sleep after it. But tax her delicate frame, which scarcely weighs eighty pounds, with severe physical exercise, and then send her in to hard study before resting, and it is making a bad condition worse. We must have nerve-power for muscular exercise, as well as for mental activity, and the secret of good health and good scholarship, is to properly divide this life-element, between the wants of brain and body.

SLEEP.

Good scholars need more sleep than they are inclined to take. The interest in lessons, the increased activity of the brain, makes them wakeful, and often the more they need sleep, the less able are they to find "the dominions of the drowsy gods."

Digitized by Google

In the majority of our large schools I find the hour of retiring to be 10 o'clock, and of rising at 6 o'clock. This will do for some, but the younger and more sensitive need from 9 to 7 in winter, and from 9 to 6 in summer. I would give them an hour longer during the long nights, because at best, students study more by artificial light than their eyes can well endure. In cold weather they are more inclined to keep close to books, less inclined to out-door exercise, and hence are better off in bed cold mornings than anywhere else. The indications of all nature are that at this season we should sleep up, rest up, and be ready for summer gayetics. But in modern days, between bright lights, gay colors, lectures, concerts, and parties of varying brilliancy, the brain and optic nerve are over stimulated, and summer finds too many of our young ladies, whether in school, or in social life, in need of summer restoratives, such as the sea-side, the mountains, and mineral springs afford. Students do not get as much sleep as their hours in bed seem to indicate. If they have studied closely and to advantage in the evening, it takes some time to arrest the mental action, to cool off head-wise, so to speak. Intellectual activity makes them dislike to retire at night, and brain weariness makes them dread to rise in the morning, and they get up feeling wretched and as if they *never did* and *never could* learn any thing. Hence, while they might retire before the required time, they do not want to, and would not get any sleep if they did, while the school world in which they are so much interested is all astir. When once asleep, they go on until a late hour if not called by duty, as is shown by the many who sleep over the breakfast hour, and go without that meal if not obliged to rise at an early hour for morning prayers. Instead of giving a general permission to retire early, and requiring all to rise early, we would reverse the order, and require all to retire early, and let them rise when they had slept all they wanted to.

SCHOOL-GIRLS OVER-ANXIOUS.

Those who have had the most experience in our best schools, maintain that our young ladies are over-ambitious; that they try to do too much in too short a time; that they are much more sensitive to class-standing than boys; that they are more elated by success, and more depressed by failure; that, rather than suffer the latter, many are ready to sacrifice food, sleep, rest, recreation, and that many fail by reason of over-anxiety. As a Professor once said to me, "the girls would get on well enough at school if they were not so sensitive." "True," I replied, "but then they would not be girls." It is a part of their organization, and ought not to be deprecated, but so directed as not to take on morbid manifestations. In the fear that they shall fail, they study too long on a lesson and get mentally muddled, and hence do fail at a recitation from sheer weariness of head. They say sometimes, "The more I study the less I know," and this is often true. It is not the number of hours, but the life, clearness, and strength which we bring to the lesson, that accomplishes the work. When these are exhausted, the book should be laid aside. In lack of a good night's sleep they may fail to recite a lesson well learned the day before, or may fail to learn the present lessons, though they bend the head and fix the attention till the neck aches and the eyes are dim, simply because the head, so to speak, is so weary it can't work.

Between science and literature, music and mathematics, ancient and modern languages, art studies, and general esthetic culture, our young ladies have undertaken more than they, with their small waists and weak spines, can well accomplish. Let each one look over the list and decide which they will leave, and which they will learn. In view of the many things which they may, can, must, might, could, would, or should study, I have inquired of their professors as to what class of studies seemed best adapted to their mental organization, and from the report given, there must be much good scholarship among them, or else much credit given on the score of gallantry. Each teacher would claim that they were remarkably successful in their department, better on an average than a class of gentlemen. For instance, the Professor in Mathematics would say that there was a nicety, an exactness in "feminine minds," which fitted them peculiarly for figures, and made them enjoy greatly the results. The linguist will say, "Young ladies are so interested in literature, appreciate exquisite renderings," etc. The teacher in the natural sciences will tell you the world of nature is just the field for women. The physical sciences give them so much pleasure in out-door life, and teach them much that is of practical utility. I too have looked with interest to this department, hoping it would afford permanent interest to our daughters, so that there would be continued and profitable study after leaving school, and, thus, less tendency to fiction, embroidery, and "fancy fixings" generally. I have hoped that a more intimate knowledge of the world, above, beneath, around, would render them more steady and sensible, and less nervous and excitable.

Digitized by Google

THEORIES PUT IN PRACTICE;
Or, Extracts from the Diary of a Physician's Wife.

EDITED BY MRS. H. C. BIRDSALL.

WEDNESDAY, *December* 6.

THE past two months have been so filled with work that I could find no time to devote to my diary. Aunt Minerva's illness, housecleaning, and a houseful of company have fully occupied me; but now a time of comparative rest has come. I have lately had an opportunity for observing the evil effects of intemperance in its most common and repulsive form. We often hear people talk as if real misery were confined to large cities, but they err, if they think there is not plenty of it in the pure, sweet country; although it would seem as if these characteristics should aid in drawing men away from the evil up to the good and beautiful. Henry was called two weeks ago to a family whom he found in a wretched state. They are living in a large house, but, for the sake of warmth, were huddled together in one room.

The family consists of a husband and wife and seven children, the eldest of whom, a girl nineteen years old, is married and has three children of her own.

Thus, there were twelve persons in a room fifteen feet square, and all more or less sick, except the father. When I went to see them, I found it almost impossible to help them to advantage. The old man was usually in an ugly state of intoxication. There were always from five to seven children on the bed, and the other members of the family lying about the floor, in various stages of sickness, but one state of dirt. The one cause of this is intemperance. The father has for years grasped every penny that has come to them in any way, and turned it into the thing which he continually craves. The first time I went to see them, the youngest child, about two years old, lay in a cradle—a very sad little picture. He would have been a beautiful child, if he had had the kind care of a good mother. Improper diet and ill-treatment soon leave marks which can never be effaced. The child was so weak that I did not think it safe to recommend a bath, as he had previously been so unaccustomed to water. But I washed off his face, hands, and feet; and, when I found that he had no clothes but those in which he had been lying for an unknown length of time, I went to Mrs. Hutton's, and soon had a sufficient supply to keep the child in a state of comfort for ome time. They were not needed long, for one evening, soon after, they sent for me to assist in laying out the child. What a scene it was! The mother in an agony of weeping and sorrow; for, in spite of her degradation, she was a mother, and her heart was still tender with the recollection of how the child clung to her in his last days, and how his last touch and look were for her. The father was sitting over the stove, apparently not caring one jot for the loss, and turning his wife's lamentations into ridicule. The mother wanted a woman from the village to give her some assistance, but, in answer to her entreaties, her husband growled, with frequent oaths, "What's your hurry; your young one won't get cold there—there's a good fire." And when a fresh thought of her affliction caused the woman to cry out, he chuckled and said, "There'll be no more rocking the cradle for you—no more rocking the cradle." He could have thought of no more subtly cruel thrust than this to a mother's heart. How very sad such scenes are! It sometimes seems as if there were no remedy for these individual cases. I do not believe that this man could ever be convinced of the evil of his course. The great hope is in talking to younger people, whose habits are not fully formed.

If all the children in the land for the next two or three generations should be educated to strictly temperate habits, and this in its broadest sense, self-restraint in *every* way, then might we hope for a purified race in time to come.

Mrs. Woodman, who has a young baby, told me the other day that she had actually been advised by a kindly, well-meaning lady to give her baby plenty of milk-punch, and she would be sure to have a good, happy baby. This person has a large family, and considers her having *nourished* them all with this beverage as the height of good management. I had heard of the custom, but thought it had been discarded entirely among sensible people.

Friday, December 8.—We spent last evening at Mrs. Williams's. She and her husband are most estimable people in many respects; but do not seem to have learned the lesson of living happily, nor do they conceal their domestic infelicities from others. Mr. Williams is continually finding fault with his wife, and has done it so long,

Digitized by Google

that his head and neck have taken a fault-finding expression, by which he can be recognized as far as he can be seen.

The two daughters have adopted a similar tone, and the object of their united complaints is their mother. She is patient, and tries to ward off all appearance of consciousness. One can but pity her and love her for her meek and quiet spirit; and yet is this sort of meekness right? Would it not be better for a wife to take a decided stand, in the early days of her married life, upon the first appearance of a fault-finding spirit in her husband, saying to him with all love and gentleness, but at the same time firmly, "We are both faulty, but it is natural that we should see the defects of each other more plainly than our own? You are drifting into a habit of venting all your nervousness upon me, for any thing that you see, or imagine, to be not quite as you would like it. And now, whatever you think in your happiest, most contented moments, to be a fault of mine, please tell me as faithfully as I have spoken to you, and we will together strive to overcome the evil that is in us." Many a woman becomes a wife with warm, earnest love for her husband, and a Christian resolve to be a good, faithful wife. When the first harsh words come, she bears them with Christian submission, considering it a part of her duty; but when the bitter words come so frequently as to threaten the formation of a habit, it is time for her to lay aside some of her submission, out of consideration for her husband's best interests as well as her own. Not indeed, in order to adopt a worse extreme, that of wordy retaliation, but that firm, medium course which must be better than years of self-renunciation. It is very comfortable for a husband to be able, after a wife's death, to look back upon her as an angel upon earth; but it would be an equally agreeable consolation, in case of the husband dying first, for his mourning widow to remember him as possessed of some saintly attributes.

Monday, December 11.—We were amused last night at Aunt Minerva's receiving a Sunday evening visit from Deacon Brown, one of the stiffest of Aunt Minerva's stiff friends. He came home with her from prayer-meeting, and spent a formal hour with her afterward, entertaining us with an exposition of his views of election and predestination. It is quite evident that he considers himself elected and fore-ordained to be Aunt Minerva's second husband. I do not think Henry and I shall object to the arrangement, but will cheerfully resign our legacy to the safe keeping of Deacon Brown, or any other deacon who may desire it.

Thursday, December 14.—Our Madge is an endless source of amusement and vexation to us. I endeavor to have the amusement keep the upper hand, remembering the advice of kind Mrs. Hutton, who said to me one day, "My dear, I think that discontent with servants may come to be almost a mania; and I hope that you will take a bit of advice kindly from me, viz.: when you are particularly tried with the failings of a servant, to think right away of some balancing good quality." Madge may be said to have an "evenly balanced" character, if we fill our test measures, with defects and virtues; for when she is most aggravating by her faults, we can always recall good qualities. She is thoroughly honest, scrupulously so, very zealous in the care of any thing left in her charge; and, with one exception, she is truthful. She will tell the truth, even when it brings her into disgrace, except when she speaks of the wages or condition of any "gurrl" or "b'ye" of her acquaintance. She has no female friend working for less than $18 per month, and then, only in the case of her living in a small and economical family. In addition to their wages, all their clothes are given them, their mistresses have them cut and made, and occupy their leisure moments in piecing bedquilts and having them quilted for their happy domestics. Her "b'ye" acquaintances receive from $30 to $50 per month, for their condescension in assisting their employers; but I have not yet heard of their being furnished with bedquilts. The only inconvenience to us in this departure from the truth is the necessity of performing an example in mental subtraction each time that our Madge is confidential about her "comraids." Curiosity is one of her leading characteristics. For four months she has asked questions of me, in regard to every thing of general or particular interest that did not concern her; for four months she has received answers that have left her as ignorant as before the questioning. In other words I have *snubbed* her for this length of time, and still her inquisitiveness survives. She accepts my snubbings with a sigh, and she retires from her catechising attempts with an ever-increasing admiration for her "misthress'" ability for keeping silence. I have frequently heard her reply to inquiries of neighbors in the pursuit of knowledge: "An' shure, what shud I know about the matther? Wud ye have the misthress be tillin' all she'd be about? I knows nothin' till I sees it." When she first came to me, she took

Digitized by Google

the liberty of inquiring the source of our letters; but I politely informed her that this did not constitute a portion of her duties. She accepted the condition, but thereafter commenced a diligent study of the addresses of the letters she brought from the postoffice; until now, in spite of her not knowing how to read, she not only knows *for* whom each letter is, but can also tell the handwriting of certain friends. When she brings a letter from any one of these she comes to me with a confidant and jubilant expression, and salutes me in this wise: "An' here's a letther from yer brother," and, before I have the envelope torn off, "and is he well, and will he come to see us soon?" If she is in doubt as to the address, she will say, "An' I suppose yer letther is from Mrs. L.?" No. "Oh, I see, I misthook the writin'; it is from Miss G. then, isn't it?" No. "Ah, an' where *can* it have coom from then?" No reply. Madge withdraws from the scene, with her usual sigh to solace herself with the pursuit of some kind of knowledge attended with less difficulty, or with scolding the cats, of which quite a regiment has come to us. The cats stand in great fear of Madge, for they are obliged to receive the sharp words which she would bestow upon one of her own race, if she had him or her at hand. After she has given the cats their meals, she throws the outside door wide open, gives a shrill whistle, and calls, in her harshest tones, "Out-of-doors wid ye, the whole facshin of yez." With one accord the six cats rush wildly out, just in time to escape being mashed by the door slammed behind them. In his first acquaintance with our Madge, one of the flock attempted to resist her authority and maintain a position by the warm kitchen stove, growling, spitting, and glaring at her with defiant eyes whenever she approached him. This aroused the energy and pugnacity of her Tipperary nature: "An' is it fightin' wid me ye'd be? An' ye shall have enough av it." These words accompanied by a vigorous use of her broom soon reduced the rebellious cat to a state of submission. We find plenty of cats a valuable scapegoat for Madge's tongue. Another servant would be more acceptable to her, as the quarreling and scolding would then have two sides; but her employers prefer the cats, as they do not in their case feel obliged to interfere, except when blows are added to words.

Wednesday, December 20.—Lightwood may justly take to itself the credit of having inaugurated something new under the sun, viz.: an Anti-Scandal Society. This is but part of our name, our appellation being adopted in the midst of a great deal of laughter, but, at the same time, with a firm determination to exert some influence through our united efforts: "Mutual Improvement and Anti-Scandal Society."

Christmas.—How thankful we should be that God has given us the means to do something for His poor on this sweet day! One pleasant privilege we took to ourselves for this day, of only giving to those really deserving and appreciative of favors received. There is one poor family who do just the best they can in their life-struggle, but can not get beyond a certain point. The father is in rather feeble health, and the mother, naturally sickly, has had children so rapidly that she has never had time to get perfectly well. They have ten children, eight of them living at home. They are lovely children, for what the parents have wanted in strength of body, they have had in strength of mind, which has enabled them to govern their family properly. What beaming faces the children had, when Henry and I went in with a basket of presents for them this morning! They have learned so thoroughly the virtue of self-denial, that it was like a glimpse of Heaven to them, to be at once, and so unexpectedly, gifted. We took them a supply of good, warm clothing for the winter, books and toys, and plenty of nice fruits for them to eat freely of them. And at noon we sent the family a good, warm Christmas dinner, which we thought was preferable to inviting them to our house to partake of dinner, as there they would be under restraint, and not take the full enjoyment of their good things. How true it is that it is more blessed to give than to receive! There is nothing which can so warm our hearts as giving, and especially at Christmas Tide. And there is no other day that so appeals to the maternity existing in every woman's heart, whether or not she has children.

Cynics may sneer at the childishness of "these Christians," who are so enthusiastic over a day, which, after all, is not the anniversary of Christ's birth; but their sneers are of little account, when we think of what we are commemorating. Every Christian should try to make it a still merrier day, a day of *sacred* merriment. We can not be too joyful—our every word, our every look, our every thought should be full of, "Christ is born, Christ is born, Christ is born!"

January 1, 186-.—The custom of New Year's calling has been adopted by the young people of Lightwood, and, I am sorry to say that, with

Digitized by Google

the importation of the fashion, has come hand in hand, the habit of serving the guests with wine. At the first meeting of the Mutual Improvement and Anti-Scandal Society, this matter was discussed. There are three unmarried ladies in our number, and they promised to give up the habit, and to do their best to induce others to do the same. We have already seen some young men pass in a state of noisy exhilaration, which shows that there are still some wine receptions. Fashion will often accomplish much, where principle has no sway, and this, I hope, another year may show is the case in Lightwood. For the young ladies, who agreed to discard wine, are the leaders of young society here. Aunt Minerva declares that it is a good old custom, that there is no harm in drinking wine to moderation, that people in old times were just as good and better than now, etc. etc. We do not argue with her, but think our own thoughts about that private brandy bottle, which she never allows to get empty.

January 3.—To-day I had the pleasure of trying my new pony and a comfortable cutter, which have just been brought home to me. I invited Aunt Minerva to take the first ride with me; but she declined, for the reason that her neck was too precious to be intrusted in my care.

Perhaps she was thinking of Deacon Brown, whose courtship progresses rapidly. The Deacon evidently intends to conduct it with business-like exactness and rapidity.

After Aunt Minerva's refusal to go with me I took Mary Morgan out with me. Her mother lifted her in like a baby, and I gave her a ride of about two miles. Her glad, happy look was an abundant reward.

After this I took Miss Margaret Stanton out for a short ride. The old lady is full of trouble. A favorite nephew and his wife have recently died, leaving two little children, with nobody to care for them. They are far out West, and Miss Stanton feels it her duty to go and look after them. At her time of life, and unaccustomed to travel as she is, this is a serious undertaking. Her resolution to go adds to my conviction, that, inside of her hard shell, she has a sweet and tender kernel of character.

Perhaps these little children coming to her may be just the softening influence necessary to the bringing this tender nature of hers to light.

When is a man like a tea-kettle just on the boil? When he is going to sing.

Causes of Erysipelas.—According to the opinion of some, the causes of this complaint are too numerous and diversified to admit of any definite specification. Nevertheless as a general rule it may be assumed that whatever tends to disorder the digestive, hepatic, or any other important function, is capable of producing the disease. Seldom, if ever, does a case of erysipelas occur, in which such derangement does not play a more or less conspicuous part. If people would live more on food derived from the grains, fruits, and vegetables, drinking only pure soft water, and less on swine and other flesh meats, grease, salt, pepper, and spices, and abstain from the use of tea, coffee, and alcoholic drinks, the time would not be far distant when this fearful, dangerous, loathsome disease, would be known only as of the past. Among the exciting causes may be mentioned the retention of vitiated secretions; certain kinds of indigestible articles used as food, such as some of the different kinds of shell fish, etc.; great mental excitement, loss of sleep, hard study, suppression of the cutaneous perspiration, and, in short, whatever tends to enfeeble the organic functions.—*Dr. J. C. Whitaker.*

Sober Children.—Joy is one of the main factors of mental development. The intellectual rank of any creature may be measured by the playfulness of its infancy. Who would buy a puppy with not a streak of fun in him, or a colt with no more friskiness than a worn-out cart house? Your sober colt or puppy is either sick or stupid; and so, as a rule, is your habitually sober child. Go to our asylums for the weak-minded if you want to see patterns of sobriety; next to them the homes of intemperate and vicious parents. The fun-loving propensity of such little miserables, if they ever had any, has been crushed into untimely soberness by disease or ill-treatment, and they are not bright. —*College Courant.*

How to Recognize The Creator.—Froebel says: "He who will recognize the Creator must early exercise his own creative powers; exercise them with a feeling of consciousness for the representation of the good; for works are the bond that next to faith unite the creature with the Creator; and the conscious doing of the same is the real living union between man and God; alike in the individual or in the race. With all this education must begin, and to this end it must always tend."

Digitized by Google

At the Cross.

BY ELIZABETH OAKES SMITH.

BEFORE thy cross, dear Lord, I fall;
Out of the depths to thee I call;
Thou art my Hope, my Help, my All.

Search, search my heart, surcharged with woe,
Till all its idols it forego,
And thee, thee only learn to know.

A thorny path with flints bespread,
With bleeding feet I fearless tread,
For thy dear hand upholds my head.

Oh, dearest Lord! thy tender eye
Rebukes, yet pities my lone cry,
When staggering 'neath my cross I lie.

The broken cisterns, who shall count,
The heart will fill at Earth's dark fount,
Ere upward unto God it mount!

Poor human heart, with human needs!
How many are its broken reeds,
Grasped till the hand in torture bleeds!

How many gourds have felt the blight!
How many stars have lost their light!
How many suns gone down in night!

All, all are gone, like barques at sea
Lost in the dread immensity!
And now I stand alone with thee.

All prostrate at thy feet I kneel,
For thou canst all our sorrows feel,
And thy dear hand our wounds can heal.

No more I mark the dreary road
My bleeding feet so long have trod,
Since it doth lead to thee, my God.

Digitized by Google

Railway Travelling.

BY REV. CHARLES H. BRIGHAM.

THE passion for travel is a genuine American characteristic, noted by all foreigners, and complacently acknowledged by Americans themselves. The Yankee is a cosmopolite, and if he has a home, is yet not willing to keep at home, but wishes to be known as one who has seen the world. Occasionally you find an eccentric American who prides himself upon the fact that he has never left his native town, and can always be found in his own house and shop, year in and year out, at the regular hours. There is a wealthy citizen of a Massachusetts town, through which three railways pass, who used to mention with satisfaction that he had never in his life been ten miles away from his birth-place, and had never set foot in a railway car. His singular whim was only less remarkable than that of the Nantucket whale-captain, who lived to the age of seventy, and twice sailed round the globe, without ever landing upon a continent. But the opposite passion is far more common. Even those who stay at home most of the time are anxious to have you think that they have been away, and have seen other than the domestic landmarks; one lady thinks that she has been a "great traveller," because she has visited half a dozen cities within a hundred miles of her home. The large sale which books of travel get is an index of the real feeling. Not boys only, but men and women, in our land, love to read about adventures in Africa, and Siberia, and Alaska, and follow with genuine sympathy the wanderings of their pilgrims even in waste and desolate places. There are few who at some time have not wished, almost resolved, to go where nobody else has gone, and see what nobody else has seen. The Italian is willing to die after he has seen Naples; but the American is not ready to die until he has seen all in the world below that is worth seeing, and much, too, that is not worth seeing, from the tropics to the poles. Americans are willing to travel in uninteresting places, and to pay liberally for mere locomotion. Nay, after death, they expect to keep on journeying, to visit some of the planets and stars.

"Fireside travels" may do for a few lazy men, but most of our people will not be content with that imperfect vision of foreign things, in which the imagination has so much part. We wish to see with our own eyes what the world has to show, and no amount of reading, no collection of engravings or photographs, no tales of returned travellers can supply the lack of this positive knowledge. The passion for travel belongs to that scientific spirit of our time and people which is not content to take things at second hand, but will inquire and see for itself. The sneer is not just, that Americans travel in foreign lands, while they take no pains to see and know their own land. Large as their land is, and little as it has in most of its ways to show of historic or even of picturesque interest, Americans know it better than Englishmen know England, Frenchmen know France, or Italians know Italy. Five times as many American visitors annually go to the White Mountains as the English tourists who explore the Lake District and scale the heights of Skiddaw or Helvellyn. The rural Americans who visit New York are five times as numerous as the visitors in Paris from the French provinces. The going up and down on this continent, new as it is, large as its bounds are, and costly as is the transit, is incomparably greater than that of any other nation. We are a travelling people, more and more so with every year. We have one class of "commercial travellers," who are better dressed than the English "bagmen," and who really live upon the road, and rarely sleep under their own roofs. And we have a class, too, who travel half the year for the mere pleasure of voyaging, with no special aim—a class which, if not large, is at any rate indefatigable. Nothing is more common than the wish, not merely of sentimental school-girls, but of grave mothers and fathers of families, to be always travelling.

The passion for travel may now be satisfied with very slight discomfort, and very moderate cost. Indeed, there are some who affirm that it is cheaper to live on the road, in the summer months, than to stay at home, and that health and economy coincide in their constant excursions. Travel has now become not merely a joy in memory, but a luxury in experience. The "Hotel Car," with its arrangements for eating and sleeping, gives all the comfort and beauty of a palace, with none of the plague of housekeeping. You can have your piano and your writing-desk, and your dining-table, and your couch to loll upon, while you are whirled like

Digitized by Google

lightning over the plains and among the hills. No more the plodding toil of pedestrian journeys, stiffening the joints, blistering the feet, with the added weight of knapsack upon the shoulders, and the vexation of soiled and, after a time, ragged garments. The walkers now are only that class of fanatics who will walk for wagers, fifty and a hundred miles a day—"walkists," they call themselves—professional gentlemen, as much as acrobats and billiard-players. The more excellent way of horseback journeying is fast losing favour, as it gives no convenience for change of raiment, and is so slow and expensive. Where a railway has been opened, the saddle surely is hung up, and left to mould.

Those very picturesque trains of emigrant wagons, which used to span the great plains of the West, have disappeared more utterly than the arches of the Roman aqueducts, and the emigrants and the cattle now go in cars, in the same trains, on the iron rail. The stage coach, with its ten inside passengers and its ten outside, has not yet quite disappeared, but there are parts of the land where it is less common than the gaudy chariot of the circus, and the "minstrels." There are a great many young men and women here who have never in their lives rode in an old-fashioned Concord coach, or felt its joltings and its wrenchings, as it swings around the curves, or is drawn painfully up the slopes. The canal boat has now ceased to be a barge for travel. The drowsy monotony of its quiet gliding has no longer any attraction, even in the hot summer days, and the loaded boats seem contemptible as the railway cars fly past them. There are dwellers in Central New York who imagine the charm of Holland and its "Treckshuyt," who yet never avail themselves of the Erie Canal, so near their homes, to test that quaint conveyance. The coasting schooner, too, and the great packet ships, so clean and so roomy, have lost their dignity, and are now only burdened with the cheaper and coarser articles of merchandise. We have boat races and yacht races, but neither boats nor yachts have any place in the conveniences of travel. Even steamboats are relatively declining in favour. On our Western rivers comparatively few persons choose the boat, when there is a chance to go by the cars. Except in the hot months of summer, there is a growing preference for journeys on land, with all their discomfort. And more and more persons are influenced by that contrast of situation, which is so tersely expressed in the description, "If you get smashed up on the railroad, why, there you are; but if you are blown up on the steamboat, where are you?"

Since the railway has come practically to supersede other modes of travel, travelling has become possible to all, to busy men as much as to men of leisure. In a few weeks, one can now go over ground which in the last generation was the task of years. A College Professor goes from a Western State to observe an eclipse in Sicily, stays some sixty days, and then comes home to tell in a public lecture what he saw in half the countries of Europe, and leaves the impression that he saw pretty much all that is worth seeing. A six-month's journey carries one now rather leisurely across three continents and three oceans, and around the earth. The mountains and the sea are only a comfortable day's ride apart; and a Boston lawyer, taking an annual run through the Alps, puts a card on the door-way of his office, "Out of town; will return soon!" One can go almost anywhere by railway, into the country or into the city, into civilized or into savage life, to the crowded Fourth of July celebrations or to buffalo hunts. The sportsman finds a fine variety of sport in shooting at gazelles from the windows of a car rushing on at thirty miles an hour. Nay, the railway tunnels, sometimes miles in length, allow the weird fascination of exploring caverns, and visiting mines without discomfort, fatigue, or danger. By the railway the most delicate woman or the most portly citizen can climb mountains, without panting or terror. The improvement in travel which the railway has brought is absolute and unquestionable. It is only the most bigoted of eccentric men who would care to go back to the old methods, or use the old lumbering carriages and wains. Speed, comfort, economy, safety, ease of motion, room, change of position, punctuality, and how many more advantages, give railway travelling an easy superiority over all other modes.

And yet the grumblers have here their objections, numerous enough and plausible enough to make out a strong case. You talk of "safety;" yet does not every day's journal have its new chapter of railway accidents, of collisions, misplaced switches, cars off the track, broken axles, bridges falling in, drownings and burnings, and telescopings, with five or ten or twenty or possibly fifty lives lost? Is it not the presumption that every engineer and fireman and brakeman and baggage-master will come to an untimely end? Are not accident insurance policies sold at the very railway offices, warning the too credulous traveller what he ought to

Digitized by Google

expect? Is it not a special providence, on some lines of railway, if any passenger comes to his journey's end without bruise or mutilation? Who thinks of safety any more than of honesty, when mention is made of the Erie Railway? The stage-coaches had their accidents, and would sometimes upset; but did we ever hear of stage-coach "horrors," or "murders," which are entirely proper words to be joined to the word "railway?" The proportion of those who are killed or maimed to the whole number of those who travel is small, certainly; but the statistics which prove that fact have not established a perfect confidence where a hundred trains are running daily on a single track, with only the telegraph and the time-table to guide them. The danger of accident on any railway is always real and serious.

Then think of the bad air that most who travel on the railways are compelled to breathe! You have heat in winter, indeed, but at what expense—loaded with the carbon and the effluvia of forty or fifty bodies and pairs of lungs, not to speak of the inevitable dust shaken up from cushions, and sifting in even when doors and windows of the cars are closed. With all the improvements in railway cars, no satisfactory way has yet been found of supplying them in winter, or in the dry weather of summer, with clear, fresh air. If you open the windows, cold draughts come in or clouds of dust. If you close the windows, you suffocate. It is a choice between catarrh and asphyxia. And in addition to this bad tone in the air, think of the risk of contagious disease in sitting near and among so many persons, a mixed company! Who knows what plague may come to you from your neighbours? If you do not catch small-pox, or measles, you have at any rate to breathe in the odour of bad whisky, or tobacco, or onions, or of food from lunch-baskets. Think of the systematic and tolerated nuisances of the railway—the pea-nut merchants, distributing their crackling wares; the apple-dealers, the candy-dealers, the dealers in vegetable ivories, and yellow-covered novels, thrusting their trash into your hands in spite of your protest; the beggars with papers, blind men, and deaf women, and screaming Italian boys; think of snow on the track, banking up the train and making it necessary to dig out, with risk of starvation and freezing; and of fire, if some shock upsets the stove or throws down the kerosene lamp; or of pickpockets, who ply their vocation so easily in the press of the passage-ways; of the dangers of getting in and out of the car; of the hackmen with their whips, barricading every station; these are the conveniences of railway travel!

But these are not all the objections; these are not the most important objections to railway travel. There is a jolt and jar which even the nicest adjustment of springs on the smoothest rail is not able to remove. The best-ordered railway can not get rid of the steady rumble and murmur which fills the ears of the traveller, and makes conversation a burden. The brain is in a state of perpetual concussion, from which there is no escape. The speed, too, so much glorified, is a snare and a trial, as it confuses the mind with too rapid impressions, and prevents one from seeing any thing in a satisfactory way. Where there is much variety in landscape, or where the number of objects is great, there is no chance of taking them in, much less of studying them, from the windows of a railway car. The visions are phantom visions. In this way of journeying, you pass through the land without really learning what it is, or bringing away pictures of it. Railway travel answers well enough for great barren plains, for deserts, for prairies, or for forests, where the scenery is monotonous, but it is not good for regions that are thickly peopled, or where there is the alternation of hill and valley, of grove and pasture, of field and village. It is too swift, and it avoids the very routes which would be most picturesque, going around or through what it should go over. The railways pass through the least interesting part of the towns and cities, where there is most grime and filth, and dull colour—among shanties and forges, and across back streets. How different from the old stage-coach, that came dashing up the broad avenue, after it had scaled the hills, and gave so to its company all the excitement of fine prospect and social cheer. In railway travel you get over the ground rapidly, but you lose half the profit of your journey by this very speed. You have not time to review and arrange impressions. It is the same vexation which comes to one who visits in a week a dozen galleries, each with its hundreds of pictures. He has no good idea of any, and the confusion of images spoils for him the grandest works of the "Old Masters."

All these objections, nevertheless, all this grumbling, will not change the course of things, or restore the slow and antiquated methods of travel of the last generation. Whether we like it or not, we must adapt ourselves to railway travel, must meet its annoyances, must take the risk of its accidents, and must make the best of what we can not help. Trains will

Digitized by Google

continue to run on the Erie and the New York Central railways, and at thirty or forty miles in the hour, in spite of the slaughter and the horrors, and the confused ideas of sluggish brains. We must adapt ourselves to railway travel, such as it is, with its watered stock, its Celtic switchmen, its rapacious purveyors, and its reckless managers. We must pay exorbitant rates for its indigestible provender, and must submit to be drowned or roasted, if the fates so order. Unless we will stagnate at home, and dry up or rust out in the routine of village life, we must make use of these fatal railways. They have the right of eminent domain; and the very capitalist who vows that he will not travel by them, has to sell his land to them, and to hear the villainous whistle, screaming ten times in the day as the hateful train shoots through his garden, and sends its dust into his chambers. A man who in our time undertakes to fight with the railways, is in worse plight than Don Quixote in his fight with the windmills. Much as we may complain, there is no better way; in fact, there is practically no other way. To travel from Boston to Saratoga now with a "coach and four," is next to impracticable, for the inns along the roadway are mostly shut, and there is no longer "entertainment for man and beast." One who would journey in this way in the most civilized part of our land must virtually do as travellers do in the Arabian desert, and take his supplies along with him, must have a plethoric canteen suspended to his graceful chariot, and carry his bags of grain on the backs of his horses. Travelling in that way now would make one a "gazing stock" as much as a costume of the last century, the knee-breeches, the cocked hat, the ponderous queue, and the brass buttons.

In view of these facts, it may not be out of place to give some rules for comfortable railway travelling. And the first of these rules is *to be punctual*. It is never safe to count upon delays, though they so often occur. Provoking as it is to wait half an hour or an hour in some dreary station, it is more provoking to reach the station half a minute too late, and see the train gently gliding away. One may be late anywhere else with more reason. It is not every purse that is long enough, or every soul that is resolute enough to hire a "special train," as some noted lecturers have done, and so fulfil a broken engagement. There is no need of being half an hour too early, and it is a pitiable weakness to hurry breakfast on a cold winter morning, when there is a good hour to spare. Yet it is a still more melancholy weakness, which brings one, red in the face and out of breath, to jump upon the platform day after day when the train is in motion, at imminent risk of being thrown under the wheels. A railway station is an excellent position for the study of human folly. It is a good rule to be at the station long enough before the train leaves to make wise choice of a place in it, if it is already there, or at any rate, to get the mind composed and the nerves quieted.

2. In the choice of a seat, *get one as nearly as possible in the middle of the car*. Perhaps a seat nearer to the door may be safer in case of accident, and one may find easier escape. But that advantage is more than met by smoother motion, and the more comfortable air in the central part of the car. There are fewer cold draughts in that part, and in most cars the red-hot stove is less a nuisance there. A place over the wheels is not good for the brain; a prudent man will avoid it, if he can. Somebody must sit there, of course. Let it be the penalty which the late comers pay. The material of the seat is of much less importance in long railway journeys than the place of the seat. A velvet arm-chair, with the wind blowing upon it, or the jerk of the wheel vibrating in it, is not so safe and not so comfortable as a hard board bench in a better place. Do not sit near to the stove, or over the wheels.

3. Then, when there are several cars in the train, *choose a place in one of the middle cars*. No place in a train is wholly safe, and it has no more been decided which is the safest place in a railway train than where is the best place on the body to have a boil. Other things being equal, the middle car is safer than the front or rear car, in case of collision, and it has certainly an easier and more steady motion. It is a mistaken idea that the rear car is the least exposed. There are trains that follow as well as trains that encounter, and some of the worst railway accidents on record have come from these following trains. Avoid, at any rate, the temptation to use the baggage-car or the emigrant-car, because in these "smoking" is permitted. The luxury of a cigar is poorly purchased at the risk of fractured limbs, or in the pollution of foul air.

4. And we are disposed to urge, as a fourth rule, the propriety of *avoiding night travel in railway cars*. How absurd! it will perhaps be said. Is this not one of the grand improvements of this method of travel, that the nights can be used, and that you can sleep as comfortably as in your bed at home? Is it not great gain to get over the ground while you are

Digitized by Google

asleep, and save the weariness of the long day stretch? Nevertheless, we say, Don't travel by night, unless you are in a hurry to meet some engagement, to see a dying friend, or to reach your lecture-hall, when the trains have been detained. A bagman or a "bummer," who must have all his day-time for traffic, may be excused for travelling by night. He has no purpose of spiritual improvement or physical delight. But one who is travelling for health or pleasure loses much in the wear and tear of nerve which night-travel involves. The thin light, flickering and faint, is ruinous to the eyes, and the sleep which is snatched and broken, is not refreshing. Even the nice bed and the clean sheets of a Pullman palace-car are no guarantee for genuine rest; there is as much wakefulness, as much fitful dreaming, as much fear of nocturnal prowlers, and much more danger in case of accident, in these palace-cars, than in the more open cars, where they tumble and toss upon the seats, but are ready to move when the shock comes. Not a few persons, who thought sleeping-cars a wonderful invention a few years ago, now religiously avoid them, and prefer to watch in the other coaches, rather than be hived in the close cells and the hot air of those splendid cages.

5. To this we add the counsel, *not to eat in the cars*. Convenient as the custom may be, it is not quite clean. One can not drop crumbs, apple skins, and nutshells upon the car floor without annoying some of his neighbors. The odour of food clings to a car, even when it is open to currents of air. "Ten minutes for dinner," at a railway restaurant do not, of course, hold out a hope of a Christian meal. Yet where reasonable time is given, it is better to go for food in the place where it belongs. We may doubt, too, if it is altogether healthy to eat when the body is flying through the air, any more than when one is walking. There is a kind of bodily exercise in the motion of a railway car, less violent perhaps than that of rowing or horseback riding, but still quite as real. Who thinks of eating on horseback? The organ-grinder stops his grinding when he takes his dinner, though he still has one hand free.

6. Dr. Holmes, in one of his books, says that the model fellow traveller in a railway car is one who sits by you with his mouth shut, and asks no questions. May we not infer from this remark, if it is as wise as most of the Doctor's remarks, *that much conversation* in railway travel is *not good*, and should be avoided? A dead silence is embarrassing, but a perpetual stream of talk when there is this background of jar and rumble, making it an effort to listen, is fearfully wearisome. It tries not only the ears of the hearer, but it tries the voice of the speaker. It is not well to talk much in railway cars, when talking is felt to be an effort, and the voice has to be strained. Moreover, we should remember that loud talking will be overheard by those to whom it is not addressed. There is no greater nuisance in a railway car than a loud declaimer, who makes his affairs or his fancies public property.

7. Shall we read in the cars? Judicious oculists say that it is not safe. But what is a lone man to do, if he may not eat or talk? Must he spend all his time in thinking, or in looking out of the window, or in dozing? Some reading, certainly, must be allowed; and the profits of the book business on the train show the warning of the oculists is not very piously heeded. The best advice is, *not to read very much or very steadily in railway cars*, not to read any thing that requires close attention or close study, or that is printed in fine print. Newspapers and magazine stories are about as much as the brain ought to be tried with in this journeying. If one studies, it should be in the guide book rather than in Herbert Spencer. Mathematical problems and theological discussions are not to be handled in railway journeys, and a wise tourist will not choose the game of chess for his recreation when he is in an express train.

8. Another rule of railway travel, different from those thus far given, which are all in a sense sanitary, is *to be chary of making new acquaintances*. One of the pleasant things in the old stage-coach era was the agreeable friendships that sprung up in those expeditions, when men and women were brought so close together, and compelled to know one another. The company in railway cars is too miscellaneous to make that intimacy desirable. It is not safe to make a confidant of the man who is on the seat with you, or to expose to him your own weak points.

9. And a final advice is, covering a multitude of details, and very comprehensive—*mind the rules of the road*. Don't stand upon the platforms, or jump from them when the cars are in motion. Get your baggage properly checked. Don't open windows which were not meant to be opened at the season. Consider the rights of your fellow travellers and their comfort, and don't act as if you were entitled to special privilege. We add nothing more.

Digitized by Google

The Neglected Rich.

BY F. B. PERKINS.

ABUNDANCE of talk has been talked over the neglected poor. It is time that something was done for the neglected rich.

Rich people are human as well as poor people, they have their rights, and in a free country they ought to have a fair chance; an opportunity to start respectably in life, and to go respectably through it. But it is a melancholy fact that the organization of society in this country is such, that these just and equal privileges are—not exactly denied, but—not considered nor provided for rich people.

Don't you see yet what I mean? *There is no education with a view to manage wealth*—no education for the rich.

Thoughtless people may laugh here, or sniff, and say it's all talk. But not at all. I can give the names of three men of large wealth in one not very large city who have died within the past few years, leaving their estates protected from their children; that is, in the hands of trustees for the benefit of the children. Unhappy, neglected rich children! They had not been educated with a view to manage riches; and they were unfit to be trusted with riches.

Is that all talk? The practice of leaving large estates in precisely this way—beyond the control of the owners, because the owners are not fit to be trusted with wealth, is growing more common. It is prudent, no doubt, under the circumstances, but it is not a natural nor healthful arrangement. It is an attempt to make up for one bad state of things by establishing another; just as doctors give the poison of belladonna to get rid of the virus of scarlet fever.

Many writers have commented on the fact that here in America, great accumulations of wealth in individual hands are almost always dispersed again in the hands of the next generation, or the next but one; and this is usually reckoned as an advantage of our particular social organization.

Partly it is an advantage, and partly not. If wealth can only be managed improperly, it is good to have it scattered as soon as possible. But this theory of scattering takes it for granted that wealth will go into bad hands.

Wealth in good hands is not an evil, it is a good. Wealth well-managed is the one most absolute material necessity of civilization. Without it, no cheap clothes, no abundant household furniture, no carpets, no books, no great newspapers, no steamboats, no railroads—in short, nothing but pervading poverty.

I really believe an institution for rich children—Rich Children's Aid Society—would be a good thing. There are many institutions for poor children. Their special dangers and weaknesses are provided for. If there is any truth in Christ's teachings, the temptations and dangers of riches are greatly more to be provided against than those of poverty. Why should not the rich children be protected against *their* peculiar dangers, I should like to know?

It need not be supposed that no such training has ever been provided. The thing has been done over and over, according to the best lights of those who did it. Indeed, in England, the whole University system is an effort in this direction. It is greatly crippled and cankered by the chief English social fallacy of "upper classes" and their privileges. Its theory is that England belongs to the "nobility and gentry;" that the "gentlemen" should govern it. This is an error which I need not stop to discuss; but at least there is sense in the idea that goes with it, that a special education is necessary for those who are to exert these special powers. Now in England an enormous proportion of wealth is in the hands of the "gentlemen;" so that in fact, although only in an approximating and imperfect way, a rich Englishman is provided with an education which prepares him to manage his wealth and his position. In Germany, where aristocratic notions are stronger than even in England, there have been—though I believe there are not now—special separate schools, exclusively on purpose for princes and nobles, and into which plebeians might not come. This plan is still more infested with evil than the English one, but it contains the same seed of truth.

The education I suggest for the neglected rich is not one that assumes the idea of privilege, but of danger, of responsibility, of weakness. It should in a particular manner inculcate ideas of duty; of self-control; of humility; of justice; of kindness; of public spirit. It should be distinctively a noble education; not an education to maintain the pride of noblemen, but exactly the opposite; to prevent pride, and thus make noble men. It should be longer, harder, more

Digitized by Google

thorough, than other educations. Its graduates ought to possess broader views, higher aspirations, finer appreciations of the true, the beautiful, and the good, than graduates less severely trained. It might reasonably be expected that such a class of graduates would afford many high-minded and cultured gentlemen; and would infuse into our politics, into our greater industrial enterprises, into our science, invention, literature and arts, a largeness, an elevation, and a purity, in which they are too often deficient.

Let Her Speak!

[BY MRS. M. A. KIDDER.

SHE has something to say; you may tell it
By the flush on her beautiful cheek.
She has something to say to the people,
Let her speak, if she will, let her speak!
Let her speak for the good of the nation,
Let her help the oppressed and the weak;
Let her sweet voice be heard through creation,
Let her speak for the truth, let her speak!

As a mother may speak to her children,
Her warm heart with love overflown,
To her daughters and sons by adoption,
Let her speak, as she would to her own.
If you have a good cause, and would win it;
Or if true consolation you seek,
Let her speak, for her heart will be in it;
Let her speak for the truth, let her speak!

God has never made woman with talents;
With genius and beauty combined,
To be fettered by folly and fashion;
Aye, a cross betwixt matter and mind.
She has something to say to the people;
To the sad, the oppressed, and the weak.
She has something to say to the people;
Let her speak for the truth, let her speak!

SOME hands have art to move the heart,
By waking music's sweet appeal;
Some borrow dies from perfect skies,
And, through the canvas, make us feel;
Some make the dress fair forms caress,
To win the heart and turn the head;
For me, more rare beyond compare,
Are the bonny hands that make good bread!

Digitized by Google

Generative Expenditure and Longevity.

BY E. RAY LANKESTER, B. A., OXFORD.

IT is apparent that the longest-lived animals and trees are those of high development, and not only generally, but in comparing the members of a class or order this is found to be true. Thus we see the great trees, exhibiting no doubt the greatest bulk and greatest differentiation among plants, as having the longest life. The Vertebrata, which are the highest in evolution of animals, are, as a whole, the longest lived; for the Mollusca and Crustacea and Echinodermata, though, as stated in the list, they are not known to have a definite limit of life, yet certainly do not, on the whole, exhibit any thing like so great a potential longevity as the Vertebrata. Again, among the Vertebrata, the longest lived are found in the Mammalia; and the whale and the elephant, living respectively three hundred and one hundred and fifty years, are the largest, and, in this special characteristic, as highly evolved as any of the class. Then, side by side, we see the whale longer lived than the elephant on account of its greater bulk; man longer lived than the chimpanzee, being larger and more highly differentiated; the ox longer lived than the sheep and goat; the lion than the ox, being although not bulkier yet of higher development. So the small Rodents and Insectivora have short lives; the mouse being said to live a shorter time than larger allied forms. It would be interesting to know as to the longevity of Marsupials; whether their lower evolution tells strongly on their longevity, or whether bulk affects it most. The large Kangaroo, were longevity regulated by bulk alone, should live longer than the sheep. The Reptiles present *inter se* the same relations; the crocodiles and chelonia, which are certainly those of greatest individuation, being longest lived. So too the Fishes, as far as facts go, the pike being a highly evolved fish. The sharks may be guessed from their great size to have very long lives, which confirms the rule as to high development, though of course it can not as to bulk. That bulk and development increase together is well ascertained from general principles. The sharks of the later tertiary period are calculated from the size of their teeth to have measured between eighty and ninety feet in length, and may have had a proportionate longevity. Speculation might lead one to attribute enormous longevity to the gigantic extinct mesozoic reptiles. Among Mollusca, the highest in evolution are the highest in longevity, if we may judge by the size and rate of growth of some Cephalopods, both recent and extinct, as compared with Conchifers and Brachiopods. The Insect *inter se* present facts supporting the truth of the proposition as to high evolution: the Coleoptera and Orthoptera, undoubtedly from the carnivorous habits (in many cases) and generally dominant character, the most highly evolved, are the longest lived, according to observation, *e. g.* Scarabæus and Mantis.

Among Birds, the most striking case is seen in the exceeding longevity, which is well ascertained, of parrots. They are undoubtedly the very highest of birds in development, and they live probably the longest. The facts as to age do not however relate to their normal potential longevity, we have to guess that from the experiment in abnormal conditions.

Next, as to generative expenditure. Since this generally and clearly increases with diminished evolution, it is not difficult to establish the contrast between it and high longevity, as a general rule. The Protozoa and Protophyta are exceedingly prolific, an Infusorian being calculated to produce two hundred and sixty-eight millions in the course of a single month (Paramecium); another one hundred and seventy billions in four days, and their duration of life is correspondingly of the shortest. Insects are exceedingly prolific, and hence, in spite of their high evolution, very short-lived. Many insects deposit three hundred thousand ova, but, what is a more important item of consideration, they deposit an enormous bulk relatively to their living matter. Compare the not far distant but inferior Annelids, and they are seen to be longer lived, for though in most cases possessing large genital organs, they do not deposit their ova or sperm so early or so rapidly as the insects. The Vertebrata are by no means prolific (except fish), and at the same time are longer-lived than Invertebrata.

Fish are long-lived, in spite of considerable generative expenditure,* the explanation lying

* The bulk of the ova and sperm in fish is not so large as the number of the ova lead one to think; and moreover, as a rule, they give no parental attention, which is a most important item of generative expenditure. In those fishes which do, *e. g.*, Pipe-fish, Hippocampus, and

Digitized by Google

in the diminished personal expenditure involved in their aquatic life. This, too, affects greatly the case of annelids just quoted. Among birds it is easy to point out that smaller broods go with a greater longevity: thus the eagle has but one or two eggs, the common owl four or five; finches two broods of five in a season, and the wrens and tits eight to fifteen; and these, as appears from our list above, stand in the same order as to longevity. It is very difficult indeed to find particular cases in which the direct action of generative expenditure on longevity is apparent, for it affects other quantities before longevity, or its action is counteracted by fluctuations in these quantities, as, for example, in personal expenditure and degree of evolution. One ought to compare organisms which are alike in these two last quantities. In trees, we may take the pear, apple, and such fruit trees, and we find that they are excessive in their reproductive expenditure, and short-lived as compared with other trees which agree (as do all vegetals) in the absence of personal expenditure, and are of equivalent individuation. In animals we may best compare experimental cases; thus we find that animals used for breeding, and made to breed early, are less long-lived than those which are not so used. There are, besides, two important cases to compare, viz., mules which are born incapable of reproducing, and animals which have been operated upon. With regard to the Mule, Bacon states that it lives longer than either the horse or the ass, which confirms the hypothesis that generative expenditure antagonizes longevity. But as to the results of operations, it appears that, as in cases of forced abstinence, a disturbing element is introduced by the interference with the proper functions and nutrition of the animal. The principle of Treviranus, "that every organ is as an excreting gland to the rest of the body" must be remembered, and we can comprehend that by the removal of generative glands no advantage as to longevity would accrue to the organism, but perhaps great injury, while the abeyance of normal functions will equally not prevent that nutrition of the organs and their growth, which is a great part of the tax of generative expenditure. At the same time, both castrated organisms, and those restrained from the sexual act, gain in the possible absence of nervous excitement, which has "a relatively enormous costliness," and by not losing the simple weight of the emitted generative product. It does not appear from facts, that castrated animals are longer-lived than those normal, neither among men nor lower animals, nor that celibates, male or female, among either men* or lower animals, have a large if any advantage.

Passing on to personal expenditure, we find more numerous facts in the list to support our deductions. Aquatic animals, generally, have less personal expenditure than terrestrial animals; they are supported in the water, the temperature fluctuates little, their food is abundant, for waters "team with life" truly more than the atmosphere. Terrestrial animals, while supporting themselves mostly on the ground, live in the air, and in very few cases is their food to be found abundantly in this medium, and accordingly their expenditure in getting food is greater. Thus among Vertebrata, the whale is long-lived, the crocodiles and chelonians are long-lived, the salamandroids and the fish. It does not appear certain that the Batrachia (frogs and toads) are shorter-lived than the salamandroids; their terrestrial habits involve greater expenditure, but their very much higher individuation may counterbalance this. Among Invertebrata, the Mollusca are long-lived; the Pulmonata less so than the branchiate Gasteropods. Paludina and Lymnæus living in the same pond differ thus in age,† while no land Mollusc is as large (and therefore probably from what we have seen as long-lived) as many hundreds of aquatic (marine) species.

The aquatic Arthropods (Crustacea), excluding the minuter forms, are most broadly contrasted with the terrestrial Insects, Myriapods, and Arachnids, in respect of length of life, as we have before mentioned, and set forth in the list. Descending lower, we find no terrestrial groups to compare.

Reptiles living in hot countries, and feeding

Arius of the Amazons, the bulk and number of the ova is immensely reduced.

This item of parental attention is what in the case of man and other animals tends much to balance the male and female generative expenditure, for the male feeds both mother and young for a considerable time by his *exertion*; hence the female's expenditure of *substance* is in some degree balanced

* It is exceedingly difficult to make estimation as to male celibates; the *unmarried* have a considerably higher death-rate at ages below fifty among the males than the married, but there are not statistics to show that of the numbers surviving there is a less expectation of life than among the married, or widowers. It is impossible to be assured of the strict abstinence of any group of men. Among women the oldest are widows, but the relative ages of marriage of males and females, and the numbers of married and unmarried affect these numbers vastly, and their influence *can not* yet be eliminated.

† As far as the writer's observations go, Lymnæus lives four years, and Paludina seven or eight.

Digitized by Google

on large masses of food at intervals, have small expenditure and live long. The higher reptiles are the most sluggish and inert of any animals in proportion to their degree of development; and hence, their expenditure being small and their development high, we should expect them to exhibit great longevity, which they do. A very instructive contrast is afforded by birds and reptiles, which are so closely allied in structure. The active, expending birds are short-lived as compared with such reptiles as the tortoise and crocodile.

Echinoderms, being exceedingly sluggish, living on the most easily obtainable food, in many cases, viz., the organic matter diffused in sand, live longer than would be expected from their comparatively low place in the scale of life. Actinia, which is also almost like a vegetal as to absence of personal expenditure, as are other sedentary cœlenterates, owes its great longevity to a relatively high evolution, in respect of *integration*. It buds never (or rarely), and breeds sexually but little.

The parasitic worms and crustacea might be expected to have a great longevity from the total absence of personal expenditure; but here, as in many plants, there is enormous generative expenditure, which shortens life, the small percentage of those born which ever get into the happy conditions of a stomach or gill, being the reason for this great generative outlay. Most of these forms die on reproduction. Tænia does not die at once, because of its tertiary aggregation; that is to say—it is separated into a number of joints, which, one by one, come to maturity and die, while new joints contine to grow from the head.

These are some of the most striking inductive verifications which the collected statements furnish; others are to be found by a further examination of the list.

FOOLS *vs.* IMPS OF MISCHIEF.—A certain old teacher used to remark that he would rather have "ten devils in a class than one fool." He could make smomething of the imps of mischief, not by suppressing their jollity, but by turning it into right channels. The "fool" is not troublesome but hopeless; he lacks energy of mind. A friend of ours, an experienced teacher, says: "The hardest working, most brilliant and successful student I ever had the pleasure of teaching, was a young man whom the president of the college called a monkey, too full of frolic to accomplish any thing useful. He *was* too frolicsome to do any thing soberly, more especially if gravity was insisted on as a duty. But when his overflowing humor was allowed to brighten his work, he was the most persistent student in the institution; he made fun of labor that sober-sided plodders broke their hearts and deranged their stomachs over."—*College Courant.*

A NEW THOUGHT FOR EDUCATORS.—In one of our large Western cities, I came a few weeks ago upon a unique school, illustrative of the desire to do something that is becoming so distinguishing a characteristic of the women of the period. Three wealthy and accomplished women, leaders in society, came to the conclusion that they could give their children better instruction than they were receiving at the schools, and determined to try the experiment. Living in the same block, the matter was easily arranged. Reception-room in house no one became a school-room, and its mistress a teacher from 9 till half-past 10, of number two from half-past 10 till 12, of number three from 2 till half-past 3 o'clock. Each taught those branches in which she was a proficient, the interest of the pupils was unflagging, and their progress wonderful. The experiment at the time of my visit was nearly six months old, and no signs of waning enthusiasm had manifested themselves on the part of teachers or pupils; it was in every sense of the word a success.—*Anonymous.*

A CURE FOR THE BLUES.—A paragraphist says in one of the medical papers that "Laughter and music will cure the blues." Now laughter is good, and music is good. And we do not doubt that they have a good effect on those who are depressed in spirit, but how is a man going to laugh when he don't feel like it, and, it is not always easy to get a dose of inspiring music. A still better prescription is to seek the society and moral support of people who are not blue. When a clock has run down, it stops. It can not start itself, somebody must wind it, and touch gently the pendulum till it swings freely in its accustomed track. So when hope has departed from the soul, and all looks dark and discouraging, the touch of a strong, healthy nature cheers and invigorates, and starts into action a faculty that has run down and stopped. If you are blue, then go to one who is not blue, and let him apply the sparks of his own life to your despondent nature.—*Exchange.*

Digitized by Google

STUDIES IN HYGIENE.

Recipe to Enhance Personal Beauty.

How to be beautiful when old?
I can tell you, maiden fair—
Not by lotions, dyes, and pigments,
Not by washes for your hair.

While you're young be pure and gentle,
Keep your passions well controlled,
Walk, work, and do your duty,
You'll be handsome when you're old.

Some white locks are fair as golden,
Gray as lovely as the brown,
And the smile of age more pleasant
Than a youthful beauty's frown.

'Tis the soul that shapes the features,
Fires the eye, attunes the voice;
Sweet sixteen, be these your maxims,
When you're sixty you'll rejoice.

Hygiene for Babes.—The infatuation of those mothers who persist in substituting corn-flour and nursery-biscuits for the milk intended by Nature for very young babies, received the other day a severe practical rebuke. Dr. Dowd, giving evidence at an inquest held upon the body of an infant, aged ten weeks, said that "the poor little thing was brought to me in a dying state; the body was very much emaciated—in fact, only skin and bones—and, although nearly three months old, did not weigh more than five pounds. The post-mortem examination showed that all the organs were healthy, and the stomach contained farinaceous food. The cause of death was wasting—in fact, starvation from want of milk, and I don't approve of corn-flour being given to young children in such a case." Dr. Lankester, in summing up, said "milk, and not corn-flour, is the proper food for infants; failing breast-milk, the best substitute is new milk, or the condensed Swiss milk, which has all the properties of mother's milk, and it will likewise keep any length of time. To my own knowledge, children have been fed on it for months, with the best possible results." Now this Swiss milk is convenient, and is within the reach of every one, and should be found in every nursery.—*English paper.*

The Swiss milk spoken of above is not to be had in this country, but in most of the large cities condensed milk can be procured, and is preferable to most of the milk sold in the market.

Family Hygiene.—A good wife is the greatest earthly blessing. A man is what his wife makes him. It is the mother who molds the character and destiny of the child. Make marriage a matter of moral judgment. Marry in your own religion. Marry into a different blooded temperament from your own. Marry into a family which you have long known. Never talk of one another, either alone or in company. Never both manifest anger at once. Never speak loud to one another, unless the house is on fire. Never reflect upon a past action, which was done with a good motive, and with the best judgment at the time. Let each one strive to do right, and above all, let each one try to keep cheerful.—*Exchange.*

The secret of family happiness is personal happiness of the members, and this depends mainly on good health. Unhappy people generally have something wrong in their stomach or perhaps they don't sleep enough. A person who has been out late at night, dissipating away his or her health, is quite sure to treat every body badly next day, and think them bad, when the fault is nearer home.

Potatoes.—Potatoes, as usually cooked, are probably the most objectionable article of food which can be presented to a weak digestion. The starch granules are but half ruptured, and are held together by cellular tissue, so that they are reduced by mastication only into small pellets, which require long soaking into gastric juice before they can be broken up sufficiently for solution.—*Chambers on Indigestion.*

If potatoes are fresh, and of good quality, and well masticated, they will not be found difficult of digestion by those who take active exercise in the open air. It is however very true that potatoes, as usually found in large cities, are more or less injured and unwholesome. They do not

Digitized by Google

bear without injury, transportation, exposure to light, and change of temperature.

HYGIENE FOR SEWING-MACHINE OPERATORS.—Dr. E. Decaisne has reported to the French Academy of Medicine, the result of his observation upon 661 operators upon sewing-machines.

1. The effect of working a sewing-machine is in no wise different from that produced by all excessive muscular effort (*i. e.*, only injurious when excessive).

2. The sewing-machine can not be the cause of disturbance of the digestive apparatus, for sixteen out of twenty of all kinds of artisans are troubled in the same way.

3. Affections of the respiratory apparatus are no more numerous in women who work with sewing-machines than with any other laborers.

4. As for the effect of the noise made by the machine, or the jar upon the nervous system, the writer thinks it of no moment, as the operators soon get accustomed to it, and make no complaint. (Do injurious agents, to whose influence we become accustomed, cease to be injurious?)

5. Without saying positively that the use of the sewing-machine has no exciting influence in producing disease, our author affirms that the observations published in this regard, and the generalizations drawn from them, are without value. The cause of these disturbances are to be sought in the moral or physical peculiarities of the operators.

6. If proved to be injurious, other power can be used in factories.

7. The machines with isochronous pedals are to be preferred to alternating.

8. The writer concludes that when women use sewing-machines within reasonable limits, they are no more injurious than sewing with the needle. In twenty-eight women, between eighteen and forty years, working three or four hours a day, he could discover no ill defects attributable to their labor.

EARLY RISING.—J. C. B. asks if children should be made to rise early in the morning. We answer, Yes, if they are sent to bed early at night, but in no case is it wise to wake them up. One of the very worst economics of time is that filched from necessary sleep. The wholesale but blind commendation of early rising is as mischievous in practice as it is errant in theory. Early rising is a crime against the noblest part of our physical nature, unless preceded by an early retiring. We caution parents, particularly, not to allow their children to be waked up in the morning. Let Nature wake them up; she will not do it prematurely. Take care that they go to bed at an early hour—let it be earlier and earlier, until it is found that they wake up themselves in full time to dress for breakfast.

QUALITIES FOR A NURSE.—She should be able to read writing and to write fit for reading. She ought also, to have all her five senses in a healthy, active condition—sight, hearing, feeling, smell, taste. Sight, that she may be able to read directions, or read aloud to the patient, and watch the change of countenance. A quick-sighted nurse will not need to wait till the sufferer has asked for any thing in words. She will, from the motion of an eye, or the lips, or a finger, see in a moment what is wanted. Hearing, that she may catch the faintest whisper, and not oblige a weak patient to exert the voice, and to repeat every request. Feeling, that she may detect any change in heat or dryness in the skin of the patient, and not to use any application which will either scald with heat, or cause a chill with cold. Smell, that she may detect the least impurity in the atmosphere of the room. Taste, that she may not offer food unfit to be used, or good in itself, but cooked in such a way as to be disgusting to the patient. Now, if she possesses these qualities, she will very soon, with a little instruction, be able to do the patient more good than the Doctor can.

HYGIENE FOR THE VOICE.—The first thing to which the teacher should give attention, is quality of tone produced by the child. The "baby-tone"—with its accompanying "baby-talk"—which has perhaps been petted and cultivated at home, and called "cunning" at school, must give place to a smooth, round, pleasant quality. The harsh screaming which boys in particular so often adopt, must never be allowed. They can easily be led to distinguish between *noise* and music, and can at least be *educated* to prefer the latter. There is as much difference between the noisy quality, often heard in school-rooms, and a true musical tone, as between the crash of broken crockery and the ring of a silver bell.

The principal points which require attention in the training of a child's singing-voice are:

1 QUALITY OF TONE.—It must be clear, melodious, promptly started, and evenly sustained.

2. POWER OF TONE.—Not strained on the one hand, nor so feeble as to be imperfect or husky

Digitized by Google

3. Length of Exercise.—The voice must not be fatigued. The singing lesson should only be continued so long as the child enjoys it; never till he is physically or mentally weary.

A Brief Night's Rest.—

Last night I weighed, quite wearied out
The question that perplexes still;
And that sad spirit we call doubt
Made the good nought beside the ill.

This morning, when with rested mind
I try again the self-same theme,
The whole is altered, and I find
The balance turned, the good supreme.

A little sleep, a brief night's rest,
Has changed the look of all that is!
Sure, any creed I hold at best
Needs humble holding after this.

Haste and Health.—It is not at all wholesome to be in a hurry. Locomotives have been reported to have moved a mile in a minute for short distances. But locomotives have often come to grief by such great rapidity. Multitudes in their haste to get rich are ruined every year. The men who do things maturely, slowly, deliberately, are the men who oftenest succeed in life. People who are habitually in a hurry generally have to do things twice over. The tortoise beat the hare at last. Slow men seldom knock their brains out against a post. Foot-races are injurious to health, as are all forms of competitive exercises; steady labor in the field is the best gymnasium in the world. Either labor or exercise carried to exhaustion, or prostration, or even to great tiredness, expressed by "fagged out," always does more harm than the previous exercise has done good. All running up-stairs, running to catch up with a vehicle or ferryboat, are extremely injurious to every age, and sex, and condition of life. It ought to be the most pressing necessity which should induce a person over fifty to run twenty yards. Those live longest who are deliberate, whose actions are measured, who never embark in any enterprise without "sleeping over it," and who perform all the every-day acts of life with calmness. Quakers are a proverbially calm, quiet people, and Quakers are a thrifty folk, the world over.—*Dr. Hall.*

Laziness and Long Life.—The lazy groan most over their "arduous duties;" while earnest workers *talk* little about the exhausting labors of their profession. Of all creatures, the sloth would seem to be the most wearied and worn. "He that is slothful in his work is brother to him that is a great waster"—first of all of health. Said Dr. Humphrey, for twenty-two years the President of Amherst College, and who reached the age of eighty-two: "I have yet to see the man who died from the effects of study." Kant, an indefatigable student in the most profound themes of metaphysics, and leader of a new school in philosophy, lived beyond the limits of three score and ten. As the result of his long experience and wide observation, he was wont to say: "Intellectual pursuits tend to prolong life." He placed great reliance on the power of *cheerfulness* and *will* in resisting disease. "Be of good cheer," is as wise a prescription for the health of the body as of the soul.—*B. G. N.*

Mental Hygiene, and Tobacco.—What is no longer doubtful is the part taken by tobacco in the progressive development of mental maladies, and more especially in the etiology of that form of alienation so vaguely denominated general or progressive paralysis, and which for a certain number of years has increased so as to encumber in every direction the *maisons de sante* and lunatic asylums. MM. Guislain and Hagon were the first to point out the double influence of tobacco and spirituous liquors on the almost unheard of development of this disease, and the following statistics seem to justify the opinion of the Belgian physicians:

From 1818 to 1830, the production of tobacco being 28,000,000 kilos, there were 8,000 insane.

In 1838, the same product being 30,000,000 kilos, there were 10,000 insane.

In 1842, the same product being 80,000,000 kilos, there were 15,000 insane.

In 1852, the same product being 120,000,000 kilos, there were 22,000 insane.

In 1862, the same product being 180,000,000 kilos, there were 44,000 insane.—*Prof. Jolly.*

Many persons think that a smoke after a meal promotes digestion, but Dr. Morris suggests that, if people whose digestion is not good, will eat slowly and masticate their food well, and not rush off to work at once after a meal, they will not need this aid, indeed he thinks the aid to digestion attributed to the smoke comes after all from the rest and quiet, and not from the tobacco in any wise.

Things that Hurt the Teeth.—Among the things hurtful to the teeth, we notice the bad habit of using them for purposes for

Digitized by Google

which they were never intended. Persons who with their teeth crack nuts, draw corks and nails, lift heavy weights, and bite thread, a thing especially to caution ladies against, only expose to premature decay, organs indispensable to nutrition and beauty. Smoking is also to be deprecated, for it corrodes the teeth, and the sudden change many times in inhaling cold air, causes an inflammatory action of the mucuous membrane of the mouth. The continued use of pipes and cigar-holders, being made of hard substances, wear away the teeth. Look at an old man who smokes a clay pipe, for example, and you will find the lateral incisor and cuspid worn to such a shape that they exactly fit the stem of his pipe. There is a habit which the ladies have of putting pins and needles in their mouths, and often carrying them there for a long time. This is no little matter, for the contact of these hard bodies, pressed with more or less force will wear away the enamel, and sometimes induce caries of the whole tooth.—*Dr. Ambler.*

WAISTS.—The waists with bands over the shoulders and buttons for the attachment of the skirts which some ladies wear, are a very useful means of support, and when properly made and fitted to the form they do much toward taking the weight of the skirts off the waist, and their use is to be strongly recommended; a single waist can be made so as to support all the skirts but that of the dress, and this should be so loose as to be supported by its own waist. Of course, if the under-waist is made so tight at the bottom as to closely compress the abdomen, it will be quite useless for the purpose designed. Woman's taste and ingenuity can devise plans for making them so neatly that they will add to, rather than detract from, the appearance of the form. These waists were much more generally worn formerly than now, and it is a pity that they were ever discarded, as their continued use would have prevented much injury to the health of women.—*Dr. Robert White.*

THE THERMOMETER IN DISEASE.—The British Medical Journal hopes "it will not be long before every intelligent mother of a family is familiar with the use of the thermometer for the discovery of disease. In many respects, it is far more reliable than the tongue or the pulse. As a means of ascertaining when it is desirable to consult a doctor, and when advice may be deferred with safety, it would be invaluable. By its aid the difference between insignificant skin-rashes, which will disappear in a day or two, and those which imply a constitutional fever, may usually be satisfactorily determined. Under many circumstances, the early discovery that a child was sickening for scarlatina or measles might be of great importance."

CONSUMPTION OF OXYGEN.—An adult person consumes between one and two pounds of oxygen daily. If we reckon the population of the world at a billion, and allow one pound per day to each person, and calculate approximately the amounts consumed in other ways, we may take the daily consumption of this element to be about as follows:

Man	1,000,000,000 lbs.
Animals	2,000,000,000 lbs.
Combustion	1,000,000,000 lbs.
Decay	4,000,000,000 lbs.
	8,000,000,000 lbs.
	= 3,571,428 tons.

Now, if the daily consumption of oxygen should continue the same, it would apparently take 945,098 years for all the oxygen of the atmosphere to be consumed—not destroyed but fully locked up. But we can not reduce the amount of oxygen except in a very small degree, say four or five per cent., without endangering the life of the higher order of animals. Hence it would take but a short time to render the existence of man impossible on the earth, if there was no means provided for restoring this oxygen to the air.

Fortunately the supply of oxygen can not be reduced so as to do injury, as the trees and plants restore it again as fast as needed.

WATERING THE STREETS WITH CARBOLIC ACID.—During the summer, most of the crowded streets of London have been watered on alternate days with a weak solution of carbolic acid, as has been the custom for the last four years, and there is no doubt that this excellent antiseptic and disinfectant has been very beneficial in a sanitary point of view. The inhabitants of those streets have often expressed satisfaction at the freshness, and removal of disagreeable smells, which this acid produces, and they regard it as an addition to their comfort.

The above note we clip from The London Medical Times, and add the wish that the same method might be tested in the cities of this country.

Digitized by Google

RECIPES FOR WHOLESOME COOKING.

SOUPS.

CONTINUED FROM APRIL NUMBER.

No. 5. VEGETABLE SOUP.—Put a little of five or six sorts of vegetables most in season into three quarts of water, with some onions, and two or three kinds of herbs, and a little celery cut small, and boil it gently for two hours. Strain it, and serve it with bread and beans, or peas.

No. 6. BROWN SOUP.—One pound of turnips, one pound of carrots, half a pound and six ounces of onions, one and a half pints of peas, four ounces of butter, and half a pound of bread. Cut the vegetables into small pieces; put them in a pan with the butter; cover the pan and let them stew over the fire till brown, occasionally stirring them; put in the peas with the water in which they were boiled; add sufficient boiling water to make three quarts altogether; next add the bread, which should be browned or toasted before the fire, but not burnt; season, and let the soup boil gently for three or four hours; rub it through a coarse sieve; return it into the pan; let it boil, and it will be ready to serve. If dried peas are used, they should be steeped for twenty-four hours in soft water, and boiled for two hours.

No. 7. BARLEY SOUP.—Three ounces of barley, one and a half ounces of stale bread crumbs, one ounce of butter, quarter of an ounce of chopped parsley, and half an ounce of salt. Wash, and steep the barley for twelve hours in half a pint of water, to which a piece of soda the size of a pea has been added; pour off the water that is not absorbed; add the bread crumbs, three quarts of boiling water, and the salt; boil slowly in a well-tinned covered pan for four or five hours, and add the parsley and butter about half an hour before the soup is ready to be served.

No. 8. CELERY SOUP.—Six roots of celery, one large turnip, two ounces of onions, four ounces of bread crumbs, one ounce of butter, one dessert-spoonful of flour, and half a pint of cream. Strip off all the green part of the celery, using only the white; cut it in shreds, reserving the inside of three of the roots to be added afterward; slice the turnip and onion, and put them with the celery into a pan; add two quarts of water, the bread crumbs, and a little salt; let all boil till the vegetables are perfectly soft; rub through a sieve; return it to the pan: add the celery (previously boiled till quite soft), the butter, and flour, well mixed; stir it, seasoning with a little mace; and, after boiling a quarter of an hour, stir in the cream, but do not allow it to boil afterward.

No. 9. HERB SOUP.—Quarter peck of spinach, one ounce of parsley, half a pound of bread crumbs, a quarter pound of butter, and a few green onions. About half boil the herbs; drain and cut them into small pieces; stew them in the butter half an hour, and dredge in a little flour. Put the bread crumbs into a pan with two quarts of water; boil till smooth; add the herbs, and season, and boil for ten minutes.

No. 10. SPINACH SOUP.—Quarter of a peck of spinach, two ounces of parsley, two carrots, two onions, one good-sized turnip, one root of celery, one ounce of butter, and a sprig or two of thyme. Put the vegetables and herbs into a stew-pan, with the butter, a little salt, and a pint of water in which mushrooms, or the stalks and parings of mushrooms have been well boiled; stew till the vegetables are quite soft; rub through a coarse sieve; add a quart of boiling water, a little salt, and boil all together a quarter of an hour.

No. 11. VERMICELLI SOUP.—Six ounces of vermicelli, two quarts of new milk, the yolks of four eggs, and one pint of cream. Blanch the vermicelli by setting it on the fire in cold water; when it boils, drain off the water, and put it into cold water; let it remain a few minutes, and then drain the water entirely from it; put it into a pan with the milk, and boil it; beat up the yolks of the eggs, and after gradually adding a pint of boiled cream, strain through a sieve. Take off the pan; add the eggs, cream, a small lump of white sugar, and a tea-spoonful of salt, and stir the soup on the fire till near boiling.

No. 12. BARLEY BROTH.—Four ounces of Scotch barley, four ounces of onions, four ounces of oat-meal, or Indian-meal, and two ounces of butter. After washing the barley well, steep it in fresh water for twelve hours; set it on the fire in two quarts of water, adding the onions and a little salt, and boil gently for an hour and a quarter. Melt the butter in a saucepan; stir in the meal till it becomes a paste; then add a little of the broth gradually, till it is a proper thickness to mix with the whole quantity; stir well together till it boils, and mix with a little of the broth a drachm of celery seed, pounded; stir well in the broth; simmer it gently a quarter of an hour longer, and serve.

SALADS.

Salads are very wholesome and refreshing, when the articles of which they are composed are fresh and crisp. They should be taken as part of the meal, and not after enough, and perhaps too much, of other food has been eaten.

MIXED SALADS.—Salads are chiefly composed of lettuce, mustard, cress of various kinds, sorrel, parsley, green onions, the tops of young spinach, corn salad, mint, endives, celery, radishes, young beets, boiled beet-root, water cresses, etc. All, or any of them should be fresh gathered, and when nicely trimmed, repeatedly washed in salt and water, and well drained. The smaller salads should be put in a clean cloth and lightly shaken, but not pressed. They should then be arranged in a salad bowl; the celery, also divided, put in the center, and the smaller salads, such as radishes, mustard, and cress, placed between. When salad sauce or dressing is used, it should not be mixed with the salad, but put in the bowl first, the salad cut in small pieces and laid lightly over it, and the top ornamented with the boiled whites of eggs cut in rings, and slices of beet-root; or the same may be served separately.

Digitized by Google

EDITORIAL DEPARTMENT.



NEW YORK, MAY, 1871.

WATER.

"To the days of the aged it addeth length;
To the might of the strong it addeth strength;
It freshens the heart, it brightens the sight;
'Tis like quaffing a goblet of morning light."

☞ THE PUBLISHERS *do not hold themselves as indorsing every article which may appear in* THE HERALD. *They will allow the largest liberty of expression, believing that by so doing this magazine will prove to be more useful and acceptable to its patrons.*

☞ *Exchanges are at liberty to copy from this magazine by giving due credit to* THE HERALD OF HEALTH AND JOURNAL OF PHYSICAL CULTURE.

TOPICS OF THE MONTH.

BY M. L. HOLBROOK, M. D., EDITOR.

AN INTERESTING LETTER FROM WILLIAM CULLEN BRYANT.—The following letter from Mr. Bryant, has been placed at our disposal for publication in THE HERALD OF HEALTH by Mr. Richards, to whom it was addressed. It contains a lesson of such value to the thousands of young men of our country regarding simplicity in diet, temperance, and exercise, that we hope it will be read by all of them, not so much to gratify idle curiosity as to gain knowledge that may be of great service to them in the conduct of their lives.

NEW YORK, *March* 30, 1871.

TO JOSEPH H. RICHARDS, ESQ.—*Dear Sir:* I promised, some time since, to give you some account of my habits of life, so far, at least, as regards diet, exercise, and occupation. I am not sure that it will be of any use to you, although the system which I have for many years observed seems to answer my purpose very well. I have reached a pretty advanced period of life, without the usual infirmities of old age, and with my strength, activity, and bodily faculties generally in pretty good preservation. How far this may be the effect of my way of life, adopted long ago, and steadily adhered to, is perhaps uncertain.

I rise early, at this time of the year about 5½; in summer, half an hour, or even an hour, earlier. Immediately, with very little incumbrance of clothing, I begin a series of exercises, for the most part designed to expand the chest, and at the same time call into action all the muscles and articulations of the body. These are performed with dumb bells, the very lightest, covered with flannel; with a pole, a horizontal bar, and a light chair swung around my head. After a full hour, and sometimes more, passed in this manner, I bathe from head to foot. When at my place in the country, I sometimes shorten my exercises in the chamber, and, going out, occupy myself for half an hour or more in some work which requires brisk exercise. After my bath, if breakfast be not ready, I sit down to my studies until I am called.

My breakfast is a simple one—hominy and milk, or, in place of hominy, brown bread, or oat-meal, or wheaten grits, and, in the season, baked sweet apples. Buckwheat cakes I do not decline, nor any other article of vegetable food, but animal food I never take at breakfast. Tea and coffee I never touch at any time. Sometimes I take a cup of chocolate, which has no narcotic effect, and agrees with me very well.

Digitized by Google

At breakfast I often take fruit, either in its natural state or freshly stewed.

After breakfast I occupy myself for awhile with my studies, and then, when in town, I walk down to the office of The Evening Post, nearly three miles distant, and after about three hours return, always walking, whatever be the weather or the state of the streets. In the country I am engaged in my literary tasks, till a feeling of weariness drives me out into the open air, and I go upon my farm or into the garden, and prune the trees, or perform some other work about them which they need, and then go back to my books. I do not often drive out, preferring to walk.

In the country I dine early, and it is only at that meal that I take either meat or fish, and of these but a moderate quantity, making my dinner mostly of vegetables. At the meal which is called tea, I take only a little bread and butter, with fruit, if it be on the table. In town, where I dine later, I make but two meals a day. Fruit makes a considerable part of my diet, and I eat it at almost any hour of the day without inconvenience. My drink is water, yet I sometimes, though rarely, take a glass of wine. I am a natural Temperance man, finding myself rather confused than exhilarated by wine. I never meddle with tobacco, except to quarrel with its use.

That I may rise early, I, of course, go to bed early: in town, as early as ten; in the country, somewhat earlier. For many years I have avoided in the evening every kind of literary occupation which tasks the faculties, such as composition, even to the writing of letters, for the reason that it excites the nervous system and prevents sound sleep.

My brother told me, not long since, that he had seen in a Chicago newspaper, and several other Western journals, a paragraph in which it was said that I am in the habit of taking quinine as a stimulant; that I have depended upon the excitement it produces in writing my verses, and that, in consequence of using it in that way, I had become as deaf as a post. As to my deafness, you know that to be false, and the rest of the story is equally so. I abominate all drugs and narcotics, and have always carefully avoided every thing which spurs nature to exertions which it would not otherwise make. Even with my food I do not take the usual condiments, such as pepper, and the like.

I am, sir, truly yours,

W. C. BRYANT.

OBJECTION TO WOMEN DOCTORS.—The London Lancet, an excellent Medical Journal in its way, is remarkable for the singular objections that it brings against women becoming practitioners of medicine. We believe we have noticed most of these objections as they appeared, and now proceed to notice the last and most remarkable one. "Women," says The Lancet, "hate one another, often at first sight, with a rancor of which men can form only a faint conception; and they have become accustomed to a certain tenderness in sickness, arising from the different sex of the doctor, which they would surely and deeply miss under the proposed *regimé*."

This objection, if not a very profound one, is certainly unique. "Women hate one another!" If every woman hated all women, this objection might have some force; but the hate between women is not universal. Their friendships are often pure, sweet, tender, lasting, and when one of their own sex is pure and strong, educated, and capable enough to become a really good physician, not only do women not hate her, but they adore her even beyond reason. The hate between women is great enough we admit and it is a shame that it is so; so is the foolish hate between men and men, and even between men and women. But if it was as great as The Lancet declares, then would the future of the race be hopeless indeed. We believe that women will have more respect and love for each other, when their sex gets out of the world of senseless frivolity and fashion that breeds only hate, and where hatred and jealousy reigns with greater force than anywhere else in the world of thought and action.

Women, like men, with plenty of wholesom-

Digitized by Google

work on their hands, do not get time to hate one another. We do not see why the same objection would not be equally applicable to all professions and pursuits. Where would this chain of reasoning lead, if followed out to its full extent? On the same ground, women could not become teachers of their own sex in seminaries; neither could they become dressmakers, milliners, nor belong to to the same church where there were any other women. They could not even speak to each other in society, or be on friendly terms anywhere. What a sad state of affairs would then exist!

It may be true, as The Lancet says, that women will, in many, or even in most instances, prefer male physicians; this they will decide for themselves. We think, however, they will prefer the one who can do them the most good and the least harm, and this will depend on talent, skill, and knowledge, not on sex, and sometimes one sex and sometimes the other will have these qualifications in excess. Besides, if women, for any natural reason, prefer a physician of the opposite sex, as The Lancet declares they will, men will sometimes prefer women physicians, not from any impure reason, but because God has made it so. Men like the tenderness, and delicacy, and sweetness which good women bring to the bedside, as much as women like the strength and power which men bring there.

LAWS OF FERMENTATION—HEBREW CUSTOMS—RABBI ISAACS.—The Rev. Dr. Patten, Sr., of New Haven, Ct., has prepared a small volume of 120 pages 12mo, entitled "The Laws of Fermentation, and the Wines of the Ancients." It is just published by the National Temperance Society. Dr. Patten is a ripe scholar, especially in Bible and ancient literature. He has evidently given the subject under discussion a careful and exhaustive examination. For one very important aspect of the great cause of Temperance, Dr. Patten has given us an admirable and cogent argument. We most heartily commend this little work. In a recent conversation with the eminent Hebrew *savan* and Jewish Rabbi, Dr. S. M. Isaacs, of this city, he stated some most interesting facts as to the customs of the Israelites, both ancient and modern, which corroborate fully the conclusions of Dr. Patten. The learned Rabbi made one remarkable general assertion, which will challenge some scrutiny. He said, that of the seventy thousand descendants of Abraham in this city, he does not know one confirmed drunkard, and that they seldom, any of them, drink to intoxication. In the Holy Land, they do not commonly use fermented wines. The best wines are preserved sweet and unfermented. In reference to their customs at their religious festivals, he repeatedly and emphatically said, "The Jews do not, in their feasts for sacred purposes, *including the marriage feast*, ever use any kind of fermented drinks." In their oblations and libations, both private and public, they employ the fruit of the vine—that is, fresh grapes—unfermented grape juice, and rasins, as the symbol of benediction. Fermentation is to them always a symbol of corruption, as in nature and science it is itself decay, rottenness.

No higher authority can be given than Rabbi Isaacs, as to the practices of the Jewish people. This testimony settles conclusively the question so often mooted, "What was that 'best wine' made by Jesus Christ for the marriage feast of Cana?" And not less decisively does it show, what was that "fruit of the vine" used by him at the institution of the "Lord's Supper." This sacred Christian feast was confessedly a substitute (and immediately followed), the Jewish feast of the Passover, from which all fermented things are carefully excluded. The pretense that the drunkard's-drink was in any form provided or encouraged by Him who "came to save that which was lost," must be utterly abandoned before one can hope to banish drunkenness entirely, even from the pulpit, the pew, or the Communion-table. Let "judgment begin first at the house of God." S.

MORNING LECTURES.—Rev. John Lord, LL. D., delivered in New York, the past winter and during March, twenty-five valuable lectures

Digitized by Google

on some of the most important personages who have figured in history during the past six hundred years. These lectures were delivered in the morning at 11½ o'clock, to over one thousand persons, and gave great satisfaction. The lecturer will deliver another course next season. The value of lectures in the morning, when the mind is fresh and vigorous, over lectures at night, when the head is weary, is great, and we hope they will become popular.

A HINDOO AT AN ENGLISH DINNER-TABLE.—B. K. C. Sen, a Hindoo gentleman of culture who has been lecturing in England, has returned to Bombay, where he lectured in one of the schools of learning, upon the sights and experiences of his life in Great Britain. As the Hindoo never eats flesh, he was greatly shocked at the sights seen on a dinner-table at dinner parties. He says: "The dining-room appeared to be more like a zoölogical garden; there were all sorts of fowls of the air, and beasts of the wilderness, and fishes of the sea, and creeping things laid on the table. They were about to start into a new life, as it were. I need not say I could not positively say whether they were alive or dead. These are the things which our English friends eat. I am glad I have run away from England. Oh Indian curry and rice, I must have them soon! But English fashions and dinners! These are really two things that are barbarous. I think there ought to be a protest against what is called 'fashion' in England. It is a dangerous thing, and makes frightful progress. The tail of the ladies' dress should be protested against, and the horrors of the English dinners ought to be protested against. If you, my countrymen, are really anxious to promote the welfare of your country, avoid these two things. Import into your country all that is good in England, but not these horrid things."

From a humane, or artistic point of view, B. K. C. Sen is right. A dinner-table covered with dead animals, however tempting to the palate, must not be thought about too closely, for the reflections will be like those of Mr. Sen. The English have been sending missionaries to India for a long time. Would it not be wise for the inhabitants of India to send a few missionaries to England to teach the English simplicity and temperance?

CLIMATES FOR INVALIDS.—The New York Standard in noticing Mr. Bill's recent work on "Climates for Invalids" says: "It is not often that a book interesting to all intelligent people can be recommended especially to invalids. This, however, is the case with the volume above specified. It is a delightful volume for general perusal; it has a special aptitude for the suffering. Minnesota enjoys justly the reputation for a climate, a soil, and a scenery that present peculiar conditions for promoting health. Still, its general merits are not so widely and deeply appreciated as they ought to be. It lies to the north of the accustomary lines of travel, and it has been visited by comparatively few who did not go there to obey the claims of business. Much of the land is high and rolling, and extends many miles back from the eastern frontier. The general elevation of the State is one thousand feet above the sea, and these mighty tracts abound in pleasant and fertile valleys, large and exceedingly picturesque, as well as valuable forests, and superb lakes, which brim with the purest water, and teem with the finest of fish. Mr. Ledyard Bill, who is the author of "A Winter in Florida," and has apparently made the best of extensive facilities for studying the science of climatology, devotes his pages to illustrating and enlarging the points we have specified. He shows what the leading characteristics of Minnesota are, takes the reader a tour along the Upper Mississippi, visits the river towns and St. Paul, studies the climate, and the causes, cures, and phenomena of consumption. He talks plainly, politely, intelligibly, and interesting to invalids, and tells them where to go and what to see and expect. He has a good deal to say in regard to Duluth, its location and rapid growth, and the Northern Pacific Railroad. Finally, he contrasts other climates with Minnesota, and the result is not

Digitized by Google

unfavorable to the last-mentioned place. The book, then, is written by a man who has thoroughly inhaled his subject, and who performs to perfection the reciprocal process of exhaling it again. It abounds in valuable hints to travelers, tourists, and emigrants, as well as to invalids, and ought to be read at least by Americans, because it tells such pleasant news about an already cultivated portion of their own lands."

BONES INFLUENCED BY FOOD.—M. Pasillon, who has experimented on pigeons and rats with a view to determine the change in the composition of the bones, when fed on different kinds of food, reports to the French Academy that on analyzing the bones of the pigeons that had been fed with the strontia, there were found in a hundred parts of the ash of the bones:

Lime	46·70
Strontia	8·45
Phosphoric Acid	41·80
Phosphate of Magnesia	1·80
Residue	1·10
	99·90

The ash of the bones of the rats that were fed with the alumina gave:

Lime	41·10
Alumina	6.95
Phosphoric Acid, etc.	51·95
	100·00

while in the bones of those fed with the magnesia were found;

Lime	46 15
Magnesia	3·56
Phosphoric Acid	50·29
	100·00

In November, 1869, we published in THE HERALD OF HEALTH an article on Parturition without Pain, in which the same principle was discussed. This essay, together with much original matter, in the form of a neat little book will soon be published and sold for $1. It will be ready in a couple of months, and will form one of the most important additions to medical literature for the people that has ever appeared. It will be a book which every woman should read.

IS IT AIR, OR SOMETHING ELSE?—The entrance of air into a wound is the dread of the surgeon. When an abscess is opened he must prevent the air from mingling with the blood-clots if he would avoid putrefaction and its teeming accompaniment of animalcule life. Some eminent London surgeons inform me that they never squeeze an abscess, lest when the pressure is relaxed the air should be sucked in. Now, whence this dreaded power? Is it the air itself that causes putrefaction, or is it something carried mechanically by the air? A follower of Gay-Lussac would affirm the former; a heterogenist would refer the animalcules to "spontaneous generation;" a holder of the germ theory would ascribe the putrefaction to seeds or eggs floating in the atmosphere, and which, when sown upon the wound, sprout into this crop of minute organisms. Do any *data* exist which will enable us to say, with certainty, which party is right? I think so.—*T. H. Huxley.*

Professor Huxley takes the latter view of the subject, and believes air is poisonous to wounds because of the germs in it which grow. How much injury these germs do to the air-passages is not known, but no doubt these passages are not so susceptible of injury as fresh wounds. They are used to their presence to a certain extent, still they must do harm in the lungs, and who can tell how much?

PRESERVED MEAT.—Dr. Stein, of Dresden, while lecturing lately on the preservation of food, opened a tin canister of meat, preserved by what is known as Apert's method, and prepared by him in 1851. The meat, on examination, it is said, was found to be as fresh, and of as good a flavor, as when placed in the canister nineteen years previously.

Digitized by Google

How to Treat the Sick.

COLD WATER TREATMENT OF TYPHOID FEVER.—Medical journals contain constant accounts of the excellent success of medical men in treating typhoid fever by cold water. This method has been practised by Hydropathic physicians during the past twenty-five years with excellent success, and there are multitudes of cases where persons who were not physicians at all, dissatisfied with the drug treatment of this disease, have carried their friends and members of their family most successfully through this fever by the Hygienic treatment alone, much to the disgust of medical men who might be looking on. Now, however, when this method of treatment has become popular, medical men claim it as having originated among themselves. The method now employed in the German Hospital of New York by Dr. Tyndale is as follows:

"1. The necessary reduction of temperature is best and most rapidly effected by immersing the whole body.

2. The water should be as cold as can be had.

3. The patient should be bathed as often as the temperature of his body, measured in the rectum, rises to forty Centigrade (about one hundred and four Fahrenheit). Since the intensity of the manifestations of disease vary much, it may occur that in one case one or two baths in the twenty-four hours will suffice, whereas, in another, as many as twelve or sixteen will be required in the same space of time.

4. The length of time for each must be governed on the one hand by the degree of fever heat, on the other by the temperature of the water used. On the whole, it will be found that in a bath varying from five to ten degrees Centigrade, an immersion of from seven to ten minutes will suffice. Should the temperature of the water be above ten degrees Centigrade, the bath is to be continued for fifteen minutes, and if above fifteen degrees Centigrade, still longer.

No attention needs to be paid to the seeming discomfort of the patient, manifested by complaints, nor to the chill often occurring during the bath and continuing for sometime afterward, as they are of no consequence.

5. After the bath, the patient should be carefully wiped dry (not rubbed), especially his feet and toes. If the water has been of very low temperature, the feet may be enveloped in warm cloths, as many patients complain of pain in the feet after a very cold bath.

Opinions differ as to whether it is best to immerse the patient in a cold bath (say of ten degrees Centigrade), at once, or to have the water at a temperature more nearly the same as that of the body, and effect a gradual reduction by a slow addition of cold water. Niemeyer, who may be considered the best authority upon the subject, is in favor of a gradual reduction. With due deference to this opinion, however, I must say that repeated trials have satisfied me that by a sudden immersion in cold water two advantages are gained: first, the reduction of temperature will be greater, more nearly approximating the normal temperature of the body; second, less time will be required, and consequently the patient will be less annoyed. In the cases under our observation, we have found from one-half to two hours after sudden immersion the temperature reduced to thirty-eight and a half degrees Centigrade (normal), when before the bath it had been from forty to forty and a half degrees Centigrade.

When the body has not been above thirty-nine and a half degrees, we have been in the habit of enveloping the patient in wet, cold sheets for fifteen minutes. In other cases in which it was desirable to move the patient as little as possible, we have resorted to a sponge bath of cold water and vinegar. Both methods

Digitized by Google

produce a limited decrease of temperature, not exceeding one degree.

The thermometer is indispensable as an aid to the cold water treatment, as without it, this method would lack the necessary safety in its application. The rectum is undoubtedly the best point of observation of the thermometer. In five minutes after the introduction of the bulb, the mercury will have reached its maximum height, and no disturbing influence can injure the correctness of observation, as is often the case when introducing the bulb into the axilla.

The severer the case, the oftener should thermometrical observations be made. In milder cases, in which the evening temperature (always higher than the morning temperature) does not exceed forty degrees Centigrade, two or three observations may suffice; whereas, in severer ones, this should be done every two hours, day and night, in order not to miss the right time for the repetition of the bath."

Twenty years ago, Dr. Joel Shew of New York, wrote as follows:

"In practising these ten years in this city, I have had numbers of opportunities of treating the different forms of typhus. I have adopted almost all conceivable ways according to the Hydropathic method, and have been successful in almost every instance. In some cases we have been able to do what we would; in others, only what we could. Some are so afraid of water, we can do but little; and some have such poor conveniences and so little help, that we can adopt hardly more than a sort of *nursing* course, and poor enough at that, often, among the poor of this great city. I have effected some admirable cures in typhus by tepid water alone, and not a great amount of that. In other cases we have used wet-packs, ablutions, shallow baths, etc., etc., to the fullest extent, and with the best of success."

But many years before this, Pressnitz published to the world the following method varying but little from that now adopted in hospitals, but then scouted as dangerous and reckless in the extreme:

"1. Envelop the patient in one or more heavy wet linen sheets, according to the heat and strength, the sheets not much wrung out, and to be frequently renewed as often, at least, as they begin to grow dry. There must not be much covering over the sheets. In severe cases the patient should be kept in the wet-sheet the most of the time until the fever is broken up. As much fresh air as possible is to be admitted into the room. The sheet should always be doubled, and wet towels applied to such parts as the armpits, between the limbs, and wherever one part comes in contact with another.

2. The cold bath is given three or four times in twenty-four hours, and oftener, should there be much heat. If the patient is very weak, the water is used mild, but never higher than twenty degrees Reaumer (77 degrees Fahr.), and this should be diminished from time to time until it can be borne cold. The bath should, if possible, be administered to the patient in a reclining posture. At the same time the back of the head and neck should be bathed in water of the same temperature as the general bath, ending always with the water cold. The surface of the body should be rubbed constantly while the patient is being bathed, and the bath continued until the temperature of the armpits is the same as the rest of the surface.

3. As the patient becomes able to take nourishment, give cold milk, fruit, and farinaceous food in small quantities, always cold, and at intervals of the usual meals. Great care is necessary in the food. Water at all times to be drank according to the dictates of thirst.

4. Use the umschlag, or wet-girdle, all the time when the patient is not in the wet-sheet.

5. Injections, or clysters of pure water, are to be given if the bowels do not act naturally without; the water cold, if the patient is not very weak, one pint at a time.

The object of the whole treatment is to supply the body amply with coolness and moisture, in order to counteract the tendency of the disease to dry up and consume the natural juices."

Digitized by Google

ANSWERS TO CORRESPONDENTS.

BY A. L. WOOD, M. D.

Chills and Fever.—"Many of the people in this city, population five thousand, have chills and fever. New comers are not afflicted till the summer heat comes in June, July, etc., but having once had them, will have them all the year. The UNIVERSAL remedy is quinine, people carry it in their pockets done up in convenient doses to take at their shops, and as they walk the streets. They even put it in their coffee. I say. I'll NOT take it. They say, 'Wait and see; you will be as glad to get it as we are. People have been here who tried Water Cure for it, but were glad to give it up, and take the quinine. The blood gets too thin in this hot country to bear water treatment.' If consistent with your arrangement will you publish an article on this subject, giving the HOME treatment for this disease? By so doing you will confer a great favor on myself and family."

People who wish to be healthy should not live in such a miasmatic place as this. There are plenty of places where they can go and not be subjected to the unhealthful influences of malaria. If a person is located in such a place and CAN NOT leave it he should try and get away during the hot weather. If he can not do this he must do the best he can to obey the laws of health, and run the risk, for he can not be sure of escaping it however strictly he may live, although the more careful he is to obey the laws of hygiene the less liable he will be to have the disease. Great care should be taken to keep the excretory organs, the skin, bowels, and kidneys, in an active condition by proper bathing, diet, and exercise, and also to avoid eating more than the system demands. In warm weather a daily sponge or towel bath should be taken, also some form of sweating bath—Turkish, vapor, or lamp—as often as once a week. The diet should consist of fruit, vegetables, and simple farinaceous preparations, fruit predominating if it can be had. The sleeping-room should be up stairs, and on the sunny side of the house. The treatment of this disease is very simple. Its main features are a very strict and abstemious diet consisting largely of ripe fruits, and free action of the skin and bowels. Where it can be had the Turkish bath is to be preferred to any other. Where it can not be had use the vapor, lamp, or hot water bath during the cold stage—the object being to induce a profuse perspiration, and help the system throw off the malarious poison through the skin.

Flatulence, its Cause and Cure.—"I am very much troubled with flatulency of the bowels. I am a strict vegetarian, and can not imagine the cause of it, and, of course, can not cure it. If you will enlighten me a little respecting it, in the next issue of your valuable HERALD OF HEALTH you will oblige a constant reader. Don't tell me to bathe every day, for I have practised it for four years. I don't think it is for the want of exercise, for I walk on an average two miles a day, sometimes twice that. I will watch eagerly for your reply."

Flatulence is simply one of the many symptoms of indigestion. Whatever tends to weaken the digestive powers of the stomach and bowels may be counted among the causes of flatulence, and whatever aids in improving the digestion may be reckoned among its remedies. Plain, easily digested food, not over two or three kinds at a meal, two meals per day, no eating between meals, no drink at meals, slow eating and thorough mastication, moderate quantity of food, gentle exercise, and thorough kneading of the bowels after each meal, as much out-door exercise as strength will allow, climbing hills, sawing or chopping wood, rowing, etc., where practicable, are the most important things to be observed in the hygienic home treatment of this very common affection. In the case of this correspondent, he probably eats too much, too many kinds at a meal, too often, food too difficult for digestion, does not masticate his food sufficiently, and does not take enough exercise. Vegetarians can and often do live as unhygienically as meat-eaters. One of their greatest errors is eating too much

Digitized by Google

Many of them seem to think that because vegetables, bread, and fruit are healthful that the more they eat the better. They had better eat meat, and eat a moderate quantity, than to over-eat as many do.

Cause of Poor Teeth.—"What is the principal cause of the almost universally defective condition of the teeth of the American people? There is no country on the globe where the people suffer so much from poor teeth, and where dentists are so common as here. Among some nations, indeed, unsound teeth and dentists are unknown."

There are many causes which aid in destroying the teeth, as using very hot drinks and food, the use of saleratus, uncleanliness, etc., but the principal cause is the feeding of children upon fine flour bread, fat, sugar, and other carbonaceous articles, to the exclusion of food that contains lime, phosphorous, silex, and other minerals in an organized form, which are necessary to the proper development of the teeth, and especially the outer covering or enamel. The system can not make something out of nothing, neither can it make sound, healthy teeth unless it has the necessary material supplied in the food. Fine flour does not contain the required material, while unbolted wheat meal does, and children who have plenty of the latter to eat will have good sound teeth.

Lemons and Biliousness.—"In your answers to correspondents, please inform me whether lemons are good for biliousness or not."

As a general rule they are. Sometimes, however, the stomach is not in a condition to bear so strong an acid. In cases of biliousness the acid and sub-acid fruits should constitute a large part of every meal. There is nothing better.

Cure for In-growing Toe-Nails.—This is a very painful and troublesome affection, caused by wearing too tight shoes, and cutting the nails too much at the corners. To remedy the difficulty wear looser shoes, and cut the nails shorter at the center than at the corners, so as to leave them in the form of a crescent, the corners representing the two horns. Also scrape the upper surface of the nails in the center as thin as comfort will allow. One operation is usually sufficient. In very bad cases two or three may be found necessary.

Climates for Weak Lungs.—"For a person with weak lungs do you advise MOUNTAIN or SEA air. Or in the case of a person who lives in sight of, but about twelve or fourteen miles from the mountains, afflicted in the way mentioned, would you advise a sea or mountain resort in the summer?"

In a great majority of cases a dry mountain atmosphere is best for weak lungs. The water should be pure and soft, and the temperature as nearly uniform as possible. The eastern slope of the Rocky Mountains—Montana, Wyoming, and Colorado—also Minnesota and Dakota, supply these conditions, and are the most desirable places for persons with weak lungs to spend the summer months. For further information see a book which we have just published entitled "Climates for Invalids." Price $1.25.

Spirometer for Weak Lungs.—"Is the periodical use of a spirometer advantageous for a person with weak lungs?"

There are different kinds of spirometers, some of which are good and some bad. Those where the air is expelled from the lungs without straining them, are beneficial if used regularly and judiciously. The kind in the use of which the air is forced back into the lungs is bad. They strain the lungs, and as generally used do more harm than good.

Soda Bread.—"Is bread made to rise with buttermilk, soda, and eggs, wholesome, either fresh or stale?"

No. It is better stale than fresh, but it is bad either way. Soda should never be used in the preparation of foods. Eggs should never be cooked hard, as they must be in bread and cake, therefore they are objectionable especially for weak stomachs.

Fruit between Meals.—"Is it injurious or beneficial to eat fruit between meals?"

It is injurious to eat ANY THING between meals. The stomach needs rest, and must have it, or sooner or later it will fail to perform its duty. Eating fruit or any thing else between meals keeps it constantly at work, and robs it of its necessary rest.

Digitized by Google

NOTICES OF NEW PUBLICATIONS.

COMMON SENSE FOR YOUNG MEN ON THE SUBJECT OF TEMPERANCE. Preached by Henry Ward Beecher, Feb. 5, 1871. New York: National Temperance Society and Publishing House.

This discourse by Mr. Beecher is from the text, "There is a way that seemeth right to a man, but the ends thereof are the ways of death." He bases his arguments in favor of Temperance on the ground of expediency, and on the higher grounds, and he finds plenty in both. It is not expedient to use alcoholic stimulants because:

1. Healthy natures never crave them.
2. Because they are not needful.
3. Nor palatable at first.
4. Nor economical.
5. And because drunken habits open the door to many temptations which no man has a right to encounter.
6. Because a young man with drunken habits loses the confidence of respectable and trustworthy men.
7. Because drunken habits develop evil passions that would lie dormant.
8. And because a man has no right to jeopardise his own and others' prospects.

Without however resting the argument here, Mr Beecher puts it on higher grounds, and presents other motives for living a temperate life.

1. Because man is bound to be as noble a specimen of manhood as he can be.
2. Because he has no right to sport with his moral nature.
3. Because moral principle demands that the animal nature shall be subject to the moral and spiritual.
4. Because no one has a right to set a bad example to others who may be weak. And
5. Because no man has a right to be neutral in the great work of Temperance.

This sermon is the first of a series of discourses to be published on Temperance, and they promise to be among the best efforts of the National Temperance Society in promoting a great cause.

"THE HOUSE ON WHEELS." Boston: Lee & Shepard. By Madame De Stols. Translated from the French, by Miss E. F. Adams.

This is the story of a disobedient child, stolen by the Gypsies, and retained in their keeping two years. He goes through much suffering, but in spite of the evil examples around him is able to retain the ingenious simplicity of childhood, and the pious love of God, which had been implanted in his young mind by the faithful teachings of intelligent and faithful parents. The character of the Gypsy girl, Gella, is well sustained, and her native grace, goodness, and beauty afford a fine contrast to that of the savage Hercules. The work abounds with refreshing pictures of happy domestic life, in which all the virtues, such as truth, gentleness, and all moral excellence are practised and enforced. We have tenderness coupled with force and courage, and devoid of that mawkish sentimentality and sickening babyishness, which fill our American literature for children with foolish expletives and pet names.

CLIMATES FOR INVALIDS, ETC.; also, Hints to Tourists, etc. By Ledyard Bill. New York: Published by Wood & Holbrook, 13 & 15 Laight St.

This is a work somewhat in the vein of, and similar in object to the Author's sketches of Florida, of which we have heretofore spoken. It abounds with hints and statistics of great value to the invalid, who may be seeking some genial spot in which to recuperate a wasted system and restore failing health. The book contains over two hundred pages, is illustrated with a fine view of the famous Falls of Minnehaha, and contains thirteen chapters on those topics of most interest to invalids, or to a very large class of persons not invalids, who, in changing their residence, wish to know where the air is good, the water pure and soft, the soil and scenery varied and interesting, and the people enterprising and progressive. Much of the work is devoted to the far-famed State of Minnesota, with which the author is familiar. The water, atmosphere, and people are sketched. The chief towns are noted and described, and two full chapters are devoted to a careful analysis of its climate, which is remarkable in many ways. We wish to call special attention to this feature of the book, for in no other work has the subject of climate as affecting health and disease been more conscientiously and thoroughly treated. The hints to invalids are also full and valuable, and the chapter on where to go, and what to expect will help the traveler to avoid much loss of time, and will also secure the most good at the least expense.

Other climates than Minnesota are sketched with care, and the whole volume is handsomely printed and bound, and sold for $1.25. We commend it to all who wish an honest work at small expense.

LIGHT AT EVENTIDE; being a Compilation of Choice Religious Hymns and Poems. By the Author of "Chimes for Childhood," "Echoes from Home," etc. Boston: Lee & Shepard; New York: Lee, Shepard, & Dillingham.

This is indeed a most beautiful collection of the choice thoughts and heavenly inspirations of men and women eminent alike for intellect and piety in all ages, and without distinction of creed. It will be found a delicate and a highly appreciative gift, being handsomely printed and bound. Indeed, the impassioned poem, beginning "I love thee, O my God," by St. Francis Xavier, commends itself to every devout mind as one of unequaled depth and purity; while the rare old song of "O Mother dear, Jerusalem," attributed to St. Gregory, is of itself worth the price of the volume.

LITTLE FOLKS ASTRAY. By Sophia May. Boston: Lee & Shepard.

This is a sketchy series of rather uninteresting adventures for very, very young children. The worst of these intimations is the careless moral training which the Parlins and Cliffords obtain. We understand that filial obedience is an exploded, or at least a very old-fashioned, virtue in our age of progress. Defects of character, which will entail lasting misery upon the child, may be amusing, and to be tolerated in its early experience, but a wise

Digitized by Google

discipline only will so regulate and eradicate them as to render the after career hopeful and reliable. Many a child reading how Flyaway Clifford is petted and endured, because her waywardness happens to be engaging, will hold habits of order, obedience, and thoughtfulness in high contempt. Any child of three or four years can understand all that is written in this book of Little Folks Astray, and *because* it is so understandable to him, the absence of moral insignificance is the more to be reprehended. He will infer that willfulness is a grace, and pertness delightful.

THE SERMONS OF HENRY WARD BEECHER IN PLYMOUTH CHURCH, BROOKLYN. 1st, 2d & 3d Series. Reported verbatim by T. J. Ellinwood. 3 vols. 8vo. New York: J. B. Ford.

To the admirers of Mr. Beecher we need say nothing in praise of these sermons. Like meat to hungry men, they come to Christian people—feeding and strengthening their Christian life. His own words best give us an idea of the quality of food furnished us in these books.

The sermons that will be read by multitudes are those which bring God's infinite truth into vital relations with the thoughts, sympathies, enterprises, habits, loves, hatreds, temptations and sins, ideals and inspirations of the times in which the preacher lives. A few sermons there are, a very few, that so grasp the heart—truths in their universal forms, as to be interesting and powerful alike in every age. "The true preacher is to be eminently a man of his own time. He is to be in sympathy, not with ideas and truths alone but with living men."

In the second volume Mr. Beecher calls our notice to the fact, that through the six months' preaching runs "an open or tacit dealing with that uncertain and doubting state of mind which belongs so largely to our present day." Against the denial of the existence of God, and the soul's immortality, he endeavors to fortify "Christian faith and courage, in regard to those great elements on which we have built our lives, and all our hopes."

In the third volume, sermons expounding the divine nature, and unfolding the higher forms of Christian experience predominate. The nature of Christ, the agency of the Holy Spirit, the doctrine of the Trinity, have special prominence.

The three volumes contain seventy-nine sermons, comprising those preached between September 1868, and March, 1870. The books are handsomely bound, and a fine steel portrait of Mr. Beecher is given in the first volume.

THE DUEL BETWEEN FRANCE AND GERMANY; with its Lesson to Civilisation. A Lecture. By Charles Sumner. Boston: Lee & Shepard. 12mo. 75 pages.

Charles Sumner never did a higher service to civilisation than by the preparation of this lecture. We earnestly wish it might be read by every young man and young woman, who may in any way be affected by war and its horrors. It would do something to prevent, and, perhaps in time do away with them altogether. War can never be reconciled with true civilisation. It is a relic of the barbarous ages, handed down to us from remote times. Man in his true estate is not a fighting animal, and when we see nations settling their differences by the sword, we know at once those nations are more or less barbarous. How worthless is all the glory that comes from bloodshed; and, too frequently how poor the results to justice. We do not say that the sword should never be unsheathed, for there may be times for its sway, but rare indeed. If man ever on our globe reaches his true destiny, war, like duelling, will not be known. War is only another name for duel. A war is a duel between thousands instead of between single persons. And there is no reason why we should tolerate the one more than the other. Charles Sumner has put this subject in its true light, and if his words could reach the young of the world before their heads and hearts are hardened, good results would come of it.

OUR GIRLS. By Dio Lewis, A. M., M. D. New York: Harper & Brothers.

This work, while written in an easy, popular vein, discusses important topics. Beginning with a chapter on Boots and Shoes, it fires away right and left, thus: How girls should walk and dress; how they torture their bodies; stocking supporters; large women, small women; idle girls; work for rich and poor; gentility, matrimony, music, French, dancing, the theater, stomach, and soul; sunshine and health, amusements, education, and heroic women. The spirit of the book is beautiful. The Doctor aims to impress on young girls the duty of living truly, of avoiding what is bad, of seeking what is good and noble. We are sure it will fire the hearts of very many of the sex with an enthusiasm that will take them out of the lower into the higher spheres of life and action. Compared with other works from the same pen, this, in our view, surpasses them all, and we rejoice at its wide circulation.

THE SOCIAL STAGE: Original Dramas, Comedies, Burlesques, and Entertainments, for Home Recreations, Schools, and Public Exhibitions. By George M. Baker, Author of Amateur Dramas, etc., etc. Boston: Lee & Shepard; New York: Lee, Shepard, & Dillingham.

The title thoroughly explains the purport of the work, except that the term drama is rather too ambitious. The collection is rather a collection of dialogues than dramas. There is no development of character, nothing of a creative import. Certain situations are predisposed, and individuals *talk* in accordance. They are moral, well disposed persons, but not very brilliant. Two of the entertainments are worthily devoted to the Temperance reform, and though the plot is most unnatural and transparent, we are willing to believe that villians do work in just such a bungling way to carry out their purposes, and that a miserable wretch who for five years has been a hopeless sot, may almost miraculously come to his better mind; at any rate, for the sake of the cause, we are willing to accept the situations.

THE TONE MASTERS: A MUSICAL SERIES FOR YOUNG PEOPLE. 3 vols. 16mo. Boston: Lee & Shepard.

These three handsome little books are neatly bound, printed with clear type on tinted paper, and finely illustrated. Moreover, the stories of the lives of the great musical composers are so attractively told, that having once looked into one of them, it is hard to close the book until the entire contents are devoured. Better still, they afford much real knowledge, and useful information along with their entertainment.

We have before noticed the first of this series, "Mozart and Mendelsohn." The two additional volumes now published are "Handel and Haydn," and "Beethoven and Bache." Others are in preparation.

Digitized by Google

THE PUBLISHERS' DEPARTMENT.

Contributors to this Number.

AARON M. POWELL,
REV. JOHN MONTEITH,
MRS. R. B. GLEASON, M. D.,
MRS. H. C. BIRDSALL,
ELIZABETH OAKES SMITH,
REV. CHARLES H. BRIGHAM,
F. B. PERKINS,
MRS. M. A. KIDDER,
E. RAY LANKESTER, B. A.,
DR. A. L. WOOD, and
THE EDITOR.

The Boston Training School for Teachers of the Dio Lewis System of New Gymnastics will hold its next session in Boston, from July 12 till September 1. For circulars and particulars address F. G. WELCH, Yale College, New Haven, Conn., or Dio Lewis, Boston, Mass.

Interesting to Ladies.—I have used the Grover & Baker Machine almost constantly for eleven years, doing all kinds of sewing on it, from the finest cambric ruffling to the heaviest English beaver cloth. I find it invaluable for Hemming, Felling, Braiding, Binding, Gathering, and every thing in general that fingers can do. I prefer it over all others on account of its simplicity and durability, and could not be induced to use any other kind.

MRS. J. OPHELIA LEESE.
PARKERSBURG, W. Va.

Facts for the Ladies.—Mrs. H. B., of Rockford, Ill., writes: I send you a Wheeler & Wilson Machine, No. 10,426, to have attached the recent improvements—the improved loop-check, tension, glass foot, new style hemmer, braider, and corder. I have used this machine for six years *without repairing*, and in that time it has earned for me a little over $4,000.

Mrs. F. H. F. of Elizabeth, N. J., writes: I have had one of the Wheeler & Wilson Sewing Machines, No. 6,352, for ten years. It has been used by myself, family, and friends, constantly, with *no expense for repairs*.

Four hundred thousand witnesses might be called (the number of machines manufactured by the Wheeler & Wilson Co.), but these two testimonials are sufficient to direct attention to a very important particular. Simplicity in the structure of a machine is of prime importance, as regards its comprehension, facility of working, and need of repairs. Friction from complication of parts and movements is sure to work mischief. A sewing machine should be able to make 1,000 stitches a minute, say 8 hours each day. This would give annually about 150 millions of stitches.

Talks to My Patients.—Mrs. Gleason's book, advertised and noticed elsewhere, is meeting with a good sale. We can supply it to subscribers and agents in any quantity. A good many ladies are selling it with success. We should like to have in every town a good Lady Agent. For particulars of agency, write to the Publishers.

CLUBBING

WITH OTHER MAGAZINES.

We will send *THE HERALD OF HEALTH* and any one of the following Journals one year for the sum below mentioned. The order and money for both must be sent at the same time.

THE HERALD OF HEALTH, $2 00, and	
Atlantic Monthly	$4 00 for $5 00
Harpers' Monthly	4 00 for 5 00
Harpers' Bazar	4 00 for 5 00
Harpers' Weekly	4 00 for 5 00
Phrenological Journal	3 00 for 4 00
Our Young Folks	2 00 for 3 50
New York Tribune	2 00 for 3 25
American Agriculturist	1 50 for 3 00

Cash Clubbing Rates.

1 Subscriber	$ 2 00
4 Subscribers	7 00
10 Subscribers	15 00
25 Subscribers	25 00

Single Numbers, 20 cents.

Address WOOD & HOLBROOK, Publishers,
15 Laight Street, New York.

Job Printing.—We are prepared to execute in neat, substantial styles, various kinds of JOB PRINTING: such as Pamphlets, Circulars, Envelopes, Billheads, Letter-heads, Cards, Labels, Small Handbills, etc., at the same rates as in all first-class New York printing establishments. Stereotype work done to order.

☞ Our friends in the country who wish neat and accurate printing, can rely on first-class work, by sending plainly written and well-prepared manuscripts. For terms, send sample or copy of work, state quality of printing material to be used, and the number of copies wanted, inclosing stamp for reply.

A Good Sewing Machine is given free for a club of 30 subscribers and $60. This premium is very popular. If there is a poor, deserving family in your neighborhood help it to get a good sewing machine by subscribing at once. Perhaps your minister's wife wants one. If so, help her to get it, by helping her to get up a club. The Empire is one of the best sewing machines in use, and we are sure that it will give you good satisfaction.

Books C. O. D.—Parties who order books will find it cheaper to send the money with the order, than to order C. O. D., as in this case the cost of collection will be added to the bill. This is considerable, when the money has to be returned from a distant point. Those who order C. O. D., should send one-fourth the value of the order in advance to insure prompt attention.

Digitized by Google

Advertisements.

☞ ADVERTISEMENTS of an appropriate character will be inserted at the following rates: Short advertisements, 25 cents per line; thirteen lines, for three or more insertions without change, 20 per cent. discount; one-half column, $12; one column, $22; one page, $40. All advertisements must be received at this office by the 5th of the month preceding that on which they are to appear.

Are You Going to New York?

If so, and you wish to stop where you can *FEEL AT HOME*, and get *GOOD FOOD HEALTHFULLY PREPARED*, and *PLENTY OF IT*,

Go to the Hygienic Institute,

Nos. 13 & 15 *Laight Street.*

Horse Cars pass near the door to all parts of the city, making it a very convenient stopping place for persons visiting New York, either upon business or pleasure. Open at all hours, day and night. Board by the day or week, at reasonable rates. Rooms can be secured in advance by writing. Address

WOOD & HOLBROOK, Proprietors,

Nos. 13 & 15 Laight Street, New York.

Important to Merchants and Manufacturers

WHO WISH TO

Increase their Business.

Correct Lists of all the Business Men, Manufacturers, etc., with important statistics, have been compiled by the undersigned, the object of which is to furnish the public with reliable names of Business Men throughout the country.

To those wishing to send circulars to any particular calling, these lists are invaluable, each business being written out separately in a blank book, and classified in States and Towns; all the information being derived from monthly correspondence in all parts of the States.

J. ARTHURS MURPHY,

MERCANTILE & STATISTICAL AGENCY,

111 Nassau Street, New York.

Reliable correspondents wanted in several towns in the South and West, with whom advantageous arrangements will be made. m-X6t

Dr. A. Smith's Water Cure.

The Hygeian Home is at Wernersville, Berks Co., Pa. Send for a circular. m-2t*

AGENTS WANTED!

Agents wanted in every town in the United States to canvass for THE HERALD OF HEALTH AND JOURNAL OF PHYSICAL CULTURE, and all our Publications.

We give the most Liberal Inducements, and money can be made and good done at the same time.

For terms, address

WOOD & HOLBROOK, Publishers,

15 Laight Street, New York.

2d LIST OF BOOKS

FOR SALE BY WOOD & HOLBROOK,

15 Laight Street, New York.

DIPTHERIA; Its Nature, History, Causes, Prevention, and Treatment on Hygienic principles, etc. Price, by mail, $1 25.

It contains chapters on the Nosology and Technology of Diptheria, Description and Pathology of Diptheria, the false Membrane, History and Infectiousness of Diptheria, its Causes and Mortality, Complications and Sequelæ, Morbid Anatomy of Diptheria, the Drug and the Hygienic Treatment, Stimulation, etc.

THE TRUE TEMPERANCE PLATFORM; or, An Exposition of the Fallacy of Alcoholic Medication. Being the substance of Addresses delivered in the Queen's Concert Rooms, London; to which is added a Discussion on the Modus Operandi of Alcoholic Medication. Price, by mail, 50 cents.

This excellent Temperance document should be read by every one who would understand the true arguments against the use of alcohol.

WATER CURE FOR THE MILLION.—The processes of the Water Cure Explained, Popular Errors Exposed, containing Rules for Bathing, Dieting, Exercising, Recipes for Cooking, directions for Home Treatment, and cases to illustrate, etc. Price, by mail, 30 cents.

THE TURKISH BATH; Its History and Philosophy. By Erasmus Wilson. With Notes and an Appendix by M. L. Holbrook, M. D.—This is the only book on the Turkish Bath published in this country. Illustrated. Price 25 cents.

TOBACCO AND ITS EFFECTS.—Being a Prize Essay, showing that the use of Tobacco is a physical, mental, moral, and social evil. By HENRY GIBBONS, M. D., Editor Pacific Medical and Surgical Journal. Price, by mail, 20 cents.

RATHE'S MANUAL OF GYMNASTICS. Illustrated. For Instruction in Classes and Private use. Dio Lewis's System Explained. By W. L. Rathe. Price 40 cents.

DISEASES OF THE THROAT AND LUNGS. Giving their Cause, means of Prevention, and methods of Cure. Price 25 cents.

PARTURITION WITHOUT PAIN. This work, long in preparation, will be ready in a few weeks. Price, by mail, $1 00.

Digitized by Google

CREAM YEAST. FULL WEIGHT.

LUXURY, HEALTH AND ECONOMY PROMOTED BY USING J. MONROE TAYLOR'S CREAM YEAST BAKING POWDER

Produces the finest Cookery known to Science; makes all articles more tender, light and delicious; saves one-third the Shortening; takes less to do the work; always reliable; full weight; best in use.

GOLD MEDAL SALERATUS.

The Universal choice of the best House-wives in America; stands without a rival for purity, healthfulness, economy and fine cookery. Depot 113 Liberty St., New York.

Healds' Hygeian Home.

WILMINGTON, DELAWARE.

DRS. PUSEY and MARY H. HEALD opened their new institution for the Hygienic treatment of invalids (without medicine), JAN. 1, 1871.

Dr. M. H. Heald (formerly Dr. York) was widely known to Hygienists during several years' practice at Our Home, Dansville, N. Y. Dr. P. Heald has also had large experience in the Hygienic system of treatment.

The building, beautifully located in the suburbs of a most delightful and healthful city, near the romantic and historic Brandywine, and overlooking the Delaware River, is entirely new, and was planned expressly for a "Cure." Every apartment is warmed by *Steam-heated Air*, and *thoroughly ventilated*, thus giving a *pure* atmosphere, free from all gas and dust, and insuring the comfort and welfare of winter guests. The best appliances provided for Water and Sun Baths, Swedish Movements, etc. Mrs. H. will devote especial attention to lady patients, giving them the benefit of kindly sympathy as well as of experience and skill. The Hygienic diet supplied, will include the choicest fresh and canned fruits and vegetables, and varied farinaceous preparations.

Railroad communication North, South, East, and West.

☞ For Circulars, etc., address, with stamp, HEALDS' HYGEIAN HOME, Wilmington, Delaware. m-1t

Saratoga Springs Remedial

INSTITUTE.—New improvements, in modern and elegant style. DRS. STRONG, its Proprietors, are graduates of the Medical Department of New York University, and give special attention to **Lung, Female,** and **Chronic** Diseases.

Among its *special appliances* are the Turkish, Sulphur, Air, Russian, and Electro-Thermal Baths, Equalizer or Vacuum Treatment, Swedish Movement Cure, Hydropathy, etc. etc.

Indorsed by Bishop Simpson, Professor Taylor Lewis, L. L. D., Rev. T. L. Cuyler, D. D., etc. etc.

For description of our appliances, diseases treated, references, etc., *send for circular.* a-tf

"Amer. School Inst.," founded

1855, *Is a reliable and practical Educational Bureau*

To aid those who want well-qualified Teachers;
To represent Teachers who seek positions;
To *give* parents information of good Schools;
To sell, rent, and exchange School Properties.

Sixteen years have *proved* it efficient in securing "THE RIGHT TEACHER FOR THE RIGHT PLACE."

J. W. SCHERMERHORN, A. M., Actuary,
Xf-11t 14 *Bond Street, New York.*

New and Improved, - - 1871.

PAGE'S PORTABLE PUMP,

and GRANULATING SPRINKLER. Efficient as a Fire Annihilator, and one-tenth the cost. Unequaled for watering Hot-beds, Greenhouse Plants, etc., and for applying liquids to destroy insects on plants, vines, and fruit trees. Sizes, styles, and prices to suit customers. Discount to Clubs and Agents. See circulars.

m-1t N. PAGE, Jr., Danvers, Mass.

Conant's Binder,

OR BOOK COVERS FOR PERIODICALS.



Adapted to the *Atlantic, Harpers', Putnam's,* and THE HERALD OF HEALTH, 50 cts.

MUSIC SIZE.—Adapted to the various Publishers' *Sheet Music* $1 00

A cheap and durable method of Binding Magazines, Papers and Music. Extremely simple. New numbers can be added as received.

We can recommend it as being just the thing for preserving Magazines perfect and clean.—*Gardener's Monthly.*

This is a useful invention, by which a Periodical is inserted in a moment between two durable covers. Various sizes are made. A good thing.—*New York Tribune.*

Conant's Binder is one of the best and cheapest contrivances for keeping Periodicals in good condition that we have ever seen, and it meets a want that has long been felt in every reading family. It is strong and durable, and is designed either for a Temporary or Permanent Binder."—*Dedham Gazette.*

WOOD & HOLBROOK,
15 Laight Street, New York.

Cheapest and Best in the

COUNTRY FOR THE PRICE!—Every Boy and Girl, every Parent, every Sunday-School, Day-School, and Temperance Society should subscribe for

The Young People's Helper,

a Monthly Paper for American Boys and Girls; 16 large pages, illustrated; 50 CENTS A YEAR. Stories, music, poetry, dialogues, puzzles, etc., in every number. Eight years established. The best paper parents can give their children. Pure, fresh, original, lively, vigorous, instructive, and entertaining. *Two-thirds the subscription price in premiums!* Every body sends for it. Samples free. AGENTS WANTED everywhere.

Z. POPE VOSE, PUBLISHER,
a-3t Rockland, Maine.

The Illustrated Excelsior

MAGAZINE has been reduced from **$2 50** to **$1 00**, and is now ONE OF THE CHEAPEST IN THE WORLD. The illustrations alone are perhaps worth more than the cost, and the beautiful STEEL ENGRAVING of Evangeline, postage, etc. being sent, is GIVEN. Size of paper on which the steel engraving is printed is 2 feet by 19 inches. The Magazine contains STORIES, PICTURES, PUZZLES, MUSIC, A LADY'S DEPARTMENT, with illustrations of ladies patterns; a YOUTH'S DEPARTMENT, etc. etc.

I hereby specially offer the Magazine for ONE YEAR, also this splendid STEEL ENGRAVING, for the regular subscription price, $1 00, and 8 cents for postage and packing of engraving on roller. Sample copy 10 cents.

Address the Publisher, C. L. VAN ALLEN,
Xf-4t 171 Broadway, New York.

See Book Advertisements,

read them carefully, and then ask yourself if you can use your money to better advantage than to purchase, read, and become possessed of information highly important to your well being for ever.

WOOD & HOLBROOK, 15 Laight St., N. Y.

THE ELMIRA WATER CURE WILL

be re-opened May 1st for the reception of patients, being under the general care of Dr. S. O Gleason and Mrs. E. B. Gleason, M. D., assisted by Miss L Z. Brooks. Address for Circular, with Stamp, S. O. GLEASON, M. D., Water Cure, Elmira, New York. my-tf

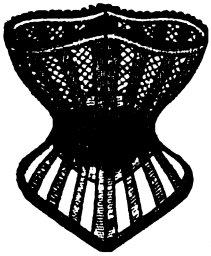
Digitized by Google

COLGATE & CO.

RECOMMEND THEIR NEW

"RONDELETIA" Toilet Soap.

Sold by Dealers in Perfumery and Fancy Goods and First-class Grocers.



Fanning's Patent

KID FITTING

DEMI-SKELETON

CORSET.

The most easy, graceful, and sensible Corset ever introduced.

Sample Corsets sent by mail, prepaid, on receipt of Two Dollars. For circular, prices, etc., address
WORCESTER SKIRT CO., Worcester, Mass.

$5 TO $10 PER DAY. MEN, WOMEN, BOYS and GIRLS who engage in our new business make from **$5 to $10 per day** in their own localities. Full particulars and instructions sent free by mail. Those in need of permanent, profitable work, should address at once. GEORGE STINSON & Co., Portland, Maine.

FLOWERING Plants by Mail,

Sent with safety to any Postoffice. Priced Circular, with instructions for culture, free.
My Illustrated Catalogue of New and Rare Plants mailed on receipt of 25 cents.

Peter Henderson

67 Nassau St., N. Y.

REDUCTION OF PRICES

TO CONFORM TO

REDUCTION of DUTIES.

GREAT SAVING TO CONSUMERS

BY GETTING UP CLUBS.

☞ Send for our New Price List, and a Club Form will accompany it, containing full directions—making a large saving to consumers and remunerative to club-organizers.

The Great American Tea Co.
31 & 33 Vesey Street,
P. O. Box 5643. NEW YORK.

A Great Offer. HORACE WATERS 481 Broadway, N.Y., will dispose of One Hundred PIANOS, MELODEONS, and ORGANS of six first-class makers, including Waters', at extremely low prices, FOR CASH, DURING THIS MONTH, or will take a small portion cash and balance in monthly or quarterly instalments.

TO THE WORKING CLASS.—We are now prepared to furnish all classes with constant employment at home, the whole of the time or for the spare moments. Business new, light and profitable. Persons of either sex easily earn from 50c. to $5 per evening, and a proportional sum by devoting their whole time to the business. Boys and girls earn nearly as much as men. That all who see this notice may send their address, and test the business, we make this unparalleled offer: To such as are not well satisfied, we will send $1 to pay for the trouble of writing. Full particulars, a valuable sample which will do to commence work on, and a copy of *The People's Literary Companion*—one of the largest and best family newspapers published—all sent free by mail. Reader, if you want permanent, profitable work, address E. C. ALLEN & CO., AUGUSTA, MAINE.

THE

FLORENCE

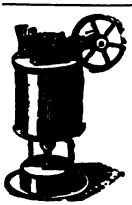
SEWING MACHINE

Is the ONLY MACHINE that ties the ends of its Seams effectually.
The FLORENCE is the only machine that will make a perfect Lock-stitch with an inexperienced operator.

SEND FOR A CIRCULAR.

MANUFACTORY AT FLORENCE, MASS.

☞ Agents wanted where not already established. ☜



DOLLAR

Steam Engine!

Every Machine warranted. Explosion impossible. Any child can run it. Sent postpaid for $1.50. Send for descriptive circular.

J. M. HALSTED, 571 Broodway,
New York.

$250 A MONTH, with Stencil and Key-Check Dies. Don't fail to secure Circular and Samples, free. Address S. M. SPENCER, Brattleboro, Vt.

VINEGAR, how made in 10 hours, without drugs. Particulars 10 cents. F. SAGE, Cromwell, Conn.

FRAGRANT SAPOLIENE

Cleans Kid Gloves and all kinds of Cloths and Clothing, removes Paint, Grease, Tar, etc., instantly, without the least injury to the finest fabric. Sold by Druggists and Fancy Goods Dealers. FRAGRANT SAPOLIENE CO., 33 Barclay St., New York, 46 La Salle St, Chicago.



THEA-NECTAR
IS A PURE
BLACK TEA
with the Green Tea Flavor. Warranted to suit all tastes. For sale everywhere. And for sale wholesale only by the *Great Atlantic and Pacific Tea Co.*, 8 Church St., New York. P. O. Box 5506. Send for Thea-Nectar Circular.

Advertise Your Business!

WM. J. CARLTON'S

LISTS OF

Advertising Mediums.

No. 1. 150 Religious Papers.
No. 2. 50 Agricultural Papers.
No. 3. 15 Literary and Illustrated Papers.
No. 4. 30 Magazines.
No. 5. 25 Family Secular Weeklies.
No. 6. 50 Secular Papers around New York.
No. 7. 125 New York Newspaper Union List.
No. 8. 290 Northwestern Newspaper Union List.
No. 9. 1500 Secular Dailies and Weeklies.

Total, 2235 Publications.

Any of the Above Lists Sent on Application.

Address WM. J. CARLTON,
Advertising Agent,
39 Park Row, New York.

Digitized by Google

Empire Shuttle Sewing Machine

Patented Feb. 14, 1860, and Sept. 18, 1866.

Received the First Prize at the Great Fair of the American Institute, in New York, Oct. 26, 1867, and highest premium for the Best Manufacturing Machine at the Paris Exposition, July, 1867.

No. 1, FAMILY MACHINE.

This machine is constructed on a new principle of mechanism, possessing many rare and valuable improvements, having been examined by the most profound experts, and pronounced to be simplicity and perfection combined.

The following are the principal objections urged against Sewing Machines:

1. Excessive fatigue to the operator.
2. Liability to get out of order.
3. Expense, trouble, and loss of time in repairing.
4. Incapacity to sew every description of material.
5. Disagreeable noise while in operation.

The Empire Sewing Machine is exempt from all these objections. Address the EMPIRE SEWING MACHINE CO., 294 Bowery, N. Y.

For 35 Subscribers and $70,

to THE HERALD OF HEALTH, we will send an Empire Sewing Machine worth $60.

WOOD & HOLBROOK,
f-tf 15 Laight Street, New York

LIFE-BOAT

A CHICAGO WEEKLY OF CHOICE, STIRRING, AND ELEVATING LITERATURE for old and young. A friend to all true religion and reform. Not sectarian in religion or politics. A paper for the people. Should be in every family in the land. Contains sermons of London's great preacher, C. H. Spurgeon. Contains latest news and market reports up to time of going to press. One of the cheapest and liveliest papers published. Only One Dollar a year; Six Months, 50 cts.; Three Months, 25 cts. Publisher of Game of "SOCIETY, OR THE SOCIAL CONFLICT BETWEEN GOOD AND EVIL." Address

Xn-6t E. C. EGGLESTON, Editor Life Boat.

New Views of Temperance!

HEAR BOTH SIDES!!

ALCOHOL AS MEDICINE, and how its use affects the Temperance cause.

A DISCUSSION between an M. D. of Newark, Ohio, and Thos. F. Hicks, M. D.

TESTIMONIALS.

"It is emphatically *a book for the times*, and should be read by every one, especially, Temperance men. We advise our readers to send for it."—*The Nation* (Boston).

"It should be in the hands of every thinking man and woman. Every Good Templar Lodge and every Temperance Organization should be supplied with copies."—*Temperance Wreath.*

"This discussion is worth a wide circulation."—*Phrenological Journal.*

"A close, incisive argument followed by a strong array of weighty testimony from prominent authors. . . . Invaluable to thinkers, writers, and speakers as a book of reference."—*Temperance Press.*

"The subject is of great importance. More so than is generally appreciated even by Temperance advocates: and the form in which it is here presented, that of debate, is calculated to make its discussion interesting. We commend it to the friends of Temperance."—*Indiana Radical.*

Price 25 cents, post-paid. Five copies for One Dollar. Address T. F. HICKS, M. D., Syracuse, N. Y. m-3t

Ladies desiring to procure a FIRST-CLASS Sewing Machine against easy monthly instalments, may apply to 294 Bowery, N. Y. a-6t

List of Articles for Sale by

WOOD & HOLBROOK, No. 15 Laight Street, New York.

BACON'S HOME GYMNASIUM, with book of explanation and 100 cuts, $10.

——Trapeze Adjustment, with 32 illustrations, $3 50.

——Swing Adjustment, for children, $1 50.

Each part sold separately. The whole, $15.

This is the most valuable piece of Gymnastic apparatus for home use ever invented. Any one can use it. For weak chests, backs, and sides its use is the best remedy known. A half hour's use of it daily would prevent and cure many cases of dyspepsia and consumption.

SYRINGES.—The best styles in market. Usual style, by mail, $3. For children, with Eye and Ear Douche for sores, etc., $2. The Spray Syringe, $3. The Trade supplied.

BOUND VOLUMES.—We still have a few Bound Volumes for 1863, 1864, 1867, 1868 and 1869 for sale, postpaid, by mail, for $3. Soon it will be impossible to obtain them.

HERALD OF HEALTH COVERS—so that every one can bind their numbers and preserve them neatly. 50 cents.

BREAD PANS—for making light, aerated Bread without soda, saleratus, yeast, or other poisonous compounds. Only by Express, $1 25.

HAND MILLS—for cracking Wheat, making Rusk, Hominy, etc. By Express, $3.

BEST GRAHAM CRACKERS—per barrel, $10. Half barrel—38 lbs., $6.

ELECTRIC MACHINES—Kidder's, best Manufactured, $20 to $22.

FILTERS.—Kedzie's, Family Size, $10 50.

Hygienic Home Water Cure,

637 California Street,
SAN FRANCISCO, Cal.

This is by far the most extensive and complete Health Institute on the Pacific Coast, based strictly on the Hygienic principles of treatment.

Dr. Smith has built and arranged the Home with special reference to its supplying the place in San Francisco that the Laight Street House and Hygienic Institute furnishes to the friends of Health Reform in New York city. The Medical Department is ample for the cure of all who may desire hospitalities, and the Boarding Department is well arranged for the accommodation of the friends of Hygiene throughout the coast. All are cordially invited to visit our healthful Home.

BARLOW J. SMITH, M. D.,
Consulting Physician.
R. S. MACBETH, M. D.,
aug-tf Attending Physician.

BOOT AND SHOE STORE, No. 415 Canal Street. Ladies', Gentlemen's, Boys', Misses' and Children's Boots, Shoes and Rubbers, in all their varieties, always on hand. Work made to order, and Repairing done on the shortest notice and reasonable terms.

DAVID WALKER,
n-1y No. 415 Canal, corner Sullivan Street.

D. H. PARMLY, *Printer, at the Hygienic Institute, N. Y.*

Digitized by Google



THE NEW YORK HYGIENIC INSTITUTE,

13 & 15 Laight Street, New York City.

A. L. WOOD, M. D., Physician.

The objects of this institution, which has been in successful operation for more than twenty years, are two-fold, viz.: 1. The Treatment and Cure of the Sick, without poisoning them, by Hygienic agencies alone.

2. To furnish a pleasant, genial Home to friends of Hygiene throughout the world, whenever they visit this city.

CURE DEPARTMENT.

Thousands of Invalids have been successfully treated at this institution during the past twenty years, and its fame is known wherever the English language is spoken. Its appliances for the treatment of disease without the use of poisonous drugs are the most extensive and complete of any institute in America. They comprise the celebrated **Turkish Baths, Electric Baths, Vapor Baths, Swedish Movement Cure, Machine Vibrations,** the varied and extensive resources of the **Water Cure, Lifting Cure, Magnetism,** Healthful Food, a Pleasant Home, etc. etc. Particular attention is given to the treatment of all forms of CHRONIC DISEASE, especially of Rheumatism, Gout, Dyspepsia, Constipation, Torpidity of the Liver, Weak Lungs, and Incipient Consumption, Paralysis, Poor Circulation, General Debility, Curvature of the Spine, Scrofula, Diseases of the Skin, Uterine Weaknesses and Displacements, Spermatorrhea, etc. Any one wishing further information should **Send for a Circular,** containing further particulars, terms, etc., which will be sent free by return mail.

BOARDING DEPARTMENT.

We are open at all hours of the Day and Night for the reception of Boarders and Patients. Our location is convenient of access *from* the Railroad Depots and Steamboat Landings, and *to* the business part of the city. Street cars pass near the doors to all parts of the city, making it a very convenient stopping-place for persons visiting the city on business or pleasure. Our table is supplied with the *Best Kinds of Food, Healthfully Prepared, and Plenty of it.* In these respects it is unequaled. Come and See! and learn how to live healthfully at home. Terms reasonable.

WOOD & HOLBROOK, Proprietors.

Digitized by Google

A NEW CATALOGUE OF BOOKS

Published by WOOD & HOLBROOK, 15 Laight St., N. Y.

MINNESOTA AND ITS CLIMATE,

as adapted to Consumptives, Invalids, and all who wish to make the State a Home. By LEDYARD BILL, Author of "A Winter in Florida." Price $1.25, postpaid, by mail.

This delightful book, while a godsend to invalids and consumptives, will be found equally interesting to sportsmen and settlers, who would find a home in this far-famed State. It contains a beautiful view of Minnehaha Falls, and also chapters on the climate of all those places which are most desirable as resorts for invalids, including Florida, Nassau, the Adirondacks, California, the White Mountains, etc. etc. This work, and the one on Florida should be in the hands of every one who wishes to find the best resorts for health.

A WINTER IN FLORIDA. By

LEDYARD BILL. With illustrations by Forbes, comprising views of the old city of St. Augustine, and the Natural Scenery and objects in Eastern Florida. Tourists, Sportsmen, Invalids, and all who would escape the rigors of a Northern Winter, or find a Home in a delightful clime, should read this book; so also those who would know all about the resources of the country, and its adaptation for Horticulture, Orange culture, and for cheap and desirable homes. It contains 250 pages. Price $1.25, by mail.

The author justifies the predictions of the climate, saying that it is so delightful that no disease can experience it without favorable effect.

SEXUAL PHYSIOLOGY. — This

work contains the latest and most important Discoveries in the Anatomy and Physiology of the Sexes; Explains the origin of Human Life; how and when Menstruation, Impregnation, and Conception occur; giving the laws by which the number and sex of offspring are controlled, and valuable information in regard to the begetting and rearing of beautiful and healthy children. With 80 fine engravings. *Agents wanted.* Send stamp for Circular. Price, by mail, $2.

It is high-toned, and should be read by the members of every family. As an evidence of its popularity, we may remark that Eleven Thousand Copies have been sold, and the demand is still unabated. If a copy of this work could be in the hands of every young man and woman, it would not only make them purer and better, but give them a knowledge all should possess.

PHYSICAL PERFECTION. — Con-

taining Chapter on Structure of the Human Body; the Perfect Man and Woman; the Temperaments; Laws of Human Configuration; Embryology; Childhood; Effects of Mental Culture; Moral and Emotional Influences; Social Conditions and Occupations; Effects of Climate and Locality; Direct Physical Culture; Practical Hygiene; Womanhood; the Secret of Longevity; the Arts of Beauty; External Indications of Figure, etc. etc. Beautifully Illustrated with 100 Engravings, and handsomely bound. Price, by mail, $1.50.

This work has been through many editions, and has given great satisfaction to thousands.

TALKS TO MY PATIENTS.—Hints

on Getting Well, and Keeping Well. By Mrs. R. B. GLEASON, M. D.

Women Agents wanted everywhere. Thousands of copies of the work are being sold. Full contents, and terms of agency sent on application. Price, by mail, $1.50.

This book is designed mainly for women, of all ages. It treats principally on the Diseases of Women, and includes chapters on Child Bearing, and the Care of Children. Harper's Magazine, in reviewing the work, says:

"Mrs. Gleason is able to say something to wives and to mothers which no man could say. There can be no difference of opinion about the value of the practical suggestions she affords, which are characterised by sound philosophy and clear, good, sterling common sense. We wish the chapter, "Confidential to Mothers," might be published as a tract, and sent to every mother in the land."

Mrs. Dr. Sayles, after reading it, says, "I would rather have written that book than been queen of the greatest empire on this small globe of ours!"

No woman can read it without being made wiser and better, and without being better qualified for all the duties of life.

MORAL, INTELLECTUAL, AND

PHYSICAL CULTURE; OR, THE PHILOSOPHY OF TRUE LIVING. By Professor F. G. WELCH, Superintendent of Physical Culture in Yale College. It contains over 400 pages, and is beautifully bound. Price, by mail, $2.25.

This book is the most perfect Encyclopedia of Gymnastic exercises of the most approved method in existence. It tells in plain language how to do every thing, from the building of a gymnasium and choosing apparatus to doing the exercises. The series of exercises with the Indian clubs alone, is the best ever published. Those who want a work on gymnastic culture should not fail to get this one. Dr. Dio Lewis says, "This is an admirable guide to physical culture."

THE TREE OF LIFE; or, HUMAN

DEGENERACY, ITS NATURE AND REMEDY. By ISAAC JENNINGS, M. D. Price, by mail, $1.50.

This work, prepared by a conscientious and philanthropical thinker, is full of interest to all who are seeking light on the important questions of which it treats. It is deeply religious in its tone, and contains a multitude of valuable hints on the treatment of diseases by natural means. Any person sending us a new subscriber for THE HERALD OF HEALTH and $2, shall have this work FREE.

THE NEW HYGIENIC COOK-

BOOK. By Mrs. M. M. JONES. This work contains several hundred recipes for cooking the most palatable and wholesome food without the use of deleterious compounds. Also, directions for Washing, Ironing, removing Stains, Canning Fruit, etc. Price 30 cents, postpaid. Several thousands have been sold.

WOMAN'S DRESS; with numerous

Engravings, showing how Woman's Clothing can be made beautiful, healthful, and comfortable. Price 30 cents.

Any or all of the above works sent free, by mail, on the receipt of the price.

ATTENTION! [illegible] COUNTY, NEW JERSEY, 44 Miles from New York, on the [illegible] Price per acre, $25 and upward. For Circulars and Maps, address ROBERT CAMPBELL, No. 155 Broadway, New York.
[illegible] BURG, OCEAN [illegible] rough for beauty and utility. Climate, mild and proverbially healthy. Water, soft and pure. No fever and ague. Sold only to actual settlers, on easy terms.

Digitized by Google

2 GAL 139

OLD SERIES—VOL. 31. NEW SERIES—VOL. 17.

BOSTON MEDICAL
JUL 23 1962 THE
LIBRARY

HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE,

ADVOCATES

A Higher Type of Manhood—Physical, Intellectual, and Moral.

CONTENTS FOR JUNE, 1871.

GENERAL ARTICLES:	Page
Drink, Pauperism, and Crime—*Harvey P. Peet*, LL. D.	241
Theories Put in Practice, or Diary of a Physician's Wife—*Mrs. H. C. Birdsall*	245
The Bright Side (A Poem)—*Phœbe Cary*	249
Cousin Lucy's Story; or, Should Consumptive's Marry—*Mary Atherstone Bird*	250
The Big Bell (A Poem)—*George W. W. Houghton*	257
Summer Resorts—*Rev. Charles H. Brigham*	259
Spirit and Form, or the Relations of the Body with the Soul—*Rev. Phebe A. Hanaford*	264
Food, Size, Climate, etc., as Affecting Longevity—*E. Ray Lankester*, B. A.	267
Studies in Hygiene	269
Recipes for Wholesome Cooking—Sandwiches and Beverages	272

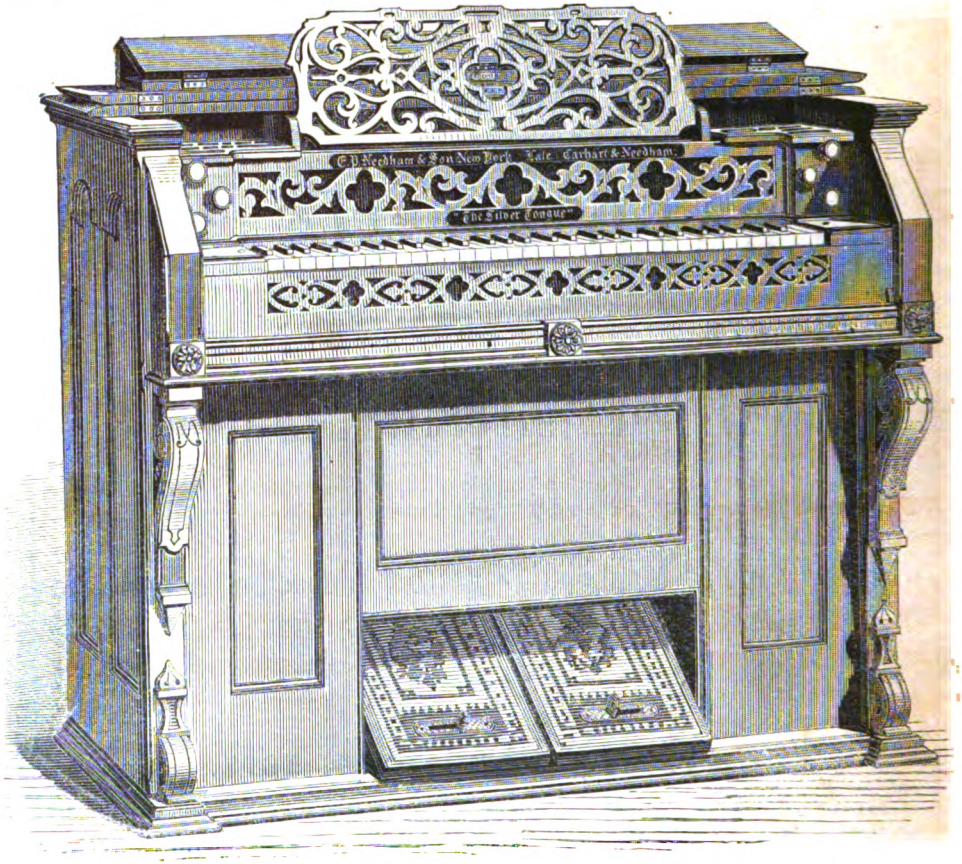
EDITORIAL DEPARTMENT:	
The Golden Decade	273
How to Abolish War	274
How a Centennarian Lives—The Value of a Clean Mouth	275
Wheat-meal Flour—Chloral Poisoning—Normal Institute—Climates for Invalids—A Hygienic Shoemaker	276
HOW TO TREAT THE SICK:	
How I Cured a Man in a Decline	277
Care of the Teeth	278
ANSWERS TO CORRESPONDENTS:	
Treatment of Tetter—To Prevent Hair Falling Out—Epistaxis, or Bleeding from the Nose—Reading after Meals	279
How Much to Eat—Age and Youth Sleeping Together—Swelled Knee—Shaving—Goiter, or Swelled Neck	280

NEW YORK:
WOOD & HOLBROOK, PUBLISHERS, 13 & 15 LAIGHT ST.
GENERAL AGENTS—AMERICAN NEWS CO. . . NEW YORK NEWS CO.

$2 per Annum. Single Copy, 20 Cents.

Digitized by Google

SYMMETRICAL, SONOROUS, SUPERB!



THE "SILVER TONGUE" ORGANS.

E. P. NEEDHAM & SON, 143, 145, and 147 East 23d Street, New York.

FOR PRICES AND DESCRIPTION OF STYLES SEND FOR CIRCULARS.

"THE AMERICAN PIANO,"

MANUFACTURED BY

DOANE, WING & CUSHING,

423 BROOME STREET, NEW YORK.

"For finish and elegant wormanship, as well as for power, elasticity of touch, and sweetness of tone, it stands unrivaled."—*Christian Inquirer, N. Y.*, Dec. 18, 1869.

"Its superior qualities of tone, its excellence of workmanship, and the beauty of its finish are rapidly extending its popularity."—*Christian Union, N. Y.*, Sept. 24, 1870.

"It contains every improvement that goes to make a first-class piano, and it is deservedly popular wherever it is known."—*Standard, Chicago*, Oct. 6, 1870. ie-tf

Digitized by Google

THE HERALD OF HEALTH

AND

JOURNAL OF PHYSICAL CULTURE.

VOL. 17, No. 6.] NEW YORK, JUNE, 1871. [NEW SERIES.

PUBLISHED MONTHLY BY WOOD & HOLBROOK, 13 & 15 LAIGHT STREET.

A NEW DISCUSSION OF TEMPERANCE PROBLEMS;

COMPRISED IN A SERIES OF TWELVE ESSAYS CONTRIBUTED BY OUR BEST THINKERS AND WRITERS.

No. VIII.—DRINK, PAUPERISM, AND CRIME.

BY HARVEY P. PEET, LL. D.

IN preceding articles have been shown the deteriorating effects of alcohol on the drinker, and on his offspring—we say the drinker, for the difference of results between the moderate drinker and the confirmed drunkard is in degree, not in kind—the two characters approach each other through almost insensible gradations.

It has been shown that the habitual use of alcoholic stimulants impairs the digestion, poisons the blood, deranges the liver, lessens the power of resisting cold and heat, weakens the heart and lungs, dims the senses, clouds the higher faculties of the mind, and excites to unnatural activity the lower faculties. The man who drinks freely, even if seldom to complete intoxication, becomes more and more irritable, quarrelsome, unreasonable, selfish, lascivious, brutal. It is not without reason that drunkenness has been called a beastly vice, as assimilating man to the beasts, by stimulating his animal propensities and clouding his higher faculties—though as beasts reject alcoholic drinks, the vice might more appropriately be styled *devilish*. Certain it is that if men should wish to make devils of themselves, drinking alcoholic stimulants to excess is the readiest and surest means known for attaining that end.

When to these effects of alcohol in the individual we add the fact that his offspring must suffer from his sins; that they will be, as a general rule, less vigorous, less intellectual, less moral than the offspring of his temperate brothers and sisters, we can well believe that the use of alcohol is the great evil that, more than all other causes combined, has been a clog on the progress of the human race, dragging so fearful a proportion of it back to a barbarism worse than that from which it had been slowly emerging during the prehistoric times.

The term *barbarism*, however, is a very inadequate expression for the condition of a community where intemperance holds full sway. Barbarians and savages are rude, lawless, ignorant, unpolished; but they are apt to be strong, healthy, faithful to each other, attached to their friends and kindred, even long-lived. They are often progressive. Their offspring may be

Digitized by Google

better than themselves. From barbarians gradually improving under the influence of Christianity have sprung the highest types of the human race.

A community of drunkards presents a very different aspect. Weakness, disease, deformity, and premature old age are its physical characteristics. In family affection, in morals, and even in intellect, a confirmed drunkard is far below an average savage, such as we read of in the early history of our country, before the "fire-water" of the white traders had debased the savage to the common drunkard level.

It is a suggestive fact that intoxication thus reduces the savage and the civilized man to one common level of degradation. The drunkard is, for the time being, below even the idiot; humanity can not fall lower.

As the invariable effects of indulgence in alcoholic stimulants is to weaken, and then to destroy both the moral and physical powers of the individual, the habit is injurious to society in a double sense: it increases the number of criminals, and it increases the number of paupers.

That intemperance, more than any other cause, fills our prisons and our poor-houses is a fact patent to every observer. Let every reader look around on his own circle of acquaintances and he will find that those who are dangerous to the community, who make work for lawyers, and sheriffs, are, as a general rule, those who drink to excess. And the same class, with their wives and children, form the greater portion of those for whose support their temperate neighbors must be taxed.

We will cite a few statistics, such as we happen to find readily accessible, to show how a large proportion of the crime and pauperism in our country is traceable to the use of intoxicating beverages.

The convictions for serious offenses reported by the sheriffs of the sixty odd counties of New York for the year 1866, were 2,055; of which the criminal in 1,150 cases was stated to have been intemperate; in 492 temperate; while in the other 413 cases no information on this point was given. The next year, 1867, out of 2,045 cases, 1,093 were intemperate, and 500 unknown. In each year, it will be seen, considerably more than two-thirds of the criminals of the State, so far as their habits were known, were intemperate. It is probable that a considerably larger number of the unknown cases were also intemperate; and, in many cases, men reckoned ordinarily temperate commit crimes under the influence of an unwonted indulgence in alcoholic stimulants. In England, it has been a common remark of the judges, from the days of Bacon and Sir Matthew Hale downward, that from three-fourths to five-sixths of the criminal business brought before them sprang directly or indirectly from intemperance.

Of the commitments to the jails of the several counties in New York in 1866, the number reported as temperate was 1,701, and intemperate 3,653.

Turning to the records of minor offenses in the cities of our State, we note that from the eighteen incorporated cities of New York in 1869, there were returned 50,472 cases, in which the culprit was temperate in 3,579; intemperate in 28,577; unknown cases, 18,316. These statistics make it a probable conclusion that about nine-tenths of the crime and disorder in our cities is to be ascribed to intemperance.

From the Eighth Annual Report of the Commissioners of Public Charities and Corrections for New York City (1867), it appeared that out of 47,313 commitments, there were 14,125 for intoxication, and 14,728 for disorderly conduct, in most cases only a synonym for partial intoxication. The returns do not show what proportion of the cases of other offenses were due to intemperance; but doubtless, judging from general experience and observation, a large proportion. Of the cases of murder and manslaughter brought to trial and conviction in our State in 1869, the criminal was returned as temperate in four cases, and as intemperate in twelve, just three-fourths. About as many cases were returned as unknown in this regard. As we all know how unlikely it is that a strictly temperate man should commit murder, and how apt an intoxicated man is to indulge in reckless violence, with or without provocation, it is certainly probable that if the cases marked as unknown should be known, they would not diminish the proportion of homicides chargeable to alcohol. The newspapers bring daily reports of murders that would never have been committed but for the frenzy or the recklessness induced by intoxication. Very recently a man was hanged in this city for the murder of a friend and comrade, on account of some trifling dispute brought up while the parties were excited by liquor. And still more recently, in another city of this State, a physician who when sober was an estimable man, beat out the brains of a gentle and loving wife, while crazed by alcohol. A well-informed writer has estimated that, taking the whole country, alcohol is annually chargeable with three hundred murders and four hundred suicides.

Equally prominent is the use of alcohol

Digitized by Google

among the causes of pauperism. In Great Britain, where the density of population makes destitution inevitable, in many cases from the mere accidental fluctuations of trade, or from loss of health, it is still found that the number of paupers is immensely increased not merely by intemperance, but also by that habitual drinking which some would call temperate or moderate. Some careful observers estimate that nine-tenths of the pauperism in their localities is due to the use of alcohol; the more moderate say at least one-half.

In this country, where labor is in greater demand than in England, there would be very little pauperism were it not for intemperance. Five hundred millions of dollars annually which should go to make homes comfortable, or to lay up a reserve for sickness, seasons of scarcity of work, and old age, are spent in the dram-shops. Add to this waste of money the waste of time and the deterioration of skill and strength, and the direct loss to families through indulgence in alcohol may be safely set down for our country at a thousand millions annually, equal to a comfortable income for a million of families. Hence untold suffering and privation among the families of those whose custom maintains the liquor traffic; hence, in seasons of distress and scarcity, it is chiefly the families of the intemperate who must be saved from starvation by public relief. Moreover, many thousands of husbands and fathers descend annually into the drunkard's grave, leaving widows and orphans by hundreds of thousands utterly destitute, to be supported by the community, and the children in too many cases on growing up, to be dragged by early associations and habits into the same maelstrom of intemperance, vice, and poverty, in which the parents were engulfed.

The connection between intoxicating drinks and crime and poverty had become proverbial thousands of years before the more concentrated forms of alcohol were discovered. "They that tarry long at the wine," said the wise king of Israel, are those "who have sorrow, contentions, babbling, wounds without cause." Multitudes who have yielded to the temptation "in looking on wine when it is red" have found that "it biteth like a serpent, and stingeth like an adder." That "he that loveth wine shall not be rich" is as true now as it was three thousand years ago. Yet wine is a mild agent of evil compared with the fiery potations of modern times.

The connection of indulgence in alcohol with theft is less immediately obvious than its connection with violence, idleness, and debauchery. Still it is notorious that when intemperance brings poverty, the unappeasable and overmastering appetite for drink, to which all the comforts of home, the esteem of others, the happiness of wife and children have been ruthlessly sacrificed, will sooner or later drive its victim to crime to obtain the means of gratification. There are cases of people who are honest when sober giving way to the impulses of kleptomania when excited by drink; and in the general blunting of the moral sensibilities under the influence of frequent potations, that of honesty is weakened with the rest, and succumbs in the hour of strong temptation. And, if the drunkard still retains too much of early-instilled pride of character to steal himself, his children, having no good moral instruction at home, and no training to industry, are rapidly educated to crime in the streets. It has been found, in fact, that two-thirds or more of the children committed to houses of refuge, were the children of intemperate parents.

We have spoken mainly of the intemperate; but, let not the reader suppose that those who drink moderately are safe. Every moderate drinker inscribes his name on a roll from which the great army of drunkards draws its doomed conscripts. The lot may fall on himself; it is more likely to fall on his children. There is no absolute safety except in total abstinence.

How many who drink moderately have seen some promising son or brother, the delight of the parents' eyes, looked on by all as destined for a career of usefulness and honor, acquiring a taste for alcohol in some mild form at the social board; and in the space of a few years sacrificing to that appetite all his hopes of earth and heaven!

The memory of multitudes will enable them to parallel the subjoined sketch from their own knowledge.

Some sixty years ago two brothers divided the farm of their father, an industrious man, who, as was then the almost universal custom, took his moderate daily dram. The elder brother was temperate and industrious. The other loved to drink at frolics, trainings, and elections, and soon entered on the drunkard's downward road. Years passed, and while the temperate brother improved his property and reared children, distinguished for intelligence and thrift, the intemperate one mortgaged his farm, and left his widow and children destitute. The descendants of the temperate brother now rank high in the community where they live. The younger son of the intemperate brother after struggling for years with the evil influences to which inherited strength of appetite and

Digitized by Google

weakness of self-control subjected him, ended his life by suicide, and his children are paupers.

In this family whose history has just been sketched, it is somewhat remarkable that not only the fathers were brothers, but their wives were sisters. This fact brings out in stronger relief the debasing influence of alcohol. In many other families where one branch is seen gradually to rise while another branch falls, it will be found on inquiry that the former maintained habits of temperance, while the latter traveled the downard road of intemperance.

And what is true of families is true of that aggregate of families which constitutes a nation. The strictly temperate portion of a nation is always the better portion; the main promoters of education and religion, the conservators of public morals, the creators and guardians of national wealth. It is fortunate for humanity that the families in which intemperance prevails soon become extinct. But for this rule of "natural selection" which causes the temperate to flourish and multiply while the intemperate become feeble and waste away, the future of our race would be dark indeed.

Yet while cherishing the consolatory faith that the powers of good will finally prevail over the powers of evil in this conflict as in others, let us not abandon the multitudes of our own brethren, who are now hesitating between the upward and the downward road. Let us not forget that, as intemperance found so many victims among the children of our fathers and brothers, it may find victims among our own. Let us do what we can to enlighten, to warn, and, so far as public opinion will permit, to restrain. To restrain those who choose to drink may be impracticable, but means can be found to reach those whose business it is to manufacture drunkards. The trade should be rendered discreditable, and, what will touch those who ply it much more nearly, it should be subjected to penalties that will make it unprofitable. So long as men can make money by pandering to intemperance, it will in too many cases be in vain to appeal to their moral sense, by showing them the amount of misery and crime resulting from the traffic. But if we can make the trade unprofitable we may hope that drunkenness will die out with the present generation, and in proportion as by legal restraints and penalties this traffic in the means of damnation can be made less profitable, will the evil it causes be diminished. That where dram-shops flourish, there drunkenness and all its attendant evils flourish, there crime and pauperism prevail, is a fact patent to every observer. That where there are no dram-shops, we find a happy and prosperous community, is equally true. Frequented by the worst members of the community, their use is to enable men to waste money and time, their tendency to manufacture drunkards and criminals.

The two results of intemperance that have been considered in this paper, the multiplication of criminals and the multiplication of paupers, make the use of and traffic in alcoholic drinks a grave public danger and wrong. The State has an undoubted right to prohibit a traffic that tends to debase the morals, impair the health, and endanger the lives and property of its citizens. SALUS POPULI SUPREMA LEX.

PHYSICAL INFLUENCE OF SUNDAY REST.—I have practiced as a physician between thirty and forty years, and during the early part of my life, as the physician of a public medical institution, I had charge of the poor in one of the most populous districts of London. I have had occasion to observe the effect of the observance and non-observance of the seventh day of rest during that time. I have been in the habit during a great many years of considering the uses of the Sabbath, and of observing its abuses. The abuses are chiefly manifested in labor and dissipation. Its use, medically speaking, is that of a day of rest. As a day of rest I view it as a day of compensation for the inadequate restorative power of the body under continued labor and excitement. A physician always has respect to the preservation of the restorative power, because if this once be lost, his healing office is at an end. A physician is anxious to preserve the balance of circulation as necessary to the restorative power of the body. The ordinary exertions of man run down the circulation every day of his life; and the first general law of nature, by which God prevents man from destroying himself, is alternating night and day, that repose may succeed action. But although the night apparently equalizes the circulation, yet it does not sufficiently restore its balance for the attainment of a long life. Hence, one day in seven, is thrown in as a day of compensation, to perfect by its repose the animal system. I consider, therefore, that in the bountiful provision of Providence for the preservation of human life, the Sabbatical appointment is not as it has been sometimes theologically viewed, simply a precept, partaking of the nature of a political institution, but that it is to be numbered among the natural duties, if the preservation of life be admitted to be a duty, and a premature destruction of it a suicidal act.—*J. R. Farre, M. D.*

Digitized by Google

THEORIES PUT IN PRACTICE;
Or, Extracts from the Diary of a Physician's Wife.

EDITED BY MRS. H. C. BIRDSALL.

WEDNESDAY, *January* 10, 186-.

I HAVE attended the second meeting of our new Society to-day. The subject under discussion was "Woman's Honesty." It was suggested at the last meeting, and Mrs. Selden was selected to prepare a paper upon it, or to read any thing that she might find bearing upon the subject. She brought Miss Muloch's "Thoughts Upon Women," in which, she said, was expressed her meaning much better than she could do it in words of her own.

The portion that I have extracted, I was particularly impressed by, and led me to think that I was hardly stating my own mind, when, in a former place in my journal, I claimed a higher, more rigid standard of honesty for women than men. My opinion was based upon my recollection of individual instances of women who were just and honest in spirit as well as deed; and this, by the way, is too generally woman's custom, to form her opinions of a whole by her observation of a part, and that, often, a very small part. But to my extract. "I am afraid it is from some natural deficiency in the constitution of our sex that it is so difficult to teach us justice. It certainly was a mistake to make that admirable virtue a female; and even then the allegorist seems to have found it necessary to bandage her eyes. No; kindliness, unselfishness, charity, come to us by nature; but I wish I could see more of my sisters learning and practicing what is far more difficult, and far less attractive—common justice—especially toward one another.

In dealing with men, there is little fear but that they will take care of themselves. That 'first law of nature,' self-preservation, is—doubtless, for wise purposes—imprinted pretty strongly on the mind of the male sex. It is in transactions between women and women that the difficulty lies. Therein—I put the question to the aggregate conscience of us all—is it not, openly or secretly, our chief aim to get the largest possible amount of labor for the smallest possible price? We do not mean any harm; we are only acting for the best—for our own benefit, and that of those nearest to us; and yet we are committing an act of injustice, the result of which fills slopsellers' doors with starving seamstresses, and causes unlimited competition among incompetent milliners and dressmakers, while skilled labor in all these branches is lamentably scarce and extravagantly dear. Of course! so long as one continually hears ladies say: 'Oh, I got such and such a thing for almost half price—such a bargain!' or: 'Do you know, I have found out such a cheap dressmaker!' May I suggest to these the common-sense law of political economy, that neither labor nor material can possibly be got 'cheaply,' that is, below its average acknowledged cost, without *somebody's* being cheated? Consequently, these devotees to cheapness, when not victims—which they frequently are in the long run—are very little better than genteel swindlers.

There is another lesser consideration, and yet not small either. Labor, unfairly remunerated, of necessity deteriorates in quality, and thereby lowers the standard of appreciation. Every time I pay a low price for an ill-fitting gown, or an ugly, tawdry bonnet—cheapness is usually tawdry—I am wronging not merely myself, but my employee, by encouraging careless work and bad taste, and by thus going in direct opposition to a rule from whence springs so much that is eclectic and beautiful in the female character, that 'whatever is worth doing is worth doing well.' If, on the contrary, I knowingly pay below its value for really good work, I am, as aforesaid, neither more nor less than a dishonest appropriator of other people's property—a swindler—a *thief!* Humiliating as the confession may be, it must be owned that, on the whole, men are less prone to this petty vice than we are. You rarely find a gentleman beating down his tailor, cheapening his hosier, or haggling with his groom over a few shillings of wages. Either his wider experience has enlarged his mind, or he has less time for bargaining, or he will not take the trouble. It is among *us*, alas! that you see most instances of 'stinginess'—not the noble economy which can and does lessen its personal wants to the narrowest rational limit, but the mean parsimony which tries to satisfy them below cost-price, and consequently always at somebody else's expense rather than its own. Against this crying sin—none the less a sin because so often masked as a virtue, and even corrupted from an original virtue—it becomes our bounden duty, as women to protest with all our power

Digitized by Google

More especially, because it is a temptation peculiar to ourselves; engendered by many a cruel domestic narrowness, many a grinding struggle to 'make ends meet,' of which the sharpness always falls to the woman's lot, to a degree that men, in their grand picturesque pride, and reckless indifference to expense, can rarely either feel or appreciate.

I do not here advance the argument, usually enforced by experience, that cheapness always comes dearest in the end, and that only a wealthy person can afford to make 'bargains;' because I wish to open the question—and leave it—on the far higher ground of moral justice. The celebrated sentiment of Benjamin Franklin, 'Honesty is the best policy,' appears rather a mean and unchristian mode of inculcating the said virtue. Another injustice, less patent, but equally harmful, is constantly committed by ladies—namely, the conducting of business relations in an unbusiness-like manner. Carelessness, irregularity, or delay in giving orders; needless absorption of time, which is money; and, above all, want of explicitness and decision, are faults of which no one dare complain in a customer, but yet which result in the most cruel wrong. Perhaps the first quality in an employer is to know her own mind; the second, to be able to state it clearly, so as to avoid the possibility of mistake; and no error caused by a blunder or irresolution on her part should ever be visited upon the person employed.

There is one injustice which I hardly need refer to, so nearly does it approach to actual dishonesty. Any lady who wilfully postpones payment beyond a reasonable time, or in any careless way prefers her convenience to her duty, her pleasure to her sense of right—who for one single day keeps one single person waiting for a debt which at all lies within her power to discharge—is a creature so far below the level of true womanhood, that I would rather not speak of her." Mrs. Selden went on to remark that ladies, particularly young ladies, were often guilty of a vexatious habit, which she thought it not too severe to characterize as dishonesty, that of continual borrowing and never paying; and, as an illustration, told of two young lady friends who frequently visited herself and sisters before her marriage. They borrowed every conceivable article that young ladies could require, postage stamps, paper, pens, ribbons, small sums of money, etc. etc., and when they used the sewing-machine, they seldom thought to supply spool-cotton of their own. Any one of these things taken by itself, was of slight consequence; but, when considered in the aggregate, made a drain upon their slender purses, which she and her sisters could not endure. One of the ladies thought that Mrs. Selden's view was too strict and harsh, that, if all entertained a similar opinion, generosity and willingness to oblige would be killed out of our natures. Mrs. Hutton, in her gentle, but clear way, talked about the matter so that this lady soon saw it as the rest of us did; and agreed that strict honesty in small matters would encourage rather than extinguish the spirit of accommodation.

January 13.—Henry has had quite an amusing experience in noticing the curious way in which some people live. He was obliged to spend all of yesterday and last night at the house of an Irish family, living near Milburn.

Mrs. Macartey was in a critical state, and needed constant medical attention. One of the neighbors, an Irish woman, in the course of the day, wanted to make a cup of "tay" for the "docther," but could not find the "taypot." Mrs. Macartey told her where she would find it with the children's worm medicine in it. Henry lost no time in impressing it upon the women that he did not care for tea, that he should not drink it if they prepared it. There being nothing in the house to eat, one of the women made a batch of bread; and she deposited it in the bed occupied by the juvenile Macartey's. It had been just left by them, and the woman said, that there was nothing like a good warm bed to make bread rise very suddent. When she invited the "docther" to her house to have a "sup o' something," he declined, although very hungry.

January 16.—To-day I was planning my sewing for the coming month, thinking that I would adopt mother's custom of having the most important sewing done always in advance of the season; when I was very abruptly checked in my plans by Aunt Minerva, who said to me, that I was tempting Providence, in reckoning upon having another season to live. This was a new idea to me, as I had grown up with the thought that we must always have our work done ahead of the time of actual need, in order to be able to devote ourselves to immediate emergencies. I paused in my planning, detecting a spice of truth in what Aunt Minerva had said, and thinking it therefore worthy of consideration. I put to myself the question: Am I, in working in advance of time, presuming upon a lease of life any more than if I waited until the time of need?

Digitized by Google

Is it not as true that we know not what an hour may bring forth, as that we can not foresee the events of a coming year? I concluded, after a few minutes pondering, that the right or wrong of such work must be decided by our feelings in doing it, and I tried to explain my views to Aunt Minerva. I soon stopped, however, for Aunt Minerva is like a good many other people in not being able to see that a question has two sides to it. She herself has been buying a supply of muslin, and is now making sheets, etc., preparatory to becoming a deaconess. Of course, she would not see any thing wrong in this, as one is not married every season.

January 18.—What a trouble an unruly tongue is! Madge is at enmity with all of her own family who will quarrel with her; she has one sister in the neighborhood with whom she has not spoken for two or three years, and another sister was glad to get out of the place away from Madge's tongue. Her old mother in Ireland is fortunate in being out of reach of it, but is all the time wishing to come to her children, and writing them letters full of affection and desire to come to this country. The postage of these letters is always unpaid, which causes much disturbance of mind to Madge; for her love of money is quite as great as her curiosity. It is amusing to watch the struggle between these two traits, when she first hears that another letter is in the postoffice for her. Sore are her lamentations over her mother's foolish fondness for writing letters, and she declares that she will not "*relase*" another one, but her insatiable curiosity to know the contents of the letter always conquers. Madge's harvest-time comes when we have visitors. She enjoys their presence in proportion to the amount of money, or the value of the presents she receives for extra services rendered the visitors. But here is an instance of the balancing of her good and bad qualities. Though very fond of money, and watchful for every opportunity of honestly obtaining it, and often, in word, making a distinction between those who reward her well and those who do not, she never, *in deed*, makes any difference. She is willing and glad to do for those who treat her well, and never thinks of her services a second time. But let any one treat her with superciliousness or assumed dignity, and there is at once an end to her assisting them, except in obedience to her mistress's orders. A good scolding, from one who has the authority to give it, is received with submission by her, and she is invariably the better for it, but she stoutly sets her face against imposition and injustice. Very frequently I am obliged to blame her for a fault and show her how to correct it; such corrections she receives with a red face, but no appearance of anger, and she always adopts my suggestions as far as she knows how. With all her rough, incurably Irish ways, she is not impudent, for her prying into the affairs of others comes from a real interest in those whom she interrogates.

Saturday, January 20.—I was hurrying round the house this morning, doing up my extra Saturday work as quickly as possible, that I might sit down with Henry, who was kept home by the violent storm; when suddenly I heard Henry call me from the sitting-room. I found him looking as I had never seen him before, and Aunt Minerva rather *abashed*. Henry drew me down on the lounge by his side, and putting his arm round me, said, "Now, Aunt Minerva, please repeat what you have just said to me." She tried to speak, but the words refused to come. She was such a picture of confusion that I felt really sorry for her. At length, finding that she could not or would not speak, Henry turned to me, and said, "Annie, Aunt Minerva has been telling me that you are so extravagant in your cooking, and some other ways, that you will soon exhaust my means. And this is not the first time that she has complained of you in this underhanded way. I have never replied, thinking that she would perceive from my manner that I would not attend to such talk; but the last time it occurred, I resolved that the next time I would call you in directly." And then, turning to Aunt Minerva, he went on, "Whatever fault you have to find with Annie hereafter must be done in her presence. She and I are both young, and make no professions of perfection. We are faulty, and are together striving against our defects. But I have confidence in Annie's judgment, and do not think she will go far astray in housekeeping matters. She may feel that I have the most entire trust in her in every respect, and that I will never allow any one to even attempt to prejudice me against her." At this stage of our first domestic storm, Aunt Minerva summoned courage to say, "Well, I must say you are making a great fuss about a little matter of advice." Henry replied, "It is not a little matter; the saddest case I ever knew of estrangement between husband and wife was brought about by just such interference as your's. I knew of it when quite a little boy, and the circumstances made a very deep impression upon my mind. The husband and wife were good people, and truly attached to

Digitized by Google

each other; but the husband had a sister of whom he was very fond, and he at length gave heed to her jealous whisperings in regard to his wife. For many years they were very unhappy. A time of reconciliation and better understanding came, and the wife had some years of comparative rest and happiness before her death, dimmed to a great extent, however, by the recollection of the undeserved misery which she had endured for so many years. Annie can not, of course, expect to spend a life free from tria's, but, God helping me, she shall never suffer from want of confidence and love in me." This scene has drawn Henry and myself very near to each other; and it has made me very sorry for poor, discontented, short-sighted Aunt Minerva.

Sunday, January 21.—I have been to-day to see an old lady, who will probably not live many days. She has been a great care and burden to her daughter, a lady about fifty years of age. The old lady is ninety-three years old, and has lived with her daughter, Mrs. Mellen, for the last ten years. She has annoyed her in every possible way, by her suspicion, her arbitrary orders, and her harsh treatment of Mrs. Mellen's servants. Sometimes Mrs. Mellen has succeeded in getting servants with sufficient sense not to be disturbed by the old lady's whims; but she has lost a number of domestics through her means.

Mrs. Mellen said to me to-day, "I constantly feel the necessity of self-discipline; for it is very true that without this, we shall end as we commence. When mother was young, she was always hard with us children—always suspecting us of what we had not done, until very often we became reckless, and did the very things, which had been only suggested to us by mother's continual upbraiding and suspicion." These words brought to my mind, the scene of yesterday, and I thought there was little hope of Aunt Minerva's changing for the better at her time of life.

January 22.—I have just finished reading Carpenter's Six Months at the White House, and only wish there was more of it. I was much impressed by the account of the interview between Mr. Lincoln and the Committee of the Chicago Convention appointed to notify him of his nomination to the Presidency. There was something noble and imposing in the man's action when he had the servant girl bring in a pitcher of water for his guests, and in the words with which he served them: "Gentlemen, we must pledge our mutual healths in the most healthy beverage which God has given to man —it is the only beverage I have ever used or allowed in my family, and I can not conscientiously depart from it on the present occasion —it is pure Adam's ale from the spring."

Very few men can be found, who, in the prospect of an exaltation like Mr. Lincoln's, would hold to their principles with equal consistency. One might trust such a man for any thing.

INFANT FEEDING.—An infant, for which the mother had no milk, and which they were attempting to bring up by hand, was shown to me when a few weeks old. It was puny, weak, and sickly. It always cried when an attempt was made to feed it, and could not hold up its head, which hung on one side from weakness. On inquiry, I found that it was fed on gruel, made of *fine* flour, mixed with unboiled milk, and heavily sweetened with brown sugar; and that latterly, to still its peevishness and cause it to sleep, a small quantity of *rum* was added to this. The sugar was given to prevent costiveness which, otherwise, it suffered from. It was acknowledged that the child was getting worse daily. "Put the sugar in your own tea," said I. "Throw the rum out of the door, and send up your daughter to me immediately for a bowl of whole meal wheaten flour, the same as my own bread is made of." This I directed them to make into gruel, thus: "With a table-spoonful of this meal, and a pint of pure water, make a thin gruel, which should be boiled about fifteen minutes, and then about a pint of new milk fresh from the cow should be added;" the milk being of course unboiled, as before. These directions being followed, and the child being fed accordingly, in a week there was visible improvement, at the same time that red blotches, like those on the face of a drunkard, began to appear on the infant's face. All costiveness had now gone. At the end of six weeks from the commencement of change of diet the flesh of the child was firm and hard, its skin clear and bright, and it was perfectly good-tempered and quiet. Its weight, too, was about double what it was a few weeks before. The red blotches on the child's face, which appeared after the spirit was given up, were to be attributed to its constitution having gained strength by that time from its food sufficient to throw out the poisonous spirit, and they soon went away altogether. The infant is now at least fully as strong as the generality of children of the same age.—*A. B.*

EVERY person should cultivate a nice sense of honor and self-respect.

Digitized by Google

The Bright Side.

BY PHŒBE CARY.

SO you think, my fair friend, in your beauty and bloom,
I have come to the season of shadow and gloom;
Where we fear to look forward, and sigh to look back,
And no gain takes the place of the good that we lack.

Ah! your head is too youthful, my friend, to be wise;
You are on the wrong side to see things with my eyes;
You are down in life's valley, and far away still
From the sunshine that lies at the top of the hill.

I am tasting the good that is yours in pursuit;
You are plucking the flowers, while I have the fruit;
You know not the worth of life's loss or its gain;
I see nothing is perfect, and nothing is vain.

You are viewing the future by Fancy's sweet gleams;
I am living a happier life than your dreams.
Ideals, with feverish longing you grasp;
I hold better realities safe in my clasp.

The mists and the shadows of morning are done;
I am come to the side that is nearest the sun;
And the hills of that country are almost in sight,
Where beyond the last shadow is nothing but light.

I have gained a sure hope, you are troubled with fears—
I can smile at such sorrows as move you to tears;
I am stripping all foolish delusions away,
You are making your idols, and finding them clay.

No shadows are mine; I have hope, I have love;
I have treasures below, greater treasures above;
And I see where I stand, by the clear light of faith,
On the bright side of life, and the bright side of death!

Digitized by Google

Cousin Lucy's Story; or, Should Consumptives Marry.

BY MARY ATHERSTONE BIRD.

"COUSIN LUCY, when will you tell me why you are not married? You have often promised to tell me when I was a little older. I am now nearly sixteen; is not that old enough?"

"Yes, love," replied the mild-eyed lady to whom these questions were addressed; "you are, I think, old enough, and thoughtful enough to apply my tale to useful purpose; so I will defer it no longer. Let us go to my favorite seat under the fir trees, and we can then watch the declining sun, while you listen to the old maid's prosy story. Come, the shadows are stretching half-way across the lawn already, and, you know, I have the history of a life to relate."

The fir trees crowned the brow of a gentle western declivity, along which extended the sunken fence which formed the boundary of the pleasure grounds. The slope below was rich with waving corn, mellowing in the breath of a warm July. Farther on, the "hedge-row elms" were here gathered into majestic groups, and there, stretched away in long irregular lines, inclosing fields of every hue presented by a rich soil in a high state of cultivation. The bright tender green where the young grass was springing up after the hay harvest, contrasted with the duskier shade of the pastures, the yellow barley that took the sheen of satin when the soft breeze passed over it, the feathery oats, and the somber bean-field, all studded here and there with patches of the brilliant scarlet poppy.

Bounding the prospect on the right might be seen a portion of the park-like meadow that nearly surrounded the house, dotted with magnificent oaks and beeches; while on the left lay a wide extent of moor-land, glowing with golden gorse and purple heather. The rich landscape swept away, broken by an occasional village steeple, a mass of denser woodland, the picturesque thatched roof and pointed gables of some old farm-house, or the silvery windings of the placid river, until it was terminated by a chain of hills toward whose bold outlines the sun was slowly sinking in a blaze of gold and crimson.

The "smell of dairy farms" came to them, mingled with the thousand luscious perfumes that load the air of a summer evening; while their ears were soothed by the plaintive cooing of the wood pigeons, the tinkling of sheep bells from the heath, the evening song of the blackbird, and the ceaseless murmur of a hidden brook.

A rustic seat of unbarked wood was placed beneath the ancient firs, and on this Cousin Lucy and her youthful companion sat for awhile in silence, watching the gorgeous landscape. Now Cousin Lucy was by no means the venerable personage she made herself out to be. She was not yet forty years old, and looked considerably younger; her complexion was pale, but clear; her figure slight and graceful; and although the habitual expression of her countenance and of her fine, full eyes, was thoughtful almost to sadness, a sweet, bright smile was ever ready to light them up in sympathy with the pleasures of others.

"There is no romance in my little narrative," she began, at length; "so you must not be disappointed, dear, if you hear of no stirring adventures, no flitting ghosts, nor mysterious warnings. I have had my trials, it is true; but I have the satisfaction of knowing that my soul has been strengthened by them; and that my life has been more useful, and far happier than it would have been had I not borne them with a patient spirit."

"Well," exclaimed Margaret, "it is a comfort to know at the beginning that whatever troubles and sorrows you may have to describe, all will end happily at last."

"Not according to the sense you generally attach to those words, my wilding!" responded her cousin, tenderly caressing the young girl's redundant tresses; "because that implies that the lovers are married, and live happily all the rest of their lives. My story, remember, is to be an answer to your question 'Why am I an old maid?'"

"Yet you always seem happy, dear cousin, though you are so quiet."

"Nay, Margaret, I know not seems. I *am* happy. And, believe me, there is no happiness to equal that which is inspired by the consciousness of having done one's best to keep within the path of duty. But I must begin my story, or night will overtake us before it is ended. You may have heard that my mother died when I was quite an infant. She had had many children, but of the whole number only the eldest

Digitized by Google

and the youngest survived the age of twenty years. Now, pray observe how many circumstances, arising from the most lamentable ignorance on the part of those who had charge of her early training, conspired to bring my poor mother to her grave at the age of twenty-seven. She was naturally of a feeble constitution, and this delicacy was augmented by a boarding-school education, under the management of well-meaning ladies who could store their pupils' memories with facts and dates, instill into their minds the most virtuous principles, and inculcate the most orthodox religious opinions, but, alas! knew absolutely nothing of the delicate physical structure that demands an equal amount of watchful care from the true teacher and trainer of human creatures. In the school where my poor mother was placed, the confined air, polluted by the respiration of forty or fifty persons, the want of active, healthful exercise, the tight, stiff stays, the backless forms, and the incessant strain upon the mental faculties, completely undermined the little vigor that she once possessed. Nevertheless, like a forced flower, she flourished precociously for a time. At sixteen she was a woman in appearance and manners; and she had only left school a few months when she married a man who was as ignorant as herself of the grave error they were committing. Within a year she gave birth to a daughter. Six more years passed away, each being marked by the birth of a child. I was the youngest, and, with the exception of my eldest sister, the only one who grew up to mature womanhood. All the others sunk under some form of consumption, that fell disease to which my mother had a strong constitutional bias, and of which she died when I was about a year old."

"Ah! then I understand why you would not marry, dear cousin; you feared that *your* children, if you had any, might die of consumption like your brothers and sisters."

"Exactly. But I was not so fortunate as to learn my danger in time to avert a very painful experience, as you will presently see. In my young days, the study of Physiology, which ought to form an important feature in education, and most especially in the education of girls, was passed by as unnecessary, even by those who professed liberal ideas; while by the generality of teachers it was avoided as something highly improper, with which the purity of the youthful mind ought on no account to be sullied. And thus, for want of the merest elementary acquaintance with the important laws that govern our bodily functions and control our health, mothers bound up their daughters' figures in unyielding web and whalebone, compressed their lungs, distorted their spines, impeded the action of their hearts, shut them safely up from the free breath of nature, taught them assiduously every fashionable accomplishment, and every artificial grace—all with the very best intentions—but would have been horrified at the indecorum, as well as risk, of a free morning run over a breezy hill, had any votary of common sense ventured to propose such a remedy for the poor creatures' pallid cheeks and wasting forms. While as for reflecting on the effect this false system must produce upon their children's children, that was a thing which they did not consider as coming within the range of their duties. I hope they know better now. Many do so, but still it often strikes me as a singular anomaly that people calculate the extent of land or the amount of money that they will bequeath to their offspring, yet never bestow a thought upon the *health* they will inherit from them. Well, profound ignorance on such matters was the rule when my sister, then about eighteen, married a young man of good family, but no wiser than herself. My father rejoiced at the unexceptionable match, and pleased himself with flattering visions of her future welfare and happiness. In short, every thing seemed to me to smile upon their union, until one evening when I happened to hear a conversation that made a deep impression upon me, though I did not fully understand it till some years later. Our medical friend, Dr. Winter, had been on the continent for several months, and had only just heard of Anna's marriage. There was a social gathering at our house, and the Doctor was chatting with Miss Rumball, our clergyman's sister, and some other ladies—the wedding of course forming the principal subject of conversation.

"'It is a great pity,' said Dr. Winter, sighing deeply; 'her mother died of consumption, and his family is not free from the same malady. They ought on no account to have married. The children will pay the penalty.'

"'But they may not have any children, Doctor,' said one of the ladies—*not* Miss Rumball, for she, I remember, kept her eyes cast down, and screwed up her features as though she was extremely shocked at something—'there are many happy marriages without children, you know.'

"'That can hardly be hoped for,' he replied; 'consumptive women almost invariably have children very fast.'

"Miss Rumball here cast a hurried, deprecatory

Digitized by Google

glance first toward them, and then toward me. Mrs. Bland stopped short in something she was about to say, and the Doctor shrugged his shoulders, and walked off, muttering the single word 'stuff!' I could not comprehend why Miss Rumball had checked them, as though they were saying any thing that it was improper for me to hear; so I slipped behind the window curtain (not a very right thing to do, you will say; and I hope you will not suppose I would do so *now*), so that I might listen unseen to their remarks, after the Doctor was gone.

"'What a singular man he is!' said Mrs. Bland, whom I remember well as a warm-hearted but weak-headed woman; 'now, for my part, I can see no possible objection to the match; there are youth, beauty, and plenty of money on both sides.'

"'Oh! I've no patience with him!' exclaimed Miss Rumball, indignantly whisking the crumbs off her silk dress, 'it is *shocking*, perfectly *disgust-ing* to hear human beings with immortal souls talked about in that way! Actually brought down to a level with the brutes that perish! Dr. Winter ought to have been a horse-dealer, or something of that sort, and then he'd have been in his proper element. One would really think, to hear him talk, that there were different kinds of human beings, just as there are of cattle and such things.'

"'I've often heard him say,' replied Mrs. Bland, 'that if we took half as much care to improve our own species as we do to improve our horses, more than half the doctors would be obliged to turn farmers.'

"'Pray, my dear friend, don't repeat such things to me. The man is positively *low*. Only think of his introducing such a subject in the hearing of a child like Lucy!'

"'He is rather careless sometimes,' said the peace-loving matron, urbanely siding with indignant virtue; 'but then he's such a clever creature, one must make some allowance for his odd little ways.'

"'Oh! clever! I've no patience!' again exclaimed Miss Rumball.

"For many an hour did I puzzle my little brain to find out what all this meant; but I did not find the interpretation till many years had passed. During this interval my dear sister had been blessed—as we all thought it—with four sweet children; lovely little fairies, like living lilies and roses. But her own health began to fail. I had not realized the idea that she was in any danger, when all my thoughts were engrossed by a new object, which excited in my heart a new and powerful feeling. This feeling was love, and the object of it a cousin; the son of my mother's brother. He was about twenty-two years of age, intellectual, accomplished, in short, a perfect gentleman. He was the only survivor of a large family, and had lived from infancy with his widowed mother in the mildest regions of Italy. Important business at length compelled them to come to England, and it was then that Henry Goring paid his first visit to our quiet home.

"I sometimes smile, and sometimes weep—but oftener both together I think, when I recollect how very happy I was for two months after his arrival. Every object seemed to glow with radiant colors; the perfume of the most familiar flowers had a fresh fragrance; all the sounds and sights of Nature spoke a new and delightful language. Music was—ah! I must not attempt to describe what music was! An air that was familiar then, and is mixed up, as it were, with the dream-like memories of that delightful time, will sometimes return even now, and wander through my brain for days and nights together, and then I sadly live over again my former happiness. But enough of this. One day you will know by experience how delightfully such moons as these roll by.

"As yet, no word of love had been spoken between us. We had looked into each other's eyes, and read our souls there; and we might have gone on in the same way for two months longer, had not Henry been summoned to London upon the business that had brought him from Italy. This brought matters to a crisis. It was just such a lovely evening as this when he first spoke of what was in both of our hearts."

The speaker paused. Her eyes rested dreamily upon the gently waving wheat, and her thoughts were busy with the long-past scene that her narrative had recalled so vividly. Her young companion gazed almost with awe at the motionless, rapt face, and the intense eyes, whose depths seemed to be lighted up by a holy fire. Then with a feeling that her dear cousin's emotion was too sacred to be watched, she looked away, and waited for her to resume her tale. This she did after a few moments, in a low, but calm voice.

"It was agreed between us that Henry should speak to my father the next morning. He did so; and all seemed propitious to our wishes, for my father gave a cordial consent. Another day of bliss, almost too intense for endurance, and then came my first sorrow—the departure of my lover for one whole wearisome month. Well may Moore sing that

Digitized by Google

'There's nothing half so sweet in life
As Love's young dream!'

"The first love of a girl who knows that she loves worthily, the sacred halo which her pure thoughts cast around her ardent feelings, all make that epoch in life a veritable foretaste of heaven.

"My engagement soon became the talk of the little town. Every body said what an excellent match it was. Miss Rumball, I understood, was perfectly oracular upon the subject; but Dr. Winter called upon my father, with a book under his arm, and after being closeted with him for nearly two hours, went away, leaving the book behind him. I met him in the garden. He stopped; looked earnestly at me for a moment; then his eyes filled with tears; and he passed on without speaking. I felt as if under the influence of a nightmare. I could do nothing but wander about the house and garden, visiting again and again every spot that was rendered sacred by some association with my beloved Henry; and cherishing but one definite idea throughout all the chaos of my feelings, and that was a firm resolve that no power on earth should prevent my fulfilling the promise I had given him.

"My father remained shut up in his study the whole day, inaccessible even to me. The meal-times passed away without his appearing; and as I crept up stairs to the bed at a late hour, I saw, by a ray of light streaming through the key-hole, that he was still watching. A vague presentiment of evil still haunted me; and after I had laid my aching head upon my pillow, the remarks which I had heard Dr. Winter make upon my sister's marriage rushed upon my memory, giving to this foreboding a shape of ghastly terror. My dream of happiness was at an end!

"You may easily suppose that I did not sleep much that night. In the morning I hastened down, anxious to see my father. He was already in the breakfast-room, and a glance at his soiled dress, and disordered hair showed that he had been up all night. I even thought I could detect the traces of tears in his pale and haggard cheeks. He looked at me as I entered, and then turned aside, with an expression of sharp suffering on his face. In the midst of my grief and agitation, that look made me think of Jephthah and his daughter.

"My father was evidently striving to arrange his ideas into words, with which to open some painful subject, when it occurred to me that by speaking first, on the prompting of my suspicions, I might spare him the agony of plunging a dagger into his poor child's happy heart, and destroying all her air-built castles.

"It is twenty years since this happened; yet I remember the whole scene as vividly as though it had taken place but yesterday. I hung upon my father's neck, and said, in as firm a voice as I could command,

"'Father, I am prepared to bear any thing you may have to tell me, even though it were that I must break my engagement with Henry Goring; provided,' I added, catching, as it were, at a straw, 'that I am *convinced* that it is my duty to do so.'

"'Thank God!' he exclaimed, clasping me to his heart, 'and thank you too, my beloved child, for sparing me the trial I so much dreaded. I could not have hoped for this fortitude in one so young. My poor Lucy!' and as he said this, he held me back to look at me. 'This is a severe trial for you, and one that ought not to have been imposed upon you. Yet how could I teach you that of which I was myself ignorant? Read this book attentively, my child. Had I been acquainted in my youth with the subject of which it treats, I should have been spared the commission of two grevious errors. Your noble conduct gives me the assurance that you will help me to avoid a third. May God in Heaven bless and reward you, and strengthen you to bear your burden.'

"And thus we parted at the untouched breakfast-table. With a despairing calmness I shut myself up with that terrible volume, whose pages seemed to be inscribed with my death warrant. Sometimes I felt prompted to close my eyes to its admonitions, and rush madly into the enjoyment of a brief summer-day of happiness; for why, I impatiently demanded, should I be doomed to life-long misery to expiate my parents' error? But calmer reason and my father's solemn words prevailed, and I went on with its perusal. You shall read the book yourself, Margaret, at some future time. It is sufficient for me now to tell you that it explains the laws which govern the transmission of qualities, mental and physical, from parent to child. It shows the immense amount of suffering and disease with which the world is filled in consequence of the frequent disregard of these laws; and how fearfully the sins of those who marry with a strong taint of hereditary disease are visited upon their children, even to the third and fourth generations. I now understand Miss Rumball's outcry against Dr. Winter. She was a good sort of person, but too narrow-minded to understand that prudery is

Digitized by Google

commonly far more indelicate than straightforward sense.

"Well, love, I must not now stand shivering on the brink of irresolution, as I did when the light of that calmly-reasoning book cleared away the mists which had made the valley of the shadow of death look like a paradise. As I read on I saw clearly the position in which I was placed. The very affection which I gave to my lover, so ardent, so buoyant in its youthful energy, was enlisted to oppose my marriage with him. For what true love would doom its object to the misery of seeing all his dearest ones sinking into an early tomb? Such was not my love; and seeing the path of duty thus strongly marked out before me, I resolved to follow it without flinching. But there was still something more to be done. My poor Henry was deeply tainted with the same fell disease. His father had died of it; so had his brothers and sisters. He must therefore be made to understand that marriage was forbidden to him as well as to me. My own share of the trial was nearly forgotten when I thought of this. Could I have borne the burden alone it would have seemed comparatively light; but he must share it, and that was indeed hard to endure. To have taught him to regard me as a friend, to have beheld him happily married to some one who *might* marry, to help to train up his children, and to rejoice over their health and beauty—all this would have been to me a never-failing source of happiness and consolation. But, alas! the ban was upon him likewise. We were both doomed to the same dreary fate. All that was left us to do, as I then thought, was sternly to pluck out hope from our hearts, and prepare for the early grave that yawned at our feet.

"I could fill a volume with the thoughts and emotions that rushed through my mind during those few hours. But such a recital would be useless. It is enough to say that when the sharp conflict was over, and my resolution firmly bent upon performing the hard task assigned to me, I experienced a degree of composure that surprised myself. It arose from my faith in God's mercy that so great a sacrifice to right and justice would not be made in vain.

"I went to my father's study, to concert with him the best means of breaking the subject to Henry. My poor father was still terribly agitated, but my calmness seemed to communicate itself to him; and when I perceived that, it stimulated me to still greater efforts to preserve my self-control. He was astonished and delighted, and the fervent blessings he called down upon me, mingled with praises at what he called my 'heroic fortitude,' reflected back upon me some of the consolation I had imparted. Thus I began already to reap the reward of having done that which was right.

"My father advised that I should not write to Henry immediately, but await the arrival of his next letter, as this would give me time to deliberate on the best way of broaching the subject. To inflict this dreadful pain upon him I loved so dearly, was the severest trial of all; but sorrows never come singly, and there was yet another impending over us. That evening we received a hasty summons to the bedside of my sister, her illness having assumed an alarming character. Her husband had carried her to Torquay in the spring, and thither we followed them.

"A description of her illness would add nothing to the usefulness of my narrative, so I will not burden your young mind with it. She died a fortnight after our arrival. There is, however, one painful circumstance which I shall allude to, because it bears directly on the principle I am endeavoring to enforce. This was my poor father's sorrow. He saw his daughter die, and that, one would think, was grief enough; but it was trifling in comparison with the remorse that gnawed his soul for having in the first place, by his own imprudent marriage, inflicted upon her the feeble constitution that would not support the ordinary trials of maternity; and secondly, for having allowed her to commit the same error, by which her life was shortened, and her fatal malady transmitted to her innocent children. It was no alleviation to his conscience that he had acted in ignorance; he continually repeated that he *ought* to have known better. The only drop of comfort that he found in this bitter cup was derived from my patient submission to my own sorrow. To the hour of his death he never suspected what my actual suffering was, for I fortunately possess a good share of self-control, and that enabled me to appear more resigned than I really felt. He knew nothing of the paroxysms of agony that at times prostrated all my energies. They were not of long duration, however, and every day they were of less frequent occurrence, as my resignation became habitual. I may praise myself at this distance of time, my dear, without incurring the charge of egotism, just as old ladies are allowed to boast of their charms, because I have nothing to do with disinterested sacrifices, heroic self-abnegation, or any thing, in fact, but taking care of my own little self, and rendering such atoms of service

Digitized by Google

to my fellow-creatures as happen to come in my way. But at the time I am speaking of life appeared a blank—joyless, hopeless, soulless. I felt that I was immolated at the altar of unrelenting justice, a sinless but unresisting victim. The sentence was as definite as it was righteous, and I had no wish to evade my doom, and to reverse it was impossible. Gradually a serener mood came over me, bringing a more genuine submission and less despair. My father also required my every care. He would remain for hours buried in melancholy revery; and Dr. Winter, a wise student of human character, incited me to redoubled exertion by arousing fears for his mental health. I believe, now, that his anxiety was chiefly on my account, and that he feared I might become insane, and the surest way to make me forget my own grief was to awaken sympathy and anxiety respecting my father. Under our united care, he began to regain his tranquillity and self-possession; but he had sustained a shock from which he never wholly recovered.

"I had heard constantly from Henry Goring while we were at Torquay, and after our return home. His letters were full of gentle and affectionate condolence, but he delicately forbore to make any allusion to our expected marriage. My replies had been brief, for I had not been able to summon courage to write him that decisive letter that would annihilate his hopes. But it had to be done, and delay seemed only to augment the difficulty. However, acting on Dr. Winter's advice, I wrote a preliminary letter, vaguely hinting that our marriage might be deferred longer than we had anticipated, but without assigning any cause for the delay. By return of post came his answer, assuring me he would not urge our union, until grief for my sister's death had so far subsided, that thoughts of happiness would not be incongruous. Thus far it seemed he had not taken the alarm, as we had intended he should. But then followed these words in a postscript: 'On reading your letter again my mind misgives me. Is it possible there can be any other reason for delay beside your late bereavement? For Heaven's sake do not speak to me in riddles, but deal with me frankly.'

"I wrote as he desired, bidding him read the fatal book, and imploring him to divest himself as much as possible from the trammels of passion, and yield to the dictates of right and justice.

"On the evening of the second day, as I sat by my father's couch, watching the first sound sleep he had enjoyed for many a weary night and day, the door opened hastily, and Henry entered. With difficulty I suppressed a scream that was bursting from my lips, and, rising quietly, with a gesture imposing silence, I took his hand, and led him into the garden.

"'Have you read the book?' was my first question.

"'I have,' he replied.

"'Then,' said I, 'you know what we must do.'

"Alas! I had judged too hastily. Either his feelings were more powerful than mine, or he had not been so well trained to control them. I was terrified at the storm my words aroused. The wildest expressions of love were mingled with anger, despair, bitter reproaches, jealousy, and vengeance on those who had instigated me to such unnatural conduct. He was indeed shaken by a tornado of all violent emotions. He even declared, poor fellow, that altered affection was my real motive, and that the book and its arguments were merely a subterfuge to get rid of him. Very, very dearly and truly did I love him, so you must not think me very foolish, if unaided and weak as I was, my resolution began to quail before his vehement attack. Still, as well as I could, I resisted and argued; then I wept and entreated. He did the same, bursting into fearful paroxysms of passion. Dreading the effect which this powerful excitement might have upon his lungs, I strove to calm him, and was just on the point of promising to reconsider the question at issue, when his voice became husky and stifled; a deadly paleness displaced the brilliant flush upon his cheek; he staggered, and sunk heavily on a garden-seat near which we had been standing. Believing he had fainted, I raised his head, and in doing so my hand was covered with hot blood that was gushing from his mouth. He had ruptured a blood-vessel!

"I dared not scream, for my father's sake, as his reason might be wholly unsettled by the spectacle that poor Henry presented. I dared not leave him, while I ran to the house. I could only support him in my arms, and look wildly around for help. And help was near at hand. Dr. Winter had caught sight of Henry as he dashed through the town in a carriage, and had followed him immediately, to sustain me by his presence and advice, should I require it, or to be at hand in case of such an event as had actually happened. He hastily summoned the servants, who, under his directions, removed the poor sufferer to the bed which he had occupied only a few weeks previously, in apparent health and strength.

Digitized by Google

"You may be sure that every care was lavished upon the invalid that affection and skill could suggest; but from the first I saw that Dr. Winter had no hope of his ultimate recovery. The intelligence was broken with the utmost caution to my father, whose greatest anxiety was on my account. But when he saw me no less tranquil than before—*paler*, my glass had told me, I could not be—he resigned himself patiently to this fresh affliction.

"It was now the commencement of autumn; during that season, and the following winter and spring, I was a constant attendant upon Henry Goring. His mother shared with me the duties of nursing him. At first she had treated me with coldness, I might almost say with harshness, because she thought I had sacrificed her son to a fantastic and unnatural whim. But when Henry himself, calmed by suffering, at last acknowledged the rectitude of my motives, her manner completely changed, and she became as kind as she had before been stern.

"Toward the end of spring our patient seemed to rally; but Dr. Winter warned me not to be deluded by appearances. Again he sank; and again his mother thought she read returning health in the bright hectic flush; and yet again was she compelled to own that her hopes had been illusory. Amid all these apparent variations, the insidious enemy continued its ravages, and ere the summer was quite gone, my poor Henry slept in his grave. He died—and, mark this, dear Margaret, for it has been my consolation during all these years that have elapsed since that time—his last words were a blessing on me for clinging to the right.

"I bore his loss with patience, for sorrow had become my familiar companion; and thenceforth I devoted myself unremittingly to my father. When he died, which was about ten years ago, I became by invitation of your kind parents a member of their family. And here I am still you see, living very happily, and always prepared for death. I render what services I can to my fellow-creatures, and thereby secure constant pleasure to myself. I am without anxiety for the future, careful of the present, and above all—and, oh, Margaret, think what a blessing this must be! I am free from remorse for the past!

"And now do you at last understand why I am an old maid?" continued Cousin Lucy, with a gentle smile.

"I do, dear cousin," replied Margaret, "but may I ask you one or two questions? Will it be painful for you to say any thing more?"

"Certainly not, love. It must always be a sad subject, but it can never be a painful one. Ask as many questions as you like; my object would not be attained if you did not perfectly understand all that I have said."

"I believe I understand it all; but I wish to know if you did not feel as though you had been the cause of poor Mr. Goring's accident? I think *I* should."

"In the first burst of grief I did, but I was soon convinced that I had done right, and that left no room for self-reproach."

"And yet you must have been very miserable when you reflected that you could never have a kind husband to protect you, nor loving children to comfort you; you, too, who are so fond of children!"

"For that very reason how much more miserable should I have been to have seen my children blighted in their youth; or, on my own death-bed, to know that I left behind me some unfortunate creatures whom I had endowed with mortal disease! With what amount of courage could I have met death, conscious that my life had only been an injury to the world—that I had helped to extend misery to unborn generations? Is not my present lonely life preferable to this?"

"A thousand times!" exclaimed Margaret, your poor sister must have thought so too, I think. What became of her children?"

"By very great care they were reared to the age of man and womanhood. Then, one by one, three of them dropped off, and now only one remains—that Raymond Percival, of whom you have frequently heard, who spends most of his time in traveling."

"How do you account for your own escape?"

"In the first place, by having been brought up in a very healthful farm-house, where I was sent during my mother's last illness, and where I remained for several years, running wild like a young colt. Then I always had a fit of sickness whenever I was sent away to school, so I was kept at home and attended a day-school. I thus escaped many things that would have called forth the lurking enemy, had I been subjected to them for any length of time. In after years, thanks to good Dr. Winter's judicious advice, I have been able to keep a careful watch over my own health. In fact, to avoid being thrown a sickly burden upon my friends, my life is one continued course of self-denial. Am I invited to a ball or large party—and you know I am sometimes, old maid though I am—I consider whether it would be wiser for me to accept the invitation, which would afford me

Digitized by Google

much pleasure, but to do which I must incur the risks attending late hours, heated rooms, currents of cold air, the temptations of dancing, eating ices, and so on; or to stay quietly at home, read, work, and chat, take my biscuit and glass of milk, and go to bed at 10 as usual. In the same way I reduce every thing to this question, What *ought* I to do? I do this not from any great desire to prolong my life, but to preserve my independence as long as possible. I consider it to be the duty of every member of society to keep his own health in the best state of which it is capable, because an unhealthy member is a burden instead of a support to the community.

"Reflect upon this, my dear child, when a little spice of vanity prompts you to wear a pair of pretty, thin boots at a picnic, in dubious weather, instead of less sightly but more substantial ones. 'If I *should* catch cold,' whispered Vanity, 'that would hurt nobody but myself.' But Vanity would mislead you, as she usually does those who listen to her, and try to make you overlook the trouble that your illness would entail upon your family. *You* would be nursed and tended, while not one other person in the house would be exempt from trouble and anxiety on your account."

"Thank you, dear Lucy, both for your story and your lecture. I have often sinned quite thoughtlessly in the way you speak of, about my dress, and so on, but I will be more careful for the future."

"If you act up to that resolution, Margaret, I shall see that my warning tale has not been told in vain. But come, the sun has just set, and I must not wait for the night dews, thereby, like too many teachers, spoiling a good precept by a bad example.

The Big Bell.

BY GEO. W. W. HOUGHTON.

THE tower lifted by the shore,
Within a big bell hung,
And three strong men stood at the rope
Whenever it was swung.

In storms and tempests it was heard,
A-crying through the gloom,
Or in the hour of wild affright,
And fear was in its boom.

It chanced one day that by that way
Came Esther, Joseph's wife,
And by her played her only babe,
Her love, and Joseph's life.

He chirruped in his boyish glee,
And stoned the swooping birds,
Or called upon the answering cliffs,
And made them speak in words.

Digitized by Google

And sporting in the silver waves,
That kissed his nakedness,
He shouted to the mother, "Look,
And see your little Ches!"

"Oh, look, mamma, and see me now!"
She turned to please the child,
And froze with fear to see a wave,
That rose, scowl-eyed and wild.

"O Cheswick, fly! Oh come to me!"
Too late! She gained the strand
To see him swept far, far away,
And watch his sinking hand.

She rent her curls; one look to heaven
The piteous mother sent;
Then struggling up the stony chasm,
Her breathing well-nigh spent;

She leaped within the tower-door;
She seized the mighty coil,
And at the dozen shivering peals
Each laborer dropt his toil.

"Oh woe, oh woe! oh, grievous woe!"
The booming message rang;
"Oh hasten, yeoman! Woe, oh woe!"
It cried, "Clang, clang; clang, clang."

They saved the boy, they saved the wife,
And still the big bell hummed;
And Joseph bore them to his home,
Nor was the big bell dumbed.

The tower still stands beside the sea,
Within the bell is hung;
But never yet has man been known
Has swung its mighty tongue

Digitized by Google

Summer Resorts.

BY REV. CHARLES H. BRIGHAM.

"WHERE shall we go in the summer?" Every respectable mother of a family in the cities asks that question of the head of the family. The question becomes more pressing as the season advances, and the June heats draw on apace. We must go somewhere. We can not swelter during the unhealthy months in these hot streets, in the glare of this fierce sun, reflected from brick walls and stone pavements. We can not breathe the foul vapors, and nauseate in the poisonous smells of the filthy city. Besides, it is unfashionable to stay. All our neighbors go out of town. The Smiths shut up their house; the Browns, prudent people, rent their house; and will not the Jones family lose caste and disgrace their name, if by staying in town, they show that they are poor, or mean, or eccentric? Certainly we must go somewhere, even if it be only for a fortnight or a week. We must go somewhere, even if we might be more comfortable in staying at home. We must make so much of a sacrifice to fashion. So the shrewd mother of the house reasons and pleads, and her lovely daughters, who have visions of brilliant matches, and foreign counts, and officers in uniform, and no end of polkas, in the fascinating throngs of the watering-places, reinforce her plea by their entreaties. Paterfamilias has to yield, while he perhaps curses the folly, and groans over the expense. He must give up his comfortable home for the time, and try the fifth story of a lath-and-plaster hotel, rather than be read out of the circle of the aristocratic world. He must be "out of town" with the rest in the summer.

But where to go? A hard matter to decide. The watering-places, where they drink and bathe, are attractive, fashionable—but then they are so frightfully expensive, and the chance of getting accommodations is so slight! Such dissipation, too! So many adventurers! It is not safe to go there with John and Jane, for there are gambling-houses, and sometimes elopements. All the gain from the waters will be nullified by the late hours, and the late suppers, and the high living, and the necessity of dressing in the latest style. One who goes to Saratoga, and Sharon, and Newport, and Long Branch, and the White Sulphur Springs, must do as the rest do, and not go as an invalid. Invalids are a nuisance in fashionable watering-places. Who cares for those nice analyses of the draughts from the High Rock, or the Iodine, or the Congress? The water is only a secondary matter at a fashionable watering-place; a morning draught in obedience to custom and tradition, but not a primary reason for seeking this shrine of pleasure. The smallest number of those who engage their rooms months beforehand in the monster hotels think of their morning beverages of mineral liquids, tonic, diuretic, and cathartic. The joy of the "Springs" is not in the flowing fountain, but in the nice chances and the nice people that they shall meet. There are fanatics, no doubt, who persist in going to Saratoga year after year, for the purpose, which they unblushingly avow, of "drinking the waters;" and who boast that they get health for all the year in their daily rule of six tumblers from the Congress Spring for three weeks in the month of July. There are blinded enthusiasts, who dwell fondly on the delights of sulphur water, and insist that no wine makes the heart so glad. But in the fashionable watering-places, the first and the absorbing purpose is pleasure, the pleasure that comes in dissipation and show—not any pleasure which is dependent on medicine, or diet, or regimen. The question is not Where is there a healing fountain? but, Where is the best place to be in summer? The majority of voices will probably decide for the watering-places, if one can afford the expense. The approved order for those who are arbiters in the world of fashion, includes several watering-places in the summer programme. Saratoga in July, Newport in August, and then perhaps some more quiet resort in September. As the Royal Lady of England has her summer-houses in Windsor, in the Isle of Wight, and then at Balmoral, so the leaders of society here would show that they change their summer resorts with the months, and have not fastened themselves in a single place. The newspapers chronicled not long ago the achievement of a fortunate petroleum dealer, who boasted that in four weeks he had visited with his family six different watering-places, in six different States.

But all can not go to the watering-places. Many can not afford it, and some do not like the show, and glare, and jostling of those centres of fashionable dissipation. Where shall the more quiet people go, who would have rest and relax

Digitized by Google

ation, and freedom, and have it all at reasonable cost? They have their choice between the mountains, and the sea-shore, and the inland farming towns. The mountains are the most romantic, and imagination kindles at the thought of the great swelling masses, and the awful shadows, the snow and the glens, and the caverns, and the unknown monsters, wolves and bears, in their solemn forests. We have fortunately plenty of mountains close at hand, the White Mountains, and the Green Mountains, and the Adirondacks, and the Alleghanies, and the Catskills—not to mention Schooley's Mountain, and the West Point Highlands—and all within a day's ride from New York. To go to the mountains was once a laborious and hazardous enterprise. Now it is hardly more than a short drive. One can almost have a home in the mountains, and do business in the city. The mountains certainly have the first claim upon the denizens of the city, for one summer at least, and they have not wanted loving and saintly demonstrators of their charms. It is putting it mildly to call Murray a "poet" in his description of the Adirondacks; his sketches have all a poet's license. And Starr King, in the pictures of Mount Washington and his companion peaks, has allowed an exuberant fancy full play. Every well-ordered family ought to make one pilgrimage at least from the haunts of fashion to the "shrines" of Nature, and no man or woman can be called "educated" who has not seen the mountains long enough and often enough to catch something of their meaning. It is a shame when the Swiss Alps give to Americans their first idea of the strength and grandeur of the eternal hills. If we have not yet been there, let one summer resort this year be by all means "the mountains," even, if we have to meet discomforts and hardships, bad beds, black flies, midges at night, sudden showers, and rough customers in the guise of guides and landlords. We shall find soon enough that a good many lies have been told about the pleasures of mountain life, but all this pleasure will not prove to be vanity and vexation of spirit.

Those who go to the mountains, however, should make up their minds to do as mountaineers do: to adapt themselves to the situation, and to see what is to be seen there. One who expects to live the life of the city when he is among the hills only makes a fool of himself. We chanced once to meet at Meyringen in Switzerland a burly Englishman, who was beside himself with wrath, because his courier—"confound the blackguard's impudence"—had *discharged him!* The courier was quite right, for he said that it would ruin his reputation to travel with a man who was not willing to cross the mountains, but only cared for his dinners in the hotels. In a previous essay, we mentioned the case of a well-known bachelor of Boston, a fixture in the Tremont House, who went up to Fabyan's in the White Mountain Notch in the summer of 1850, just to "rest his stomach." "Bless your soul, sir," said he, "I have no idea of climbing on any bridle-paths." Those who go to the mountains, and mean to get physical or spiritual benefit from their expedition should go prepared to venture in the gorges, to explore the caves, to climb the steeps, and to make martyrs of themselves, if they are short of wind, and stout of frame. If they are sportsmen, they must prove their skill in stalking a deer or bringing down a loon, all the more if they can do it in a thunder-storm. If they are fishermen, they must wade in the brooks, and show their captures of mottled trout. The highest peaks accessible must be scaled, and they must go down in the deep ravines. There is nothing more absurd than the manners of city life in the mountain hostelries, or the costumes of Broadway on the sides of Kearsarge and Greylock. And half the benefit of a trip to the mountains is lost in the multiplication of urban labour-saving comforts in the wild glens. A railway on the slope of Mount Washington is a great convenience, no doubt, but who that has toiled through those woods and over those rocks, stumbling at every step on the highest ledges, and drenched again and again in "the mountain sweat," would change that experience for the snail's pace of a cramped railway car? We do not go to the mountains to find the ways and luxuries of the Fifth Avenue.

Few care, however, to stay long at the mountains. A day or two, or a week or two at farthest, is enough for most summer tourists. Enthusiastic trout fishermen, like Dr. Bemis, or the painter Harding, may make a long season among the hills, but the rest pass on, when they have fairly fixed the scenery in their minds. Comparatively few, too, go to the mountains a second time, and the passion of such a man as Starr King, who would run up to the mountains in the late autumn, or even in the dead of winter, away from the cheerful fires of Burroughs Place, seems unaccountable to calmer souls. The mountains will only do for those who limit their absence from the city to a fortnight or less; those who mean to stay away longer must try some other resort. And then the "sea-shore" claims consideration. How

Digitized by Google

delightful, how suggestive, the great and wide sea, so vast, so infinite, so endless in movement, so deep in mystery! Let us go to the sea-shore, where we can look off from morning till night, on the beautiful blue, and see the ships go sailing by, and watch the tumbling billows, and the white caps of foam, and the creeping surf upon the beach, and the fishermen at their toil, and the wheeling gulls in the air, and glory of the sun as he rises from the wave, all fresh from his slumber! Have not the boys read Byron, and the girls read Thalassa, and shall the head of the house plead against them in his prosaic realism, that there are sand-flies, and dirty sea-weed, and the smell of decaying fish, and wretched fogs, and horrible roads and no shade from the mid-day sun, and a stupid sameness from morning till night? Shall these grumbling objections overrule the thought of the healthy baths in the surf, and the nice boating parties and yacht races, and the capital fishing, not of wretched little brook trout and perch, but of great cod and halibut, and the ravenous blue fish, possibly of the dreadful shark? And the beaches are so handy, too. As the rivers run by all the large towns inland, so the Lord has kindly ordered the beaches near the great cities. Rockaway and Long Branch near to New York. Cape May near to Philadelphia. Nantasket and Nahant beach near to the American Athens. What a blessed thing that this land has such a long sea-coast for the refreshing of its tired speculators and traffickers, where the breezes may blow upon their fevered cheeks!

Sea air, nevertheless, is not good for all constitutions. The damp, salt wind has for some lungs danger rather than tonic help. The sport of bathing may be carried too far, and rheumatism comes out of that leaping in the wave. Even the grand prospect may oppress the soul by its vastness, and weary by its monotony. There are those who insist that they never tire of looking upon the sea, and that it is always new in its play of form and colour. In most cases, nevertheless, those who make that statement are self-deceived, if they are sincere. The human soul ought not to bear such a constant strain, ought to get tired of that eternal heaving of the wave. Even the sailor, whose home is on the deep, longs for the end of his sea voyage; and the passenger counts the days to the end, when the voyage is hardly begun. It is inconsistent that those who find the sea so monotonous and tiresome when it is all around, should find it so delightful and varied when it is seen from the shore for days and weeks. There is real benefit and quickening from life on the sea-shore, where rest and bracing air are so happily brought together. Yet the sea-shore has not that immense advantage which is often claimed for it. Even the coolness of its airs in the season of the dog-star is greatly exaggerated, and there is not much advantage in the breeze from the water when the loss of shade is considered. The mercury marks as great heat by the sea-side as in places inland, and one may find the days of July as uncomfortable in Newport as in New York. When the risks of living at the sea-side are taken into the account, the dangers from slippery rocks, leaking boats, sudden squalls, imprudent bathing, heavy fogs, and necessary exposure, are taken into the account, the balance is not largely on that side as against a home nearer to the field and to the forest. Those who live in the inland cities, in St. Louis, and Cincinnati, and Pittsburg, will do well to get away from the burning heats of their alluvial soils, and the hateful clouds of carbon in their air, to the purer breath of the sea, and its broader outlook; but that is not so needful for those whose home is already in cities by the sea.

The third alternative of those who would go out of the city in the summer, is to find a retreat in some country farm-house, where they may smell the new-mown hay, eat fresh eggs and fresh vegetables, drink pure milk, and have plenty of room for the children to run about. This variety of rustication has the advantage of cheapness; yet in these last years the scale of prices has considerably risen, and now the cost of living in a country cottage for two or three months, even where there are no "extras" to pay for, is not so very much less than the cost of accommodation at the sea-side. The hard working farmers, who barely get a living from their land, make up the lack by their income from summer visitors, just as the owners of Newport cottages support themselves all the year from the rent of their furnished houses in July and August. And charming as these farm-houses are in their rural simplicity, they have their trials. The wet grass in the morning is troublesome. The roads are impassable in rainy weather. There are flies in the day-time, bugs and beetles in the evening, and mosquitoes musical all through the night. Fever may be caught in the fogs. When you would like to ride, the horses are always busy in farm work. The wholesome fare is often scanty, and the cookery is not palatable. The beef is tough, the potatoes are sodden, and the bread is coarse. You have to keep early hours, and go to bed long before you are sleepy, unless you attempt vainly to read by the light of a dim tallow

Digitized by Google

candle. If you refuse to make confidence with your host and his family, and to admit them to your secrets, you are looked upon coldly, and served reluctantly. The routine of farm life soon loses its novelty, and after you have seen the cows milked, and the butter churned, and the pigs fed, and the chickens in their coop, for a few successive days, these bucolic duties cease to be exciting, and you pine for a more complex and varied life. You find that the farmer's family are very unconscious of the poetic beauty of their hard life, and that they envy the happy dwellers in the cities, and hate their own tiresome drudgery; and insensibly you come to feel the justice of their complaint, and to thank God that you are spared this homely servitude.

There is, however, still another method which some take in our time, which seems to answer the demand of fashion, but does not, after all, make a very important change in the habit of life. Not a few call it "going out of town for the summer," when they only go from a large city to a smaller city, only from the metropolis to the provincial centres, only from comfortable houses on the avenues to less comfortable hotels in the large shire-towns. Paterson and Poughkeepsie are "country places" to the citizens of New York; Worcester and Springfield to the wise Bostonians. It is a curious fact that while these smaller cities are more and more becoming summer resorts for residents of the larger cities, their own citizens are constrained by the same inexorable fashion to go away somewhere for the summer. The law is as absolute in the town of twenty thousand inhabitants as in the city of two hundred thousand or five hundred thousand. In some respects these small cities have the advantage over watering-places, or sea-side life, or farm life. There is more going on in them, more variety, more show of human activity, more to enlist sympathies. They have pretentious shops, which imitate fairly the best in the metropolis. They have easy communication, trains of cars five times or ten times in the day, with newspaper depots, and local papers, and a choice of churches, and the frequent sound of bells, tolling the Catholic Angelus, or the Baptist prayer-meeting, or the funeral procession. In the summer, they are sure to be visited by two or three caravans and circus companies, with their gorgeous chariots, their spirited music, their monkeys and dogs and ponies, and the admiring crowds watching their progress along the streets. There are meetings of citizens, too, which can be attended, political, agricultural, educational; school examinations, school exhibitions, and the like. If you would get the last novel, there is a library conveniently at hand. If you would have society, it is easy to get invitations to picnics, and clam-bakes, and evening parties, which are always coming up in small cities in the summer months. Indeed, the aristocrats who come into the country, for the summer, in this way may find that they get more excitement in these small cities than in their own homes, where they are so shut in by the throng and press. The contrast of this life with the ordinary life of cities, is not great enough to give the benefit of going out of town.

All these ways of finding enjoyment, and meeting the social demand have reason, though all of them have their prosaic side. There are certain general rules that are applicable, no matter which kind of summer resort any one may choose. The first of these is, to *make the best of what has been chosen*, to get out of it all that it has, and not to expect what it can not give. Grumbling and complaining will not help the matter at all, even if the complaint be well founded. Do not anticipate any more pleasure in your summer home than you get in your winter home, or think that Paradise is to be gained in Saratoga, or Swampscott, or Sudbury, any more than in New York or Boston. Take it for granted that there will be a good many annoyances in this recreation, and that you will have to pay rather dearly for it, as you do for most kinds of pleasure. Mark Tapley's resolution to be "jolly" always, and jolly all the more, when circumstances are unpromising, is a good resolution for any kind of summer resort. Good nature is nowhere more needed or more helpful. Keep your criticism in your breast, until you get back to the safe fastness of the city, where you can relieve your soul without adding to your misery. In the summer, when the light is so brilliant, and the breezes are so soft, we ought all to be optimists; the pessimists on the hill-side or on the sea-shore are at war with Nature. Let the imagination magnify common things into grandeur. Don't contradict the good man, who sees in his acres of ploughed field, his ancient orchard, and his ditched meadow, a landscape fit for a king. If the milk is sour, remember that sour milk was the favorite drink of the Hebrew patriarchs. If the beef is tough, take it as a warning to longer mastication and a wholesome trial of patience. If there are fogs in the air, think of Turner's pictures, and the verdict of the inspired apostle of English art.

2. A second rule for those who seek summer resorts is, as far as possible, to *throw off business cares*. If the head of the firm goes away with

Digitized by Google

his family, let him leave the work of the counting-house to the junior partners and clerks. If newspapers come, let them be of the kind which eschew details of the markets and the stock exchange, and deal with the lighter gossip of society and amusement. When a city preacher goes in the country for the summer, he had better forget his occupation, not cudgel his brain for a new sermon, and content himself with selection from the barrel. A lawyer at the sea-shore should leave all his writs and law books behind him, even Abbott on Shipping. A physician in the farm-house should abandon Mulberry Street and Ann Street to the pestilence, if the Lord sends it while he is away from the city. And the good mother of the family should not vex herself about the house which she has left, whether it has been entered at night, and the plate stolen; or whether the servants have been carousing there with their friends. If the summer resort be only an hour's ride off, it ought to be practically a hundred or a thousand leagues away from business, away from regular occupation. Of course, it is insulting to preach the Italian *dolce far niente* to the energetic Yankee, or to advise that he let his hands hang down, and empty his brain of ideas. Only he must not keep on in his regular work, if he will get the full benefit of his change of place.

3. And then, no matter what your position in the city may be, no matter how much money you have to spend, *renounce, in your summer resort, the tyranny of fashion.* Do not think of Mrs. Grundy. Wear comfortable garments, without regard to the latest style. Don't take advantage of the leisure hours to spend more time in the intricacies of raiment. Harper's Bazar is not so suitable for the sea-side or the farm-house as Bonner's Ledger. Take it for granted that a dress for the morning is good for the evening, and that it is not needful to shame the lilies of the field, though like them, you neither toil nor spin. Any summer resort which hinders a reasonable freedom had better be avoided. Of course, absolute freedom from social proprieties is neither seemly nor possible, and the denizens of the Fifth Avenue ought not to frisk like wild colts in a pasture, when they get out of sight of their artificial civilization. But as much freedom of action and speech as decency will allow, or is consistent with a Christian profession, should be claimed and used. The style of Grace Church, should not be carried into the humbler tabernacles of the village. The most vulgar of all ostentation is the parade of wealth on the country roads, or on the resounding beach. Nature rebukes this foolish display, and before the great billows, or in the shade of the woods, the millionaire is not more than the laborer. The pine is as tall above them both, and the wave will drown one as easily as the other.

4. *Moderate exercise*, also, is a good rule of summer enjoyment. You ought not to crowd too much into a day, to do too many things, or to see too many things. If you go to the mountains, one mountain a day is enough to climb. Leave to the professional "walkist" the boast of walking fifty or sixty miles in the day. If you go to the sea-side, you need not swim more than half an hour, to get the best exhilaration of the surf. If you are on a farm, it is not worth while to volunteer as journeyman in haying or reaping. The attempt to condense all the exercise of a year into the few leisure weeks of summer is a great mistake. Exercise enough to keep a good appetite and an elastic muscle is all that you want, and not enough to send you tired and lame to bed. Reserve feats of gymnastics for the winter, when they are needed as a relief from the confinement of the office or the counting-house. Even laziness in the country is pardonable, and is by no means a ground of shame or remorse. You can lose several days without compunction, even from works of philanthropy. It is a dreadful confession to make, that you have tramped three hundred miles in fifteen days, and shot eight hundred and sixty-three pigeons, and landed two hundred trout.

5. Another rule is *to stay long enough* in the place that you choose to get the good of it, long enough to see all that it has to show, and to know all its capacities and meaning. The minimum of time perhaps can not be given, for there are places possibly which can be exhausted, in professional language, "done," in twenty-four hours. Alexander Dumas could get enough in that time to make a full novel out of a wayside inn. It is safe to say, however, that any place where you can not comfortably stay at least a fortnight, is not good to be chosen as a summer resort. Less than that time belongs rather to summer travel.

6. But an equally important rule is *not to stay too long*, not to stay after the pleasure has worn out, and time passes wearily, and there is the longing to get back to the city, not to bring on disgust by lingering after the summer is past, and the harvest is gathering. *Ne quid nimis* is an excellent maxim for summer recreation. It is better to stop before we are fully satisfied than to go beyond satiety, in our view of the hills and the fields and the sea. Sam Weller's

Digitized by Google

philosophy of letter-writing is good philosophy for this kind of amusement.

7. And finally, with the habit of some great men denying our word, we venture to give the advice, *not to go every year to the same place*, but to vary the resort with the succeeding seasons. Dr. Chapin may go to Pigeon Cove year after year, but a less gifted mortal will find advantage in alternating between the farm and the beach and the hills. A different place in every year may not be quite wise, but that is better than the same place in every year. In one generation, a judicious arrangement will have given a knowledge of all the mountains, and all the coasts, and all the varieties of inland scenery in the Eastern States, from Mount Desert to the Alleghanies, where a constant return to the same nook or the same cottage would only have strengthened prejudice.

Spirit and Form, or the Relations of the Body with the Soul.

BY REV. PHEBE A. HANAFORD.

An Essay read at a Meeting of the Hygienic Society, at New Haven, Conn., March 25, 1871.

GOD is a spirit, and all forms of matter are embodied thoughts of God. In humanity there is an effluence of Deity. And while ignoring the Pantheistic idea, it is yet proper to declare, in my opinion, that every human soul has so much of divinity in it, that it may be deemed a part of God, just as a child is said to be "bone of the bone, and flesh of the flesh," of its parents. For the lofty mountains, the vast ocean, the rolling river, the beautiful flower, the verdant meadow, the geometric snow-flake, the countless specimens of animated nature, all these are God's *creations*. Human beings are God's *children*. Into each He has breathed the breath of mortal life, and lo! at the same instant, each became a living soul, with a career that henceforth runs parallel with God's own existence. Its immortality is consequent upon its ancestry. God's fatherhood is the guaranty of a high destiny, also, as well as of endless being to all his sons and daughters. To claim kinship with Deity is to claim immortal life, ultimate holiness, and consequent happiness. All this may be allowed, and yet many questions may be asked concerning the nature of the Absolute Existence on which all existence depends, and in reference to the relation between Deity and humanity. Spirit and form are perceived and acknowledged to have existence and mutual relation, but that being, and that interdependence, or at least the dependence now existing, have been the great, ever-present, obtrusive mysteries with which the human mind has been always exercised. Classic Greece had its thinkers who pondered on these profound themes for meditation. Thales, Pythagoras, Zeno, Epicurus, Plato, and a long and brilliant line of thinkers, thought, talked, and wrote of these unsolved problems of mind and matter, of spirit and form. To use Professor Winchell's words: "On the other side of the Mediterranean we hear the same interrogatories resounding from the region of civilization's dawn, in Egypt, and in far off India and China other races have found themselves confronted by the self-same mysteries, and, with equal courage, have demanded from the depths of Nature their solution. These sublime questions have stared with equal steadiness in the face of Greek, Egyptian, Phœnician, Chaldean, Jew, Persian, Arabian, and Hindoo. Perennial problems, omnipresent as mind itself, they have reappeared upon American shores; and we find that the sacred books of the Aztecs yield us a cosmogony and a theogony no less sublime than those of India, Persia, and Greece."

To attempt then to solve the problems of the origin of spirit, or of the union of spirit and form, or to portray fully, the relations of the body with the soul, either as pertaining to this life, or that which is to come, would be presumptuous on my part, and I shall be careful not thus to inaugurate a failure for my unpretending essay, with its pretentious title. I retreat before those mighty mysteries, and leave all such sphynx-like problems to be solved by the light of that day when we shall see as we are seen and know as we are known, content with the Saviour's assurance, "What thou knowest not now thou shalt know hereafter."

Digitized by Google

My purpose is a practical one. Instead of any philosophical explanation of the relation of the body with the soul, which I should vainly attempt, I prefer to speak of the fact of that relation, and our duty in reference to it. The fact is patent. It is evident, without argument, that souls are united to bodies, and that earth is peopled to-day with embodied spirits. This is God's world, and this fact then must be one of God's facts—and therefore *good*. Moreover, infinite wisdom and goodness are our surety that the union of spirit, and form of soul and body, is for the human race the *best* arrangement that could be devised. Regarding, as I do, life here on earth as the childhood of human existence, and earth therefore as a stepping-stone to heaven, and time rightly improved as the best preparation for eternity, I can not but think it important that while we may not fully understand the relations of the body with the soul, we may and ought so far to seek a knowledge of them as to enable us to find the body to be what Paul declared it should be, "the temple of the Holy Ghost," and to assist us to realize in all its beauty of sentiment and fitness of expression, the poet's assertion that

"The more our spirits are enlarged on earth,
The deeper draught shall they receive of heaven."

In speaking of the soul in this essay, I refer not only to the immortal principle which is the object of religious culture, but to the intellectual powers commonly termed the Mind—for, according to its etymological derivation, and the authority of some of the greatest philosophers, it is the only term our language offers for that essence of being which includes and contains within itself all our intellectual power. Reason and Revelation are not antagonistic, and any thoughts of duty or morality suggested by my theme must be in harmony with a right understanding of the sacred Scriptures, and as one* has said: "The noble lines of Milton may suffice to show that the most fervent and enthusiastic believer in Revelation need not scorn the assistance of those faculties which are inherent to man, as the gift of his Creator.

'Mortals that would follow me,
Love virtue; she alone is free;
She will teach you how to climb
Higher than the sphery chime,
Or, if virtue feeble were,
Heaven itself would stoop to her.'"*

It can not then be amiss to speak of the dietetics of the soul, and such dietetics must be a legitimate theme for the consideration of a Hygienic Society. Without the soul the body is nothing more than so much inanimate substance. A stone knows as much. A bird knows more. Yet without the body the soul could not engage in ordinary employments, or hold communion in ordinary manner with spirits also robed in the flesh. The body is the avenue of the soul, through which she receives and imparts. Is it not all important that the avenue be kept in a proper condition? Is not health for the body desirable that the soul may prosper? Wisdom answers affirmatively both these queries. And divine wisdom suggests the importance of spiritual health that the body may rightly perform its uses. "Keep thy heart with all diligence, for out of it are the issues of life." The duality of human nature must be acknowledged. While we dwell on the earth we are spirit and form—we are soul and body—and each has great influence on the other; both, then should be kept in health, each for the sake of the other, as well as for its own sake.

The will is an attribute of the soul. Kant examined "the power of the mind to master morbid feelings by the mere force of resolution," and left on his readers the impression that will power was health power, or, at least, could be made conducive to health. Goethe declares that he once warded off disease by the power of his will. If we accept the theory of Kant, how much nobler will be the choice, if, instead of choosing to look "pale and interesting" we adopt the words of Schlegel as our motto, "Consecrate thyself and proclaim that Nature alone is venerable, health alone lovely."

Yet the soul and body are not married for eternity. God has joined them together for this earthly life alone, and sometimes, through faults or misfortunes of inheritance, the bond which makes the twain one human being on earth, is very frail. Then there must be the evidence of weakness, and after a time the visible marks of decay. To use the language of Dr. Ernest Von Feuchtersleben, the author of the book on Soul Dietetics, which I have mentioned (and which reached a seventh edition in German, before it was translated into our mother tongue), "Wherever beneficent nature has assisted the efforts of moral cultivation, facilitating the higher development of the individual by a happy

* The translator of "Dietetics of the Soul"—in his Preface.

* Milton's Comus.

Digitized by Google

organization (and has not the existence of moral as well as artistic genius been long admitted, for example, in Socrates, Marcus Aurelius, Howard, Penn?), *there* the manifestations of harmonious existence will be more evident and more lovely than in cases where the painful struggles of the soul can barely wring a few blossoms from the rude soil of bodily organism. But all the more gloriously will those scattered rays of a higher light break forth as lightning from the depth of night, illuminating the outward form, as formerly the face of Socrates, and verifying the eternal truth of Apollonius—'there is a bloom, even in wrinkles.' What then, is beauty, but the spirit glorifying its earthly tabernacle; and what is health but the beauty of its various functions? Where the mind directs a well-tuned instrument we perceive not its glorious perfection from the facility with which it draws forth the harmony of virtue, and the effect appears to us natural; but when we know that it wrings harmonious accord from dissonance, then we deem its action miraculous. And as hidden beauty often bursts forth from the face of a good man in one great and solemn moment, so also may the beauteous treasure of health be won by a single bold resolution. 'Think not,' exclaims the inspired physiognomist 'to render man beautiful without making him better;' and think not, I would add from the deepest conviction, to maintain him in good health, without first making him better."

The truest culture is the harmonious development of the corporeal and the spiritual powers. Soul and body alike need to enter the school of Christ. And when taught there, the soul, as well as the body, will find that it has duties to the souls around, and is as dependent as the body on others. Plato taught that solitude engenders selfishness. It is certainly unfavorable to health, and he will be most likely to have what Horace calls "*mens sana in corpore sano*," who is most active in all the various social duties and philanthropic efforts of the age. Says Whittier, very truthfully, "God is loved through love of man," and the best dietetic rule for the soul, or the truest hygienic rule for soul and body, is, I verily believe, that eleventh commandment which Jesus gave, saying, "A new commandment I give unto you, that ye love one another." As soul and body act upon each other, so those who truly love humanity, and labor for its good, must love God; and they who are truly in love with goodness, and grateful to their heavenly Father, also love his children who are subject to the same laws with themselves, sharers of the same hopes and fears, heirs of the same high destiny.

Intelligence influences the bodily health of men. Learned men generally attain advanced age. Witness Humboldt and others. Thus argue many philosophers. I believe that civilization has always the effect of reducing the standard of mortality, and hence Temperance societies are of great importance, for "in the elevation of our sources of enjoyment lies the special means by which mental cultivation contributes to the well-being of the body." Continued cultivation of the reasoning power is conducive to life and health, to peace of mind, for a real culture of the soul results in the recognition of God in the laws of his creation. Where there is much conflict between the evil and the good the vital principle must be reduced. Hence, "other things being equal," the calm, peaceful, heaven-sustained soul will have the strongest, healthiest body, and thus the promise of the Beatitude be fulfilled; "Blessed are the meek, for they shall inherit the earth." If I may be allowed to cite a living example, I would point to the venerable and venerated Lucretia Mott, and show in the saintly beauty of her placid face, the realization of that declaration. The ever-active mind, the lofty soul, in that almost ethereal body, has maintained life and health far beyond the promise of her earlier days. She has lived near to God, and so God has been near to her, to strengthen soul and body for its labors of philanthropy and reform.

A writer in The Christian Union (possibly Mr. Beecher himself, who is its editor) seems to hold similar views, and says:

"We all know here and there men and women who seem to be always young. We meet them at certain epochs of their lives, after years of great changes and toils, and various experiences and discipline, we meet them again expecting to find them worn and discouraged—in a measure overcome by the war which they have been waging. On the contrary, they have the mien and port of victors; what we call trouble has made them strong. What is the secret of the clear eye, and the smile around the lips so frank and joyous that it is almost infantile? What is the secret of this unfailing belief in right, of their untiring defense of what men call romance? Is it not because they live on a plane so high that they are able to get at first hand constant supplies of life from that spiritual realm where youth is eternal? The divine essence which we call the soul is, so long as it keeps in communication with this source, independent of change or chance. These men, then, who never grow

Digitized by Google

old live where they can get a constant influx of life from God. So powerful is that divine energy that one glance of the soul into the realm where are the sources of life will counteract the thousand trials incident to its present temporary improvement. Our bodies must, according to the laws of nature, fall to decay; but blessed are they who keep up such an illumination within, that the building is glorified till the moment of its fall."

The truth is—and I would emphasize this declaration—soul and body are conjoined for man's good, and thus for God's glory, and the union can only be a blessed one, and accomplish the design of Heaven, when we seek moral and religious culture with all the heart. We may be as careful as duty may require in regard to what we eat and drink; may have wise rules in relation to exercise and rest and keep them; may learn whole libraries of treatises on the art of living well, or the effect of mind on body or body on mind, but more still is required for us to reach the standard that ought ever to be ours:—the stature of perfect men and women in Christ Jesus—knowing and governing ourselves, cultivating our moral and intellectual faculties, and using all our powers in the service of humanity, which is the service of God. Then shall we experience the joy of a healthy union of soul and body, and understand that its joy and peace are a part of the inheritance of God's child both "in the life that now is and in that which is to come."

Food, Size, Climate, etc., as Affecting Longevity.

BY E. RAY LANKESTER, B. A., OXFORD.

ANIMALS which feed on large masses of food, of great concentration—as, *e. g.*, other animals, or special fruits and portions of trees—are longer lived than those feeding on diffused and widely-spread food, as the lower sorts of vegetable growth and decaying material. This we see in the greater length of life of carnivorous and frugivorous animals as compared, *cæteris paribus*, with herbivorous and garbage-eaters. This reduces itself to a case of evolution and bulk; for in the first group it is an advantage to be large and highly endowed, to be swift and powerful, and to secure the whole mass by one effort. In the second group, five mouths will take in more nutriment than one, it being equally diffused; and hence it is better for a given bulk of the species to be divided into five small individuals than retained in one large one. Where the acquisitive power increases more nearly with the bulk, as in vegetals, such a distinction does not hold. It is in accordance with this relation of bulk to food that insects which feed on widely-spread vegetable juices, or similarly wide-spread garbage, are shorter lived than the birds which prey on the insects, or than other insects which are carnivorous; and that the lower animals, generally feeding as they do on diffused food, are shorter lived. Thus the frugivorous apes are longer lived than other animals similar to them in many other matters which are not fruit-eaters; carnivora generally than herbivora, in the various classes and orders, *cæteris paribus*.

Tertiary aggregation acts in aiding longevity like the construction in five compartments of the *Great Eastern* steamship, if one is injured and lost, the others can go on without it, or even one may survive by itself. The question of tertiary aggregation brings us very near again to the discussion of individuality, which is not within our scope. Remembering what was said at the outset as to this, it is clear that tertiary aggregation acts by merging many individualities into one, and thus improving the chance of continued life.

Social organization is a sort of tertiary aggregation, in that newly-produced individuals do not separate from but remain attached to the preceding generation, supporting and ministering to the life of the older constituents. Thus it is with civilized man. He is supported in old age by the younger generations; the hope of, and confidence in, such support which the younger individuals have, being the strongest bond of society.

Mere size acts in plants and animals both, in rendering them less susceptible to the cold of the wet season, or the winter, and thus protracts life.

The production of woody fiber in plants is a condition of longevity, and any thing directly favoring this may extend life. It enables the

Digitized by Google

plant to resist breakage by wind or other violence, and protects it from cold. Thus bulbs continue the individual life of an annual flower for many years, and thus the trunks and branches of trees and shrubs live, while the leaves and flowers die. Obviously the influence on age of the development of wood is but a part of the law of relation of evolution and longevity; but it is a special correlation, of very wide application.

SOME EXPERIMENTAL EVIDENCE.

There are some experimental proofs of the influence of generative and personal expenditure on longevity which may be now cited. By preventing plants from reproducing, that is, by cutting off their flower-buds, the gardener increases the bulk and the longevity of some plants; leaves and wood being produced in place of generative products. By change from a warm to a colder climate, this may similarly be effected. The American aloe reproduces and dies in about five years in Mexico; in England it elaborates leaves for a hundred years before flowering. Again, the axolotl reproduces in warm Mexico as a branchiferous amphibian; in colder climates its fertility is diminished, it becomes a salamandroid before reproducing, thus lengthening life by delaying genesis. It is rarely that we can point to such cases as these, where the diminution of warmth affects sexual development. Usually it will kill the animal or plant experimented upon—as in the case of the mignonette (a shrub in Barbary), and the palma Christi (a tree in India), which both die annually in our severe climate; the longevity of the individual being in these cases diminished rather than the fertility delayed.

The two cases are interesting to compare with man, who is believed to live longest in cold countries. Like the American aloe, as is seen, when it is taken to still colder climates than our own, or like the mignonette in England, man ceases to gain in longevity when a certain limit of cold is attained. Beyond the cold of temperate regions his longevity is probably injuriously affected, as is that of the palma and the mignonette in England, and that of the aloe in regions farther north. The general action of cold lies no doubt in the production of a sluggishness of the chemico-vital changes, which, if carried far, may destroy, but if moderated must extend, *length* of life (at the expense of *intensity*). The coldness of water, together with its diminished power of oxygenation, as compared with atmosphere, is one of the direct causes of the diminished expenditure in aquatic animals, rendering their life necessarily less intense than that of terrestrial forms, and so longer.

In keeping animals in menageries, in rearing pets and domesticated animals, man performs an experiment by diminishing personal expenditure. He frequently does the same in his own case, leading a careless, laborless existence; but there is in this as in other experiments (which are rarely so good in physiological inquiry in their results as natural camparisons) a disturbing cause, for Luxury, "the fertile parent of a whole family of diseases," as Galen termed her, steps in and works against the diminished expenditure. When man in his own person, or in the organisms he interferes with, so far baulks Nature's provisions that the organs become, as it were, rusty through the suspension of that personal expenditure, which is usually necessary to keep up the warmth by oxygenation, and to obtain necessary food, then he shortens rather than increases the length of life, disease attacks his victim, and death follows. This is seen exemplified in the case of domesticated animals, which are fattened for eating, and are believed to be short-lived in consequence. It is clearly the case in pets, such as small dogs whose life is shortened by luxury. Hounds are the longest lived among dogs. On the other hand, there are cases in which man, by his care in avoiding expenditure, has lengthened his own and other animals' tenure of life; and it appears, from the little that is known, that experimental evidence does not support the proposition, that longevity is lengthened by diminution of personal expenditure.

SUMMARY.

Hence, in spite of the great complication of the case, we may conclude, on both deductive and inductive grounds, that the high or low potential longevity of different species, as a general law, is necessitated by those conditions of life which necessitate high or low individual development, as the case may be, whether of mere bulk, or complexity, or both; that it is directly subject to those conditions which cause personal expenditure to fluctuate, or which affect generative expenditure, being high when these are low, and low when these are high; that these relations interacting and contending variously according to the special case, determine the potential longevity of the various species of lower animals.

From the intricacy of these relations we may conclude that potential longevity is a very delicately balanced quantity, and that very *slight* causes may produce *great* fluctuations in it.

Digitized by Google

STUDIES IN HYGIENE.

GYMNASIUMS AS MORAL REFORMERS.—The idea that the gymnasium lately established at Princeton has already become an important *moral agent* can scarcely seem plausible to most of our readers, yet when we compare the Princeton of three years ago with that of the present, no one will deny the fact that there has been a marked improvement in the student character, and that it is in a great measure owing to the influence of the gymnasium.

In what manner then does this elevating influence exert itself? Simply by causing us to spend our leisure hours in the healthful exercise of our bodies, instead of the so-called social games so prevalent in collegiate institutions. A young man enters college for the purpose of study; for a time recitations are well prepared and no absences incurred. Finally he is so fascinated with the popular game of whist, that books are rarely opened, recitations less regularly attended, and chapel, perhaps totally ignored. Now, however, by the erection of the gymnasium, a useful and healthful amusement is provided for all, an amusement that leads us from the haunts of the Devil, and guides us to the narrow way of virtue.—*College World.*

CARE OF CHILDREN'S TEETH.—As soon as the teeth make their appearance, it should be the duty of the mother or the nurse, to clean them morning and evening with a small brush and tepid water, and as they increase in number, floss silk well waxed should be passed between them, moving it up and down a little under the gums, for the purpose of removing accumulations, remembering that food, fruit, etc., left in the mouth and between the teeth during sleep, are the principal causes of their decay. Early and careful attention to the teeth, cleanliness of mouth, temperance in living, and abstinence from acids, are some of the best maxims for the preservation and beauty of the teeth. When children are thus familiarized with the healthy and necessary custom of brushing the teeth, it becomes a fixed habit, and they will find it ever afterward absolutely essential to their comfort. As soon as the child is old enough, give it a tooth-brush, and give instructions for use, and see that it is done often and thoroughly. The brushes to be used should be adapted to each case, neither too soft nor too hard, and so formed as to clean the teeth without injuriously irritating the surrounding tissues. Brushes for children should not be quite as stiff as for older persons, the gums not having been subjected to as much friction are not so dense. Procure brushes of a medium width, and narrow at their extremity, so as easily to penetrate to the last molars without wounding the cheeks; they should have three rows of bristles, with the handle slightly bent, so as to allow of an easy and graceful motion.—*Dr. Ambler.*

PROTECTION FOR WET WEATHER.—High rubber boots are very nice for children in weather that is bright over head but wet under foot. I find that one pair serves my little boy through three wet seasons—two springs and one fall—and it is a great pleasure and some profit to him to wade out into the vin-lakes, vin-oceans, and vin-rivers made by rain or melted snow. "Vin" in his "Tench" language, means "dry-away-soon," I am informed.

Rubber boots are indispensable for women who are obliged to be out in all weathers and who wish to preserve good health. I often wonder why we who love the woods and fields do not provide ourselves with costumes suitable for rambling about comfortably. I remember that Mr. Beecher (in one of the first series of "Star Papers," I believe) recommended the Bloomer for such occasions. So did Grace Greenwood in her early Greenwood Leaves. But that comfortable costume has fallen into such disrepute among persons who fancy that they already know and apply the laws of beauty in regard to woman's dress, that it requires great courage for a sensitive woman to "face a frowning world," even on a stormy day, in a dress that protects her person without wearying her in both body and mind by the constant care she is obliged to give it.—*Faith Rochester in Agriculturist.*

Women lose half the pleasure of a free, wholesome life by their style of dress. Every woman ought to have a beautiful costume for use out of doors, one in which freedom and grace of motion can be maintained. It need not be a Bloomer, but it should be short, and light, and handsome.

Digitized by Google

To Preserve the Color of the Teeth.—The way to preserve the color of the teeth is to remove whatever may collect upon them, and thus allow them to possess their natural whiteness and polish. The best method to effect this is with a brush and tepid water, then pass a thread of waxed floss silk between them, to dislodge whatever may have collected on their approximal sides. If these means do not subserve to prevent the accumulation of tartar, we would recommend as the most simple dentrifice, a nice article of precipitated chalk, which possesses alkaline properties sufficient to help neutralize the fluids of an acid character which come in contact with the teeth, and to promote their well-being, as well as the parts surrounding them. The habit which many have of scouring their teeth with soot or charcoal is a detestable practice. The small black grains remain between the necks of the teeth and the gums, and their constant use in many cases, will cause absorption of the gums around the necks of the teeth; and besides all this, they scratch the enamel. This will seem very plain, when we remember that charcoal is used for polishing steel.—*Dr. Ambler.*

Motive Power in Ventilation.—Ventilation must be accomplished by a motive power. Let this be a lamp or fire, or the wind, which sometimes will not blow, and is then of no value, or a fan, or a ventilating lamp, but in any case have something which will move the current. We must take the air from the tops of rooms that we wish to ventilate, because, if the draught is reversed we have the disadvantage of bringing all the impurities down from above, contrary to the laws of nature, for, though heavier than the air, they will rise by reason of their greater heat, and consequent small specific gravity for the time. But you may say this introduction of hot air below and cold above is not economical. Very true, if human life is cheaper than anthracite coal. But if not, we can have a little more and not destroy life quite as rapidly. The hot and foul air must be taken out and a fresh supply introduced.—*B. Silliman.*

Hygiene of the Night.—A capital form of rest is one that has been most foolishly abused—we mean sleep. Nearly all the men that work well and long have been sleepers. They have a faculty of sleeping. Witness the Duke of Wellington and Lord Palmerston. But, short of sleep, we want more of quietness in social life. Our evening engagements are far too numerous, and our parties are too much of the nature of public meetings. They have lost all domesticity and simplicity to say nothing of the cost of them, which is itself a care. They are so late as to extend far into the night.

The injurious results of scanty rest are very obvious. They take two apparently opposite but really related forms—excitability and exhaustion. We are fearful and fatigued; hypersensitive and subject to *ennui*. We are exquisitely sensitive to pain and discomfort on the one hand, and uncommonly hard to please on the other.

Neither moralists nor physicians have much control over the faults of our social life. We can only point them out. The remedy for them rests with the public. Will a few influential people who want easily to do an enormous amount of good, dare to initiate a few changes in our social arrangements in the direction of sleep and simplicity?—*London Lancet.*

Light Sun-Bonnets.—It must be an unnatural child, I think, that can enjoy having a close, heavy sun-bonnet tied on its head whenever it runs out to play. Children always prefer light straw hats, and these are more sensible head-coverings for summer than close sun-bonnets. For very small children bonnets are most convenient sometimes, but let them be light and comfortable in shape. The bonnets stiffened by pasteboard slats or whalebones running from back to front away out beyond the nose, so that one can not see right nor left without turning the head, are heavy and worrisome to the children who wear them. There is the same objection to the stiff "shaker." A good sun-bonnet is deeper over the top than at the sides, serving as a shade, but not as "blinders." White sun-bonnets are trying to the eyes, and if used should have a piece of green silk basted in for lining. A corded gingham sun-bonnet, stiffened with thin starch, or one made on a few rattans running over from side to side—deep over the top, but short around the cape; is easy to make and comfortable to wear.—*Faith Rochester.*

We might add, that it is well to let children go bareheaded at their play, during such times when it is not too cold or too hot and sunny for them. Exposure of the head to the air is very grateful at proper times.

Gymnasiums.—Plato said no republic was complete without its gymnasiums. This is true of all schools and more of all cities and towns. The gymnastic hall, well ventilated, lighted and warmed, where the sedentary and

Digitized by Google

studious, those confined much in-doors both male and female, old and young, can, in appropriate costume, throw off the restraints of a confined life, and take vigorous body-training under a master, with music, is fully as important now as was the gymnasium in the days of Plato.

NATURAL AND ARTIFICIAL LIGHT.—Of all the requisites for a comfortable use of the eyes, none is more important than a favorable and sufficient light; and perhaps none are oftener neglected. Many persons read while lying down, giving more thought to comfort in the position of their bodies than to whether the light falls in such a direction as is adapted for easy vision. Many school-rooms are so arranged as to favor only the teacher, whose desk is between the windows, while a flood of light falls full on the faces of the pupils, whose eyes have no protection against the strong, full glare.

Such a position as will allow the light to fall over the shoulder upon the book or paper is best in reading or writing, especially in the evening, the book being also so held that the eyes are not exposed to a direct reflection from the pages.

When artificial light is used, it should be steady and abundant. Far more harm is done by too little than too much light when the eyes are used for reading, sewing, and similar avocations, and we may well rejoice in the advent of better means of illumination than were possessed by our ancestors. Tradition tells us that tallow candles and pitch-pine splinters enlightened the eager youthful studies of some whom our country has ranked high among her honored names, but we are more fortunate in having for our "midnight oil" the German student's lamp, and the bright gas-jet, or the clear flame of kerosene.

A soft, steady light, such as is given by a student's or a carcel lamp, is perhaps the perfection of artificial light; yet we may regard gas or kerosene as good enough for all practical purposes, if used in sufficient quantity and with burners that do not flicker.—*Henry W. Williams, M. D.*

OFFENSIVE BREATH.—The popular term "bad breath" is a very significant expression for this unpleasant condition. What is more offensive to the acute olfactory sense than a fetid breath? It engenders a feeling of aversion and disgust, which is not readily overcome.

Great care should be exercised in keeping the mouth free from all extraneous substances. After each meal, a quill, or ivory tooth-pick should be used, to remove any aliment that may have become lodged in the teeth during the process of mastication, and the mouth rinsed with tepid water. Every night previous to retiring, the teeth should be cleansed with a soft tooth-brush and water. As a rule, tooth pastes and powders should be eschewed as harmful agents. If a dentifrice is desired, a little fine toilet soap, or charcoal reduced to an impalpable powder, may be used. This is all that will be required. Decayed teeth are a very prolific source of mephitic breath. As soon as it is ascertained that a tooth is affected, it should have immediate attention from some competent dentist.

Carious teeth are often the source of serious functional and general disturbance. It sometimes occurs that persons with a number of defective teeth are constantly ailing with either gastric or nervous troubles, when, upon a removal of these unsound members, all the unpleasant symptoms promptly disappear.

It may be well to give a word of caution in regard to diet; by irregularities in eating, the digestive functions become greatly impaired, and for want of proper digestion, the aliment undergoes zymotic change, during which process noxious gases are evolved, and cause a foul breath. When cases arise from disease, it is either of the stomach, lungs, or the respiratory passages. In these cases a physician should be consulted at once.

Many substances are in vogue to sweeten the breath, and to disguise any unpleasant scent, as of spirits, tobacco, etc. With the vulgar it is customary to use some pungent aromatic, as cloves, etc., but this savors too strongly of the drinking-bar to be used by any but tipplers.—*Dental Register.*

WATERING TEAMS OFTEN.—Horses and oxen at work need water often. The plowman carries his jug of water, or leaves his team to rest while he goes to the house for a drink. But the team works harder than the driver, and probably needs drink as often; yet many teams are taken out early in the field, where there is no water, except in the driver's jug, and worked five or six hours before they can get a drop. Is it any wonder that they are injured by drinking too much when they are led to the spring at noon or at evening?—*Ex.*

Where horses and oxen are fed on dry food and grain with much salt, they need more water than when fed on a mixture of grain and roots, or green grass.

Digitized by Google

RECIPES FOR WHOLESOME COOKING.

SANDWICHES.

Sandwiches are very useful to put in your bag or your pocket, when you are not likely to be able to procure your usual meal.

No. 1. CHEESE SANDWICHES.—Take two-thirds of good cheese, grated, and one-third of butter; add a little cream; pound all together in a mortar; then spread it on slices of brown bread or gems; lay another slice over each; press them gently together, and cut in small square pieces.

No. 2. EGG SANDWICHES.—Boil fresh eggs five minutes; put them in cold water, and when quite cold, peel them, and after taking a little of the white off each end of the eggs, cut the remainder in four slices; lay them between bread and butter.

No. 3. FRIED EGG SANDWICHES.—Beat some eggs well; fry them in butter as a pancake; when cold, cut in small square pieces, and lay them between brown bread and butter.

No. 4. OMELET SANDWICHES.—Take four eggs; two table-spoonfuls of bread crumbs, and one-half ounce of chopped parsley. After beating the eggs well, add the bread crumbs, then the parsley, and two table-spoonfuls of water; season, and fry it in small fritters, and when cold, put them between brown bread and butter.

VARIOUS BEVERAGES.

No. 1. WATER is the natural beverage of adult animals when thirsty. Man is the only animal that departs from it; and he never improves himself, nor increases the sum total of his enjoyments by doing so. Plain water is the most simple and the best drink.

No. 2. TOAST AND WATER is made by toasting, very highly, a thick crust of bread, or a plain unbuttered biscuit, and then plunging it into a jug of *boiling* water; the water should not be poured on to the toast, as the latter is thereby broken, and the drink rendered turbid; if the bread is burned instead of toasted an unpleasant flavor is imparted to the water; a large quantity should not be made at once, as it acquires by keeping a disagreeable mawkish taste.

No. 3. TEA is very injurious to some persons, especially to the nervous; in fact, it does the most harm to those who think it does them the most good—who fancy they could not live without it;—that it cures (relieves) the headache to which they are frequently subject. These are among our strongest reasons for not using it. It is just this habit of tea-drinking that produces the headache, though sometimes relieves it for a short time. It contains a volatile oil, which has a peculiar effect upon the nervous system, occasioning watchfulness, tremblings, anxiety, and other distressing symptoms, such as sinking at the stomach, etc. It is a powerful astringent. Our recipe is—avoid it!

No. 4. COFFEE, though in another form, and for other reasons, is equally objectionable. It should never be taken as a beverage. It is heating, exciting, and very difficult of digestion. And although the man who is working hard in the open air, with a scanty supply of food, may be able to dispose of it with little inconvenience, it is injurious to the sedentary and commercial part of the community, who work their brains more than their muscles. Here also our recipe is—REJECT IT!

No. 5. CHOCOLATE is a nutritious and pleasant beverage, wholly free from causing the effects which tea and coffee sometimes produce in nervous persons, yet not altogether unobjectionable in some cases, as from the large quantity of oil it contains, it is rather difficult of digestion, and therefore apt to disagree with delicate stomachs.

No. 6. COCOA is generally prepared by simply grinding the cocoa nibs, the husks being ground up with the kernels, and those separated in the manufacture of chocolate are added. In the cheaper kinds, the adulteration is carried much further, a very large quantity of potato starch, animal fat, and red ochre being added; some idea may be formed of the extent to which this practice is carried, from the fact that the common kinds of cheap cocoa are sold retail at less than half the price that genuine cocoa nibs command wholesale.

No. 7. LEMONADE.—Lemons furnish two important products for the formation of beverages: an acid juice, and an aromatic stomachic oil, contained in the rind. Lemon juice is a slightly turbid, very sour liquid, having a pleasant flavor when diluted; it contains a considerable quantity of gummy mucilage, which causes it to become moldy on exposure to the air; it is capable of furnishing a large number of acidulated drinks, which are useful in allaying thirst, and are valuable for their antiscorbutic properties. Cut in very thin slices three lemons, put them in a basin, add half-a-pound of sugar, bruise all together, add a gallon of cold water, and stir well. It is then ready for use.

No. 8. BARLEY LEMONADE.—Put four ounces of sugar into a small stewpan, with half a pint of water, which boil about ten minutes, or until forming a thickish syrup; then add the rind of a fresh lemon and the pulp of two; let it boil two minutes longer, when add two quarts of barley water, made without sugar and lemon; boil five minutes longer, pass it through a hair seive into a jug, which cover with paper, making a hole in the center to let the heat through; when cold it is ready for use; if put cold into a bottle, and well corked down, it would keep good several days.

APPLES are the bread of fruit, and one of the noblest gifts of God to man. There are at least twelve hundred varieties, and yet are comparatively but little used, and even then often improperly used. They should form a part of our meals, and not merely as a condiment.

Digitized by Google

EDITORIAL DEPARTMENT.



NEW YORK, JUNE, 1871.

WATER.

"To the days of the aged it addeth length;
To the might of the strong it addeth strength;
It freshens the heart, it brightens the sight;
'Tis like quaffing a goblet of morning light."

☞ THE PUBLISHERS *do not hold themselves as indorsing every article which may appear in* THE HERALD. *They will allow the largest liberty of expression, believing that by so doing this magazine will prove to be more useful and acceptable to its patrons.*

☞ *Exchanges are at liberty to copy from this magazine by giving due credit to* THE HERALD OF HEALTH AND JOURNAL OF PHYSICAL CULTURE.

TOPICS OF THE MONTH.

BY M. L. HOLBROOK, M. D., EDITOR.

THE GOLDEN DECADE.—When a man is young and struggling to gain a proud position in the world against obstacles that present their front to him at every step, he looks hopefully forward to the time when he shall stand on the lofty pinnacle of his ambition, and enjoy for a season the fruits of his triumph. When a man is old and past the age for enterprise, when his eye is dim, and his stop feeble, and his thoughts vague, he looks sorrowfully back to the days when he was young and strong and valiantly striving to make a name, build up a fortune, and achieve a success. The young look forward, the old look back, and it is an interesting inquiry at what age in life are men and women at their best. Dr. Beard has been discussing this question in a series of able articles under the head of "The Future of American Colleges" in The College Courant. He has taken the biographies of eight hundred of the most distinguished persons who have lived in all ages and countries, and tabulated the time of life of these persons when they did their best work, making the average age of the list the age when man is at his best. Not to misrepresent him, we give his conclusions in his own words. He says: "The mean year of greatest productiveness for all classes representing over eighteen hundred dates in the lives of eight hundred individuals, is thirty-eight years and fifty-two hundredths. This may be regarded as the mental prime of life, or from five to ten years younger than has been supposed." We do not propose to find fault with these statements. For averages they are probably not far from correct, though, in individuals they will vary greatly from this. For instance, according to Galton in his recent work on Hereditary Genius, the two hundred and eighty-six Judges of England, between the years 1660 and 1865, received their appointment at the average age of fifty-seven, and their average age at death was seventy-five, most of them dying as Galton says, "in harness." It is not at all likely that the best work of these men was made before forty, if, indeed it was before fifty. But then, Judges are tough men with sound digestion, and this condition of body would tend to prolong the average time of greatest productiveness. On the other hand, Generals do their greatest work while quite young. Alexander the Great began his career at twenty, and ended it at thirty-two. Bonaparte was made Emperor at twenty-six, and many we might name were equally young while old Generals rarely succeed in great campaigns, unless they have young men to execute

Digitized by Google

their orders, as was the case with the great German General Von Moltke, aged seventy, who carried forward with such signal success the late sad war between France and Germany.

But not to dwell longer on this point, let us return to Dr. Beard's article, from which we quote a few brief sentences, as follows:

"The golden decade is between 30 and 40.
The silver decade is between 40 and 50.
The brazen decade is between 20 and 30.
The iron decade is between 50 and 60.
The tin decade is between 60 and 70.
The wooden decade is between 70 and 80.

Seventy per cent. of the work of the world is done before forty-five, and eighty per cent. before fifty.

The golden decade represents about twenty-five per cent. more dates than the silver. The difference between the first and second half of the golden decade is but slight. The golden decade alone represents nearly *one-third* of the work of the world.

The best period of fifteen years is between thirty and forty-five. Over one thousand dates are found between twenty-five and forty-five. The advantage of the brazen over the iron decade—of twenty and thirty over fifty and sixty is very striking, and will cause surprise.

There is considerably more work done between thirty and forty than between forty-five and seventy-five."

Without attaching too great importance to these statements, we may infer that they approximate toward the truth, and, if applied to each person born, would do more than justice to all. And the question which most deeply concerns THE HERALD OF HEALTH is, "How can men and women be maintained at their best longer, so as to make the golden age last from thirty to sixty, or seventy, instead of from thirty to forty, as now. We believe it can only be done by improving the health of the people. The golden age ends when the body fails to perform its functions with great vigor. It lasts over the time allotted to the silver, brazen, iron, tin, and wooden ages, if first-class health lasts so long. We have long tried to teach in this magazine the doctrine that old age should not mean decrepitude, deafness, blindness, and a condition even worse than the wooden age, and none of Dr. Beard's conclusions militate against this. He states what he finds true. We state what ought to be true. What greater work can men do than to help make the golden age longer, to make it cover the whole of life even, and to reach into the life hereafter, when eternal youth shall be renewed. In the next HERALD OF HEALTH we shall present some of the best methods of bringing about this result.

HOW TO ABOLISH WAR.—Just so long as aggression continues, so long war must continue; and the only way to abolish war is to abolish its cause. Teach men and nations to refrain from aggression, and the work is done. I see no radical cure for this stupendous evil of war except in the destruction of its causes; and I would fain concentrate my efforts, however feeble in this one direction. When monarchies have everywhere given place to republics—when standing armies are everywhere disbanded—when the lust of conquest yields to the peaceful emulation of commerce and home development—when men are sufficiently educated to despise that passion for "glory" which has been the bane of humanity for thousands of years—when the sentiment of human brotherhood has become so universally diffused as to bind all nations into one common family—when respect for equal rights has become so deeply rooted in human hearts that to do an unjust act is more disgraceful than to suffer it—in a word, when the spirit of True Religion shall embrace the globe like an all encompassing and life-giving atmosphere, then, and not before, will war be done away by the cessation of all aggression of nation on nation, and man on man.—*F. E. Abbott.*

We think that wars will be less frequent when the carnage of battle becomes so great that few lives will be saved of those who go to battle. The French accomplished nothing with

Digitized by Google

their fleet in the late war with the Germans, because they dared not approach the German coast, which was so well protected by torpedoes that to do so would have been certain destruction. Let land forces be able to destroy an army at once, and war by land will be too terrible to indulge in, especially when all the disputes for which people fight can be settled by arbitration. It ought to be a disgrace for two nations to go to war, without first exhausting every resource fer settlement of disputes by the wise men of the world.

How a Centennarian Lives—Letter from Rev. Charles Cleveland, One Hundred Years Old this Month.—Last month we published an interesting letter from William Cullen Bryant, one of the oldest and most respected of American editors and literary men, showing in detail something of his habits of life, so far as they relate to exercise, food, sleep, and occupation. This letter has been republished from The Herald of Health far and wide. The following letter from Rev. Charles Cleveland of Boston, a city missionary, and long known as Father Cleveland, who will be if he lives, one hundred years old in June, will also, we are sure, be read with great interest.

"Dr. M. L. Holbrook—*My Dear Sir:* In answer to your request for information regarding my habits of life, you will please accept the following remarks, which are given with much pleasure:

1. My time of retirement is at an early hour, not beyond 10 o'clock, and of rising as soon as awake, and before the sun, *throughout the year.*

2. At meals my food is simple and nourishing, avoiding whatever may be regarded as luxuries.

3. My drink at the table is 'Golden Ale.'

4. I taste no spirituous liquors.

5. Tobacco I abhor in all its forms as I would poison, persuaded that its use hath been as an harbinger to 'strong drink,' which has slain its thousands and tens of thousands.

Thus, dear philanthropist, I have given you my 'habits of living,' and would just add that, preserving a conscience void of offense toward God and man, my sleep in its season is undisturbed and refreshing.

Wishing your Herald of Health all the circulation it so richly merits,

I am, respectfully, yours,

CHARLES CLEVELAND."

The Value of a Clean Mouth.—One of the simplest means of preserving the teeth consists in cleanliness of the mouth. The first thing after rising in the morning, or from a meal, should be to cleanse the mouth thoroughly with tepid water. It is the custom in some parts of England and France, to rinse the mouth with warm aromatic water after eating. It is well to remember that this precaution not only tends to keep the teeth clean, but to clear the voice of those about to sing or converse. By cleansing the teeth three times a day regularly, the formation of tartar is not only prevented, but such particles of food and other extraneous matter as lodge about and adhere to them, causing irritation and inflammation, are by this means removed. The fermentation of vegetable substances in the mouth produces, indirectly, sulphuric acid, animal and nitrogenous substances producing nitric acid. These vitiate the fluids of the mouth and help the teeth on to certain decay. Attention to cleanliness of the teeth in early life, can not be too urgently insisted upon, for it is thus that the foundation of sickly teeth is most frequently laid.—*Dr. Ambler, Dental Surgeon.*

We have heard of a man in New York who has had over three thousand dollars' worth of dentistry work done in his mouth. Now we do not believe that cleaning the teeth will always preserve them from decay; yet it will do much, and even if we do not have to pay three thousand dollars to repair them, we may have to pay many hundreds, which a little care would save. The teeth should be examined once a year by a good dentist, and all repairs made that are necessary. The best dentists now rarely extract a tooth. It is wonderful how

Digitized by Google

they will save even those in the worst stages of decay.

WHEAT-MEAL FLOUR.—Good, sound, fresh wheat ground in a grist-mill forms the best flour for making family bread, but this can not always be obtained in cities. Millers are quite apt to grind into "Graham meal" their poorest wheat, such as will not make white, sweet flour. For the difficulty you mention, bread formed of two parts of sweet flour and one part of bran is excellent. A large part of the obstinate cases of constipation can be wholly or in part removed by a free use of bread prepared in this way. The bread is really delicious when well made. Some manufacturers prepare a cleaned bran for dietetic purposes which is very nice."

The above we clip from The Journal of Chemistry, and will add that for years we have found it impossible to get good Graham flour in New York City, for our family of one hundred persons, and are obliged to have it made for us at first-class mills in the country, where good wheat can be obtained. One might as well live on sawdust bread, as on that made of the coarse flour obtained in the city, while a good article of Graham flour furnishes delicious food.

CHLORAL POISONING.—Cases of poisoning from chloral are reported in a great number of the medical journals, both in Europe and America. The extent to which this new drug for producing sleep is used is wonderful. Tons upon tons of it are made by the chemists to meet the demand, and thousands on thousands of people take it without advice, and with little or no knowledge of what the result may be. It is bad enough to swallow drugs by advice of doctors, but to swallow them whenever in the mood of it, doctor or no doctor, is worse, unless the person is over forty years old, when he is supposed to be either a physician or a fool. If he is the former, he would rarely swallow even his own remedy; if the latter, perhaps it does not matter if he is poisoned and put out of the way.

THE NORMAL INSTITUTE for the Training of Teachers in the Dio Lewis System of Physical Education will hold its Annual Session this Summer in Boston, from July 12 till September 1. With Dr. Dio Lewis, Prof. F. G. Welch, Prof. E. P. Thwing, and Miss E. P. Thwing as managers, a great and good work will be accomplished. This is a most worthy cause, in which many might engage with permanent profit to health, pecuniary profit, and success. A well-trained teacher is sure to meet with success, as the demand is always good. This can be taught without detriment to other business or teaching. This institution offers greater advantages than any other, with the same expenditure of time and money. See advertisement in this number.

CLIMATES FOR INVALIDS.—The Christian Advocate in speaking of Mr. Bill's new book, "Climates for Invalids," says: "Among the multitudes of worthless story-books that find their way to an editor's table, it is refreshing to meet with an occasional volume of real worth. Such a one we have in this sketch of the great Northwest, for which Minnesota stands as the representative. It unites the easy freshness of a tourist's sketch-book with the solid value of the geographer (including in his view every thing belonging to the place), the gazetteer, and statistician. It is a book to be read both for the valuable information it gives, and for the pleasure its perusal must afford."

A HYGIENIC SHOEMAKER WANTED.—The Editor of The Woman's Journal published in San Francisco, California, offers to give free advertisement to any shoemaker who will settle in that city, and make shoes as follows: "Any one who will in San Francisco manufacture for ladies' wear a good article of calf-skin shoes, with low, broad heels, material and workmanship such as will insure comfort, warmth, and dryness to the feet, can have free advertisement of the fact to the extent of our circulation."

Such a shoemaker would be most welcome anywhere.

Digitized by Google

How to Treat the Sick.

HOW I CURED A MAN IN A DECLINE.—In a former article I described my search for a grand cure-all for the ills that afflict humanity, and my numerous and grievous disappointments. In this I propose to write in a more cheerful strain, and give a brief account for the benefit of unprofessional readers of some little success I myself have met with, in the treatment of disease.

While in Florence spending the winter, a great many years ago, I made the acquaintance of a young American, whose name was—well, I will call it Myers.

He had been living in Italy for several years, devoting himself to the growth of a long nail on the little finger of each hand, learning an affected way of speaking his mother tongue, and what was better and went far to make up the deficiencies of the above, to making himself generally agreeable and useful to any whom he could serve, especially of his own countrymen.

I was green, as a matter of course, for I was not born in Italy, didn't know the language and didn't care to know it, and his acquaintance with the customs of the country was of great service to me, and I soon came to like him in spite of his long finger-nails and affected speech.

It was a pleasant party of Americans that gathered in Florence in the winter of 1859-60; and these, together with the permanent residents of the same nationality, with a sprinkling of English, afforded the materials for as delightful a social gathering as it has ever been my lot to mingle with. Myers was always present at these, and always performed a mild part well. If there was a question of dress or of etiquette, he was the umpire. Historical questions soon carried him beyond his drift, but as regarded the fashionable life that was then moving in that beautiful city and gathering twice a week to listen to the music and witness the display of the gorgeous equipages, he was *au fait*.

But suddenly in the midst of our festivities he dropped out of the circle. He was first taken with a severe fever, and when it left him he failed to rally, and seemed to be running down with quick consumption, or something of the kind, causing his friends a great deal of uneasiness. Watchers were appointed for every night and some of his acquaintance took care of him during the day. He grew worse, and the case seemed doubtful.

Not having been accustomed to the care of the sick I simply offered my services as day nurse, was accepted, and one afternoon was duly installed in a large room, at the head of two flights of stone stairs, in one of those old Florentine palaces, on a narrow and dingy street, as the nurse of my sick friend, whose life, or death perhaps, depended on the faithful discharge of my duties. I felt the responsibility, and was prepared to fulfill it to the utmost of my ability.

A small fire made out of three mulberry sticks was burning in the little pottery fire-place, as I took my station in the sick-room. It hardly seemed sufficient, and with something of an American extravagance in the matter of fuel, I piled on the mulberry till the whole room was in a cheerful glow. An ominous roar from up the chimney, and the falling of soot attracted my attention, and led me to suspect that perhaps I had been rather overdoing the matter, in fact that I had set the chimney on fire. "Dusty old place; it probably hasn't had a good cleaning out since the time of the Medici; let her burn," I said, as I looked at my patient, who seemed to be sleeping soundly, and took up The Galignani.

The roar soon disturbed Myers, and he asked sepulchrally, "What is the matter?" "Oh nothing," I answered in my most assuring tones, except that your old chimney needed

Digitized by Google

cleaning, and I thought that this afternoon would be a good time to burn it out."

"What shall we do?" he groaned.

"Do? why do nothing; only keep quiet. It is one of the wise customs of New England, where I was brought up, to burn out the chimney every year, and I propose to introduce it in this city of dirty flues. Hurrah for New England, and her enlightened institutions!" I said, with as much enthusiasm as the state of my patient's nerves would warrant.

Myers answered with a groan about the police. "But what have the police to do about it, I would like to know? Now just don't trouble yourself, it will all be right in a few moments."

But now a stir began to be heard on the other floors—these Italians are the most easily frightened of any people in the world, and in no case will they suffer a chance for a first-class excitement to pass unimproved. Up comes our Padroni, trembling with fright. I told him in good plain English that there was nothing the matter, and there was no need of disturbing a sick man, and making a fool of himself.

Then a roar in the streets below. Some of the small boys had probably caught sight of the smoke, and they will have up all that crowd that spend the day lounging on the banks and bridges of the Arno presently. No matter, let them come.

And now, clank, clank, up the stone stairs is heard a measured tread, a sword-scabbard striking the stair at every step. Who is this? I wonder. Perhaps, after all Myers was right, and the police are out after that fire. A knock at the door, and then a rattle. I open, and there sure enough is the Chief of Police, uniformed, booted, and spurred. He demands admission. I tell him that it is impossible, that my friend is very sick, and that the flue had already burned out; but all in vain, in he must come. He looks the room all over, then goes up stairs, and returns with a wise and determined expression of countenance. He had as good an eye for a job as a New York Alderman evidently, and this chance must not be lost. A hole must be cut through the ceiling, but firs Myers must be removed. I was in consternation. I used all the Italian I could muster, as well as some good, square English, but it was of no use; the sick man must be got out at once; but where? There was no place but a vault-like room at the other end of the hall, tile floor, stone walls, no fire-place, and the room unused for perhaps a score of years. How was it to be made safe for a sick man, short of a week's preparation?—and there wasn't ten minutes.

I got a huge cauldron of coals, charcoal of course—these Italians get so used to it that carbonic acid gas don't seem to hurt them—set it in the middle of the room, as a heating apparatus; then bundled up poor, groaning Myers, and brought him in without much ceremony. "Alas! alas!" said I, "my dear friend, after all your kindness to me, that I should be the death of you!" I felt like jumping into the Arno, only it was such dirty water. I concluded I wouldn't, but went home to my lodgings on Via Maggio instead, feeling very much as if I had been guilty of a first-class manslaughter.

But what do you think? All this mistake was one of those by which rare secrets are discovered. This fire, and excitement, and rough handling, and damp room, was just what Myers needed, and he began to get better, made up his mind he had been sick long enough, and in a week was out, as mildly happy as ever. And now I wish to give this prescription to the world without charge. For a good-natured, effeminate fellow in a decline, set fire to a chimney, if you have a very dirty one handy, and if not, do something else and make him dig out in a hurry, and it will do him more good than physic, and if dexterously managed with damp room and charcoal accompaniment, is warranted a sure cure.—*Simple Simon.*

CARE OF TEETH.—Put a piece of quick-lime the size of a walnut in a pint of distilled water. Clean the teeth frequently with this fluid, washing the mouth well with clean water afterward. The application will preserve the teeth and keep off the toothache, and will harden the gums.—*Correspondent of English Mechanic.*

Digitized by Google

ANSWERS TO CORRESPONDENTS.

BY A. L. WOOD, M. D.

Treatment of Tetter.—"Having heard the Turkish baths recommended as a cure for skin diseases, I write to ask your advice as to trying them to cure tetter, which has troubled me for some time, appearing on my hands. If you will give me your opinion as to the length of time that would be required, and the expense attending the treatment, you will oblige."

Tetter or Herpes is an eruptive disease of the skin caused by acrid bile and retained excrementitious matters in the blood. The treatment should be directed especially to the purification of the blood. The Turkish bath is the most effective agent for accomplishing that purpose. From one to two months treatment with the Turkish bath is usually sufficient to effect a cure. For terms and other information send for twenty-four page circular of the New York Hygienic Institute. For home treatment, where the Turkish bath can not be obtained, the wet-sheet pack may be substituted. The frequency with which it can be taken with advantage may vary from once a week to once a day according to the strength and reactive power of the patient. The diet should be plain and unstimulating—the larger the proportion of fruit and vegetables the better. Pure air and out-door exercise should not be neglected.

To Prevent the Hair Falling Out.—"Do you know of any thing that will prevent the hair falling out? Mine has been coming out for nearly a year. I have tried a great many things, but they have not done me much good. I am using bay rum and borax now. Are they good?"

Keep the hair cut short, and the scalp scrupulously clean. Leave bay rum, borax, and all "hair invigorators" with the druggist. Wet the head with cold water two or three times a day, and give it a thorough rubbing with the fingers afterward. The more the head is uncovered, whether in-doors or out, the better. Air and sunshine are as necessary to the health of the hair, as to the health of the system generally. Air-tight hats are an abomination. They keep the scalp heated, and keep the air and light from coming in contact with it. Many cases of falling hair could be cured by simply not wearing any covering upon the head at all, and being out of doors a large share of the time. Feather pillows should not be used to sleep upon. They are too heating. Undue mental activity tends to produce falling of the hair. Where this condition exists, the mental effort must be restrained, and more physical exercise taken. The better the digestion, and the more perfect the general health, the less liability to the loss of the hair; consequently careful attention should be paid to the observance of the laws of hygiene.

Epistaxis, or Bleeding from the Nose.—"What is the cause of bleeding of the nose? How can it be prevented or stopped?"

This occurs most frequently about the period of puberty, when there is usually a greater tendency to plethora than at other times. It can be prevented by keeping the depurating organs, the skin, bowels, and kidneys, in an active condition, by plenty of exercise, and by guarding against eating more than the system requires. It can usually be stopped by bathing the nose in cold water, and sniffing cold water up the nostrils. Care should be taken to keep the head well elevated. In connection with this, a hot foot bath is useful. In severe cases, the nostrils may be plugged with lint, or a soft sponge. When the hemorrhage is from the front part of the nasal passages, firm pressure with the thumb and finger will generally stop the flow.

Reading After Meals.—"Can any harm result from reading any thing interesting immediately after taking one's meals?"

Reading that simply interests without taxing the mind is not objectionable, but any thing which requires much mental effort should be deferred for an hour or two.

Digitized by Google

How Much to Eat.—One of the questions oftenest asked me is: "How much shall I eat?" It is a question which each one must answer for himself. The best general guide in this matter, is to avoid eating enough to make you feel dull and sleepy, or to produce any unpleasant sensations in the head or stomach. If such feelings are experienced after meals, you may know you have eaten too much, and that you must eat less thereafter. If, as is the case with many persons, you can not control the amount in any other way, and stop when you have eaten enough, you should measure out the amount you are going to eat, and put it upon your plate before you begin, and never allow yourself to be tempted to take any thing more. There is very little danger of not eating enough. There are such cases, however, but they are confined to the class of persons who lead a sedentary, in-door life. If such persons will change their mode of life, and take as much out-door exercise as they are able to, their appetite will return, and they will soon eat a sufficient quantity.

Age and Youth Sleeping Together.—"I am about forty-eight years old and of feeble constitution, probably induced by many indiscretions. I am very thin in flesh, and have been for twenty-five years. I am colder than most persons, and have cold feet habitually. I suppose it would be said that VITALITY is nearly exhausted. I am active, and do light business all the time, but can not stand the cold, and could hardly sleep alone in this latitude in the winter. I slept this winter with my son of five years. He is warm during the fore part of the night, but usually cooler toward morning. I would ask, Is it good, or bad, for the boy to sleep with me? Also, would Florida be a good climate for me? I would like to go there."

You will injure your son very much by sleeping with him, in your present condition of health. It is bad for children to sleep with elderly persons, even if they are strong and healthy, but to sleep with them when weak and diseased, is doubly injurious. If you can not keep warm of yourself take a bottle or two of hot water or hot bricks to bed with you. You had better go to a warmer climate, and Florida is one of the best places you can select.

Swelled Knee.—"I have upon one of my knees a bunch, or a kind of swelling, which, if on the leg of a horse, would probably be called a windgall. It feels and looks like it, is full of water, and covers the entire knee-cap. It has been about three weeks since I first noticed it, and has been growing ever since. My knee feels a little weak and tender, but does not pain me very much. My work has been such that in order to save my back, I have frequently got on to my knees, and a bruise, or a strain might perhaps have caused the difficulty."

The treatment should be such as to keep down inflammation, and promote absorption. Gentle rubbing and manipulation, alternate hot and cold douches, exposure to the direct rays of the sun, sweating baths, and cold covered compresses are the most important remedies.

Shaving.—"Is it injurious to shave the face? If so, what are its effects?"

The beard was evidently intended to be worn as a protection to the lower part of the face, and the neck, and, it is said, and is doubtless true, that those who wear beards are much less liable to colds and sore throats than those who do not.

Goiter or Swelled Neck.—"Please inform a subscriber through the columns of THE HERALD of the cause and cure of swelled neck."

An answer to this query will be found in the June number of THE HERALD for 1870.

LEADERSHIP. — Where nature has marked a man out for a leader, he does not need a uniform to show his rank. General Grant could afford to wear plain clothes—and his were often very plain. But nine hundred and ninety-nine military officers out of a thousand need all the appliances of their rank to give them authority.—*Higginson.*

One might ask, If a man is not a leader by nature, how can he be one even when dressed in all the paraphernalia of leadership? We are of the opinion that a man who is not a leader by nature, or by preparation, had better not try to be one. He may be thankful if he can lead himself.

Digitized by Google

NOTICES OF NEW PUBLICATIONS.

THE INCREASE OF CRIME AND ITS CAUSE.—By Anna B. Boone. Boston: Published by the Author, No. 42 Hansom Street.

Mrs. Boone is well and favorably known to the public as the devoted mother and assiduous teacher of the "Boone children," whose artistic rehearsals and declamations, as well as Temperance lectures, have been most favorably received in all parts of the United States, and in England. She has been a most strenuous anti-alcoholic advocate for many years, and her son Daniel was a member from five years of age of "The Band of Hope," as it was called in England, being an army of young children pledged to Temperance, and before whom the child Boone gave eloquent recitations of lectures appropriately written by his mother.

We believe in this Band of Hope—"the child is the father of the man," and if we will have manly men, temperate in all things, contemners of strong drink, the seed must be sown in childhood—the boy must pioneer the temperate man.

Mrs. Boone is a clear-headed, earnest, womanly woman, who upholds the sanctity of the household, and the dignities of her sex. She is a keen observer, and an energetic opponent to all shams, pretense, idleness, extravagance, and vanity. The pictures she gives of herself and family affirm her right to reprobate the vices of the age, which she does with a caustic sarcasm and honest indignation refreshing to read. She does not stop with alcohol as the cause of increase of crime—she shows how extravagance in dress and living, the neglect of children, the idleness and unwifely habits of our women, are filling the country with a vicious and morally irresponsible population. She is great on these points; the whole honest soul of the woman throws itself into utterance. She indicates her own struggles with poverty, and many disheartenments, not in a maudlin, complaining spirit, but with the hearty endeavors of a brave one. She says plainly I *will* be *master* of my children, and when the giddy Daniel goes out to see the world without her leave or license—he a mere boy, likely to be led into bad courses, what does this courageous matron do? Does she wring her hands and advertise the child? Not a bit of it. She starts from New York City to Vermont in winter weather, with only sixty-two cents in her pocket, and finds the boy, and brings him home.

She is not ashamed of shabby clothes when her purse is low, but tells sundry anecdotes of the discredit occasioned thereby, and of her own pithy, independent action on such occasions, all going to show that the woman is so thoroughly true and wholesome throughout, that nothing can deprive her of her own self-respect. Her little gleams of pride, and a touch of womanly vanity now and then are perfectly charming, and we seem to feel her with us, as we read.

The portrait of Mrs. Boone forms an appropriate frontispiece, representing as it does a fully developed woman, of a noble presence, wholesome and handsome, a woman fit to be the wife of a Cæsar, so beyond suspicion is she.

We could wish that every woman in the land might read the work, and learn a new role of womanly responsibility, of courteous friendliness, of wifely devotion, of maternal dignity and conscientiousness. She has touched the right cord in this book, and we shall look with interest for the autobiography of such a woman, which she has indirectly promised.

SCIENTIFIC ADDRESSES.—By Prof. JOHN TYNDALL, LL. D., F. R. S. New Haven: Charles C. Chatfield & Co.

This little pamphlet of seventy-four pages is the fifth of the University series of successful essays and lectures from this young and enterprising house. It contains:

1. On the Methods and Tendencies of Physical Investigation.
2. On Haze and Dust.
3. On the Scientific Uses of the Imagination.

These addresses have already been widely published in the papers of this day, and we are glad to see them put in this handy form for convenient preservation and reference.

TALKS ABOUT PEOPLE'S STOMACHS.—By DIO LEWIS, M. D. Boston: Fields, Osgood & Co.

This is not a scientific work on the stomach, but plain talk about the digestive organs, food, drinks, the teeth, mastication, condiments, tobacco, and a hundred other things, interlarded with stories that will do perhaps more good by the laughter they will promote, than the more serious part of the work. We commend the book, not because it is free from faults, but because with all its faults it contains too much good to be lost.

DRESS AND CARE OF THE FEET.—New York: S. R. Wells.

Works of this kind are not likely to meet with half the sale they deserve. They supply a need of which people as yet are only partially conscious. The foot, more than any other organ of the body, is a slave, a bearer of burdens, and why should we not treat it as such? Because if one member suffers, all the members suffer with it. This work is for the few who wish to know how to use their feet so as to preserve them from all spot and blemish. It aims to show what a foot would be if well treated, and how to keep it so. It discusses deformities, and their causes, and, what is of great importance, it gives full information in regard to boots, shoes, and lasts, and shows how to have them made so that they will answer the ends for which they are designed. We may add that the human foot encased in a boot or shoe made as it ought to be made, is a very happy part of the body, but capable of suffering great misery when encased in shoes improperly made.

THE GAS-CONSUMER'S GUIDE.—Boston: Alexander Moore.

We have no clue to the authorship of this little book, but its aim is to impart information in regard to the proper management and economical use of gas. The writer tells the gas-consumer that it is not always the fault of the manufacturer that their bills for gas are high, and the amount of light yielded small. If the burner is improperly constructed or adjusted, the amount of light yielded from a certain number of cubic feet of gas is very much reduced. We commend the book.

Digitized by Google

THE PUBLISHERS' DEPARTMENT.

Contributors to this Number.

HARVEY P. PEET, LL. D.,
MRS. H. C. BIRDSALL,
PHŒBE CARY,
MARY ATHERSTONE BIRD,
GEO. W. W. HOUGHTON,
REV. CHARLES H. BRIGHAM,
REV. PHEBE A. HANAFORD,
E. RAY LANKESTER, B. A.,
SIMPLE SIMON,
DR. A. L. WOOD, and
THE EDITOR.

Facts for the Ladies.—I made one hundred pairs of pantaloons, all thick and lined, with *one needle* without changing it: also made three hundred pairs in nine months. Very truly yours,

MRS. A. M. TAYLOR

TROY, BRADFORD CO., Pa.

I can inform any one interested of *hundreds* of Wheeler & Wilson Machines of twelve years wear, that to-day *are in better working condition than one entirely new.* I have often driven one of them at a speed of eleven hundred stitches a minute. I have repaired fifteen different kinds of Sewing Machines, and have found yours to wear better than any others. With ten years' experience in Sewing Machines of different kinds, yours has stood the most and the severest test for durability and simplicity.

GEO. L. CLARK.

LYDENVILLE, N. Y.

I earned over $600 in a year with one needle on a Wheeler & Wilson Sewing Machine.

MRS. PARKER.

NEW YORK.

Interesting to Ladies.—I have used a Grover & Baker Machine for seven years for all kinds of family sewing, quilting bed-quilts and embroidering, and have made heavy beaver cloth cloaks. I have no trouble with the under-thread wearing off, neither will the stitch break on bias seams in washing and ironing. I have used my machine more than a year without resetting the needle, and have used it six years without any repairs more than I could do myself.

MRS. DR. W. J. SCOTT.

CLEVELAND, Ohio, No. 364 Prospect Street.

The Boston Training School for Teachers of the Dio Lewis System of New Gymnastics will hold its next session in Boston, from July 12 till September 1. For circulars and particulars address F. G. WELCH, Yale College, New Haven, Conn., or Dio Lewis, Boston, Mass.

Talks to My Patients.—Mrs. Gleason's book, advertised and noticed elsewhere, is meeting with a good sale. We can supply it to subscribers and agents in any quantity. A good many ladies are selling it with success. We should like to have in every town a good Lady Agent. For particulars of agency, write to the Publishers.

CLUBBING

WITH OTHER MAGAZINES.

We will send *THE HERALD OF HEALTH* and any one of the following Journals one year for the sum below mentioned. The order and money for both must be sent at the same time.

THE HERALD OF HEALTH, $2 00, and	
Atlantic Monthly	$4 00 for $5 00
Harpers' Monthly	4 00 for 5 00
Harpers' Bazar	4 00 for 5 00
Harpers' Weekly	4 00 for 5 00
Phrenological Journal	3 00 for 4 00
Our Young Folks	2 00 for 3 50
New York Tribune	2 00 for 3 35
American Agriculturist	1 50 for 3 00

Cash Clubbing Rates.

1 Subscriber	$ 2 00
4 Subscribers	7 00
10 Subscribers	15 00
25 Subscribers	25 00

Single Numbers, 20 cents.

Address WOOD & HOLBROOK, Publishers,
15 Laight Street, New York.

Job Printing.—We are prepared to execute in neat, substantial styles, various kinds of JOB PRINTING: such as Pamphlets, Circulars, Envelopes, Billheads, Letter-heads, Cards, Labels, Small Handbills, etc., at the same rates as in all first-class New York printing establishments. Stereotype work done to order.

☞ Our friends in the country who wish neat and accurate printing, can rely on first-class work, by sending plainly written and well-prepared manuscripts. For terms, send sample or copy of work, state quality of printing material to be used, and the number of copies wanted, inclosing stamp for reply.

A Good Sewing Machine is given free for a club of 30 subscribers and $60. This premium is very popular. If there is a poor, deserving family in your neighborhood help it to get a good sewing machine by subscribing at once. Perhaps your minister's wife wants one. If so, help her to get it, by helping her to get up a club. The Empire is one of the best sewing machines in use, and we are sure that it will give you good satisfaction.

Books C. O. D.—Parties who order books will find it cheaper to send the money with the order, than to order C. O. D., as in this case the cost of collection will be added to the bill. This is considerable, when the money has to be returned from a distant point. Those who order C. O. D., should send one-fourth the value of the order in advance to insure prompt attention.

Digitized by Google

Advertisements.

☞ ADVERTISEMENTS of an appropriate character will be inserted at the following rates: Short advertisements, 25 cents per line; thirteen lines, for three or more insertions without change, 20 per cent. discount; one-half column, $12; one column, $22; one page, $40. All advertisements must be received at this office by the 5th of the month preceding that on which they are to appear.

Are You Going to New York?

If so, and you wish to stop where you can *FEEL AT HOME*, and get *GOOD FOOD HEALTHFULLY PREPARED*, and *PLENTY OF IT*,

Go to the Hygienic Institute,

Nos. 13 & 15 *Laight Street.*

Horse Cars pass near the door to all parts of the city, making it a very convenient stopping place for persons visiting New York, either upon business or pleasure. Open at all hours, day and night. Board by the day or week, at reasonable rates. Rooms can be secured in advance by writing. Address

WOOD & HOLBROOK, Proprietors,
Nos. 13 & 15 Laight Street, New York.

CLIMATES FOR INVALIDS.

BY LEDYARD BILL.

This work gives a careful description of the Climate, Soil, Water, Air, Scenery, and Natural Advantages of MINNESOTA, for Tourist, Invalid, and Emigrant; including carefully prepared notes of the Climates of Florida, Nassau, Fayal, California, the Adirondacks, etc. etc., together with Hints to Invalids of the most inestimable value regarding the best places to visit, etc. etc., in one neat, illustrated volume of over 200 pages, handsomely bound. Sent, postpaid, by mail, for $1.25.

Address WOOD & HOLBROOK,
No. 15 Laight Street, New York.

THE ELMIRA WATER CURE WILL be re-opened May 1st for the reception of patients, being under the general care of Dr. S. O Gleason and Mrs. R. B. Gleason, M. D., assisted by Miss L. Z. Brooks. Address for Circular, with Stamp, S. O. GLEASON, M. D., Water Cure, Elmira, New York. my-tf

A GREAT OFFER.

Only $3 for $11, in value.

Until the first of November next, the beautiful and artistic Chromo,

"ISN'T SHE PRETTY."

Size, 13 x 17 after Lillie M. Spencer, retail price, $3.00; will be sent by mail securely done up, post free, as a premium to every yearly subscriber to

DEMOREST'S

Illustrated Magazine,

AND

MIRROR OF FASHIONS,

acknowledged the most practical, useful, original Parlor Magazine.

"Isn't She Pretty," is a beautiful Chromo, a splendid Parlor Picture, and a valuable work of art; it is highly finished, mounted and varnished, and *worth more than double the cost of subscription*, and together with DEMOREST'S MONTHLY, affords an opportunity for the investment of Three Dollars *such as may never occur again*. Do not fail to subscribe for "DEMOREST'S MAGAZINE," and you will never be willing to be without it. It will not only teach you how to dress, how to cook, how to make over your children's clothes, but it will make you better, wiser, happier. Women everywhere find it exactly what they want. In fact, it is the most complete Ladies' Magazine now published. Husbands, Fathers, Brothers and Lovers subscribe for it, and present it with the beautiful Chromo, "*Isn't She Pretty.*" It will make eyes sparkle with delight and satisfaction, and prove a monthly reminder of your good taste and kind feeling.

Address, W. JENNINGS DEMOREST,
No. 838 Broadway, N. Y.

Specimen Copies of the latest numbers of the Magazine mailed free on receipt of 25 cents. je-X1t

A RARE OFFER.

THE LADIES' OWN MAGAZINE

Will be sent on trial the balance of the year (seven months) for only 50 cents. The Ladies' Own is eminently

The American Woman's Magazine of Literature and Fashion.

"It is the most charming, the most instructive, and in every way the most popular publication in the West."—*Indiana Journal.*

"I am perfectly delighted with it."—*Olive Logan.*

"It sparkles among other ladies' Magazines, like a real diamond among pinch-beck jewelry."—*Illinois Statesman.*

"It is a sensible woman's paper, and we hope there are sensible women enough to give it a wide circulation."—*Advent Herald, Boston.*

"It has the largest corps of special contributors of any magazine in the West, and is a most charming publication."—*Country Gent.*

Good Agents clear from $5.00 to $10.00 a day canvassing for it.

Mrs. M. CORA BLAND,
je-1t Editor, INDIANAPOLIS, Ind.

Dudley Kelly's Boot and Shoe Emporium,

299 HUDSON STREET, NEW YORK.
One Door from Spring.

A choice and select stock of the best goods manufactured in New York, for ladies, gentlemen and children, always on hand, which I will sell at lower prices than any other house in the city.

Goods cheerfully exchanged and money refunded if they won't suit. Give me a trial. je-12t

Digitized by Google

GOOD BOOKS.

NEW PHYSIOGNOMY; or, Signs of Character, as manifested through Temperament and External Forms, and especially in the "Human Face Divine." With more than one thousand *Illustrations*. By S. R. WELLS. In three styles of binding. Price, in one 12mo volume, 768 pp., handsomely bound in muslin, $5; in heavy calf, marbled edges, $8; turkey morocco, full gilt, $10.

HOW TO READ CHARACTER. A New Illustrated Hand-book of Phrenology and Physiognomy, for Students and Examiners, with a Chart for recording the sizes of the different Organs of the Brain, in the Delineation of Character, with upwards of 170 Engravings. Latest and best. Paper, $1. Muslin, $1.25.

WEDLOCK; or, the Right Relations of the Sexes. Disclosing the Laws of Conjugal Selection, and showing who may and who may not Marry. For both Sexes. By S. R. WELLS. Plain, $1.50; Extra gilt, $2.

THE HUMAN FEET. Their Shape, Dress and Proper Care. Showing their Natural Perfect Shape and Construction; their present Deformed Condition; and how Flat Feet, Distorted Toes, and other Defects are to be Prevented or Corrected; with Directions for Dressing them elegantly, and comfortably; with Hints upon various matters relating to the general subject. With numerous Illustrations. A handsome 12mo, $1.25.

LIFE AT HOME; or, The Family and its Members. Husbands, Wives, Parents, Children, Brothers, Sisters, Employers and Employed, etc. By REV. WILLIAM AIKMAN, D.D. A work which should be found in every family. $1.50. Extra gilt, $2.00.

MAN AND WOMAN: Considered in their Relations to each Other, and to the World. By HENRY C. PEDDER. 12mo, fancy cloth. Price $1.00.

MAN, IN GENESIS AND IN GEOLOGY; or, the Biblical Account of Man's Creation, tested by Scientific Theories of his Origin and Antiquity. By JOSEPH P. THOMPSON, D.D., LL.D. One volume, 12mo. Price $1.00.

CHILDREN, THEIR DISEASES AND MANAGEMENT. By JOEL SHEW. Price $1.50.

COMBE ON INFANCY. An excellent work. Price $1.25.

HYDROPATHIC ENCYCLOPEDIA. Price $4.50.

DISEASES OF THE THROAT AND LUNGS. Price 25 cents.

EXHAUSTED VITALITY. Price $1.

HOW TO BATHE. Price 30 cents.

In Preparation.

PARTURITION WITHOUT PAIN. Price $1.00.

Sent by mail post-paid. By WOOD & HOLBROOK, 13 & 15 Laight Street, New York.

THE INDEX,

A WEEKLY PAPER DEVOTED TO

FREE RELIGION,

PUBLISHED BY THE INDEX ASSOCIATION, AT TOLEDO, OHIO.

TWO DOLLARS A YEAR.

THE INDEX accepts every result of science and sound learning, without seeking to harmonize it with the Bible. It recognises no authority but that of reason and right. It believes in Truth, Freedom, Progress, Equal Rights, and Brotherly Love.

The transition from Christianity to Free Religion, through which the civilized world is now passing, but which it very little understands, is even more momentous in itself and its consequences than the great transition of the Roman Empire from Paganism to Christianity. THE INDEX aims to make the character of this vast change intelligible in at least its leading features, and offers an opportunity for discussions on this subject which find no fitting place in other papers.

FRANCIS ELLINGWOOD ABBOT,.....*Editor.*

OCTAVIUS BROOKS FROTHINGHAM, THOMAS WENTWORTH HIGGINSON, WILLIAM J. POTTER, RICHARD P. HALLOWELL, J. VILA BLAKE, WILLIAM H. SPENCER,
Editorial Contributors.

CASH PREMIUMS.

For 75 Names.....50 Dollars in Greenbacks
For 50 Names.....25 Dollars in Greenbacks
For 25 Names.....15 Dollars in Greenbacks
For 10 Names..... 5 Dollars in Greenbacks
For less than 10 Names, a Cash Commission of Twenty per cent.

INDUCEMENTS.—We would invite special attention to the very liberal Cash Premiums we offer above.

Whoever collects $150.00 for 75 subscriptions, is authorised to retain $50.00, forwarding $100.00.

Whoever collects $100.00 for 50 subscriptions, is authorised to retain $25.00, forwarding $75.00; and so on.

Now it can not be very difficult, in a town of any considerable size, to get twelve subscriptions a day for one week, if the agent uses ordinary business energy. Yet he would be paid about $8.00 a day—as much as his representative in Congress receives for work not always, we fear, so useful!

"A word to the wise." Who will canvass for THE INDEX, and at the same time earn as much as the Hon. Mr. ——?

N. B.—*Names need not all come from one postoffice.* We will send the paper wherever directed, and list the names count as clubs.

N. B.—The subscription price of THE INDEX is TWO DOLLARS a year in each and every case, *invariably in advance.* Address

FRANCIS E. ABBOT,
je-X5t LOCK BOX 86, TOLEDO, OHIO.

The Illustrated Excelsior

MAGAZINE has been reduced from $2 50 to $1 00, and is now ONE OF THE CHEAPEST IN THE WORLD! The illustrations alone are perhaps worth more than the cost, and the beautiful STEEL ENGRAVING of Evangeline, postage, etc. being sent, is GIVEN. Size of paper on which the steel engraving is printed is 2 feet by 19 inches. The Magazine contains STORIES, PICTURES, PUZZLES, MUSIC, A LADY'S DEPARTMENT, with illustrations of ladies patterns; a YOUTH'S DEPARTMENT, etc. etc.

I hereby specially offer the Magazine for ONE YEAR, also this splendid STEEL ENGRAVING, for the regular subscription price, $1 00, and 8 cents for postage and packing of engraving on roller. Sample copy 10 cents.

Address the Publisher, C. L. VAN ALLEN,
Xf-4t 171 Broadway, New York.

Ladies desiring to procure a

FIRST-CLASS Sewing Machine against easy monthly instalments, may apply to 294 Bowery, N. Y. a-6t

Dr. A. Smith's Water Cure.

The Hygeian Home is at Wernersville, Berks Co., Pa. Send for a circular. m-2t*

Digitized by Google

COLGATE & CO.'S

CASHMERE BOUQUET SOAP has a novel but very delightful perfume, and is in every respect superior for TOILET USE.

Sold by Dealers in Perfumery and Toilet Articles.

Meadville Theological School.

Unitarian. Educates ministers. Gives aid to worthy beneficiaries. Begins September 18. Write Rev. A. A. LIVERMORE, Meadville, Pa.

New Sabbath School Music.

THE PEARL. An entire new collection of beautiful *Sabbath School Music.* Every thing New, Fresh, and Sparkling, and by the best writers in the country. Examine THE PEARL if you wish the best. Specimen copy mailed on receipt of 35 cts.; $3.60 per doz. Sold by all Booksellers.
S. BRAINARD & SONS, Publishers, Cleveland, O.

PRATT'S ASTRAL OIL Safest & Best OIL HOUSE CHAS PRATT 1770 – 1871

$250 A MONTH, with Stencil and Key-Check Dies. Don't fail to secure Circular and Samples, free. Address S. M. SPENCER, Brattleboro, Vt.

VINEGAR, how made in 10 hours, without drugs. Particulars 10 cents. F. SAGE, Cromwell, Conn.

FRAGRANT SAPOLIENE

Cleans Kid Gloves and all kinds of Cloths and Clothing, removes Paint, Grease, Tar, etc., instantly, without the least injury to the finest fabric. Sold by Druggists and Fancy Goods Dealers. FRAGRANT SAPOLIENE CO., 33 Barclay St., New York, 46 La Salle St, Chicago.



THEA-NECTAR
IS A PURE
BLACK TEA
with the Green Tea Flavor. Warranted to suit all tastes. For sale everywhere. And for sale wholesale only by the *Great Atlantic and Pacific Tea Co.*, 8 Church St., New York. P. O. Box 5506. Send for Thea-Nectar Circular.

REDUCTION OF PRICES

TO CONFORM TO
REDUCTION of DUTIES.
GREAT SAVING TO CONSUMERS
BY GETTING UP CLUBS.

☞ Send for our New Price List, and a Club Form will accompany it, containing full directions—making a large saving to consumers and remunerative to club-organizers.

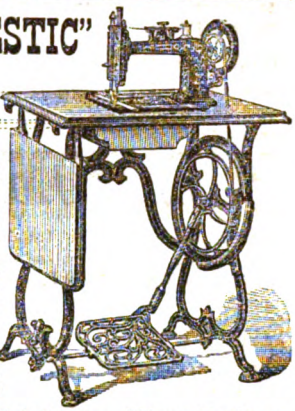
The Great American Tea Co.
31 & 33 Vesey Street,
P. O. Box 5643. NEW YORK.

Wanted—Agents

$75 to $250 per month, every where male and female, to introduce the GENUINE IMPROVED COMMON SENSE FAMILY SEWING MACHINE. This machine will stitch, hem, fell, tuck, quilt, cord, bind, braid, and embroider in a most superior manner. Price only $15. Fully licensed and warranted for five years. We will pay $1000 for any machine that will sew a stronger, more beautiful, or more elastic seam than ours. It makes the "Elastic Lock Stitch." Every second stitch can be cut, and still the cloth can not be pulled apart without tearing it. We pay Agents from $75 to $250 per month and expenses, or a commission from which twice that amount can be made. Address SECOMB & CO., *Boston, Mass.; Pittsburgh, Pa.; St. Louis, Mo., or Chicago, Ill.*

WM. J. CARLTON,
Advertising Agent,
30 PARK ROW, NEW YORK.
Magazine Advertising a Specialty.
☞ Send for a Circular. ☜

"DOMESTIC"



The whole world challenged to produce a Family Sewing Machine that will sew as light and as heavy; light running and easily operated. The best machine for use, the easiest to sell, the most durable, and will last a life-time. Lock stitch, noiseless attachments unequaled. A good business may be established in any city or town in the United States. This machine has established its superiority in every instance where it has come in competition with any machine in the market. Men with capital are finding it to their advantage to make the sale of this machine their exclusive business. *Agents wanted in unoccupied territory.* Machines guaranteed as represented. Address
"DOMESTIC" SEWING MACHINE CO.,
96 Chambers Street, New York, or Toledo, Ohio.

$60 A WEEK paid. If you want business send stamp to NOVELTY CO., Saco, Me.

REVISED EDITION.

A WINTER IN FLORIDA.

BY LEDYARD BILL.

With Illustrations by Forbes, comprising views of the old city of St. Augustine, and the Natural Scenery and objects in Eastern Florida.

This work contains Observations on the Soil, Climate, and Products of our Semi-Tropical State, with Sketches of the Principal Towns and Cities, a brief Historical Summary, and Hints to Tourist, Invalids, and Sportsmen. The work is replete with information for all classes of people. The adaptability of the climate to invalids is carefully treated. The chapter on Orange Culture alone is worth the price of the work. Sent by mail, postpaid, for $1.25.

☞ Any person ordering both the above and Mr. Bill's new book on THE CLIMATES FOR INVALIDS, at one time, can have them for $2.00. Address

WOOD & HOLBROOK,
No. 15 Laight Street, New York.

Digitized by Google

TO INVALIDS.

Do You Wish to Get Well?

OUR HOME ON THE HILLSIDE.

DANSVILLE, LIVINGSTON COUNTY, N. Y.

This Institution, so celebrated for the restoration to health of thousands of Chronic invalids, who have taken treatment in it, under the professional management of its Physician-in-Chief, JAS. C. JACKSON, M.D., having had the past winter over an hundred patients, who came from 24 States of the Republic, and from British Provinces, has opened its

SPRING AND SUMMER SEASON.

The Establishment is peculiar in its methods and medical management. Dr. JACKSON, its founder, began twenty-five years ago to elaborate his philosophy, by treating the sick on the plan, that whatever legitimately helps to keep one from getting sick, ought to be available, in some measure, in restoring him to health when he is sick.

In using therefore only those substances as *remedies* for, which every one admits are good as *preventives* of disease, success the most wonderful has attended his practice. The history of the Healing Art can not show another instance where a Physician, in a quarter of a century, has treated over 20,000 chronic invalids of various ages, of both sexes, for all the maladies common to North America, and cured or essentially helped 95 per cent. of the whole number, yet *who, in his entire practice, never gave one nor all of them a particle of medicine.*

Dr. Jackson has shown himself a benefactor to mankind, while at the same time he has secured for himself a permanent and widely extended reputation, by having demonstrated in his practice, through the most unquestionable and significant illustrations, the following facts:

1st. That there is no *need* for persons to be sick.

2d. That when sick, of the whole number only very few need to die.

3d. That in order to get well, medicines are not necessary.

4th. That all that is needed for the sick in order that they shall get well, are *such conditions of living* as will permit their Vital Force to work in their bodies according to the Laws of Life and Health.

Now, to all who, being sick, would like to get well, and having tried drugs and medicines, are willing to abandon them and make use of NATURE'S THERAPEUTICS, such as air, light, water, food, dress, sleep, exercise, rest, play, pleasant associations, and the like,

OUR HOME ON THE HILLSIDE

will be open the coming season.

It is one of the most beautiful places in the world.

It is one of the healthiest.

Its All-Healing Spring is famous in Indian tradition, as well as in our personal knowledge, for the purity of its waters and their appropriateness to the wants of diseased bodies.

Our Home on the Hillside is not an hotel, nor a place for the fashionably foolish, nor the foolishly fashionable to visit; but it is an admirable place for tired-out, over-taxed, worn-down, half-sick, wholly-sick, diseased, suffering men and women, who want health, long for it, are slowly dying for need of it, to come and find what hitherto they have failed to find elsewhere.

The object of the Proprietors and Physicians is to give health to those who, having lost it, are willing to do what Nature requires in order to its recovery. Such persons we shall be glad to receive, and to such we shall always give our best endeavors.

Address, with stamp for answer,

JAMES C. JACKSON, M.D., or
MISS HARRIET N. AUSTIN, M.D.,
DANSVILLE, LIVINGSTON CO., N. Y

je-1t AUSTIN, JACKSON & CO., Proprietors.

Digitized by Google

CREAM YEAST. FULL WEIGHT.



Produces the finest Cookery known to Science; makes all articles more tender, light and delicious; saves one-third the Shortening; takes less to do the work; always reliable; full weight; best in use.

GOLD MEDAL SALERATUS.

The Universal choice of the best Houses, wives in America; stands without a rival for purity, healthfulness, economy and fine cookery. Depot 113 Liberty St., New York.

Empire Shuttle Sewing Machine

Patented Feb. 14, 1860, and Sept. 18, 1866.

Received the First Prize at the Great Fair of the American Institute, in New York, Oct. 26, 1867, and highest premium for the Best Manufacturing Machine at the Paris Exposition, July, 1867.

No. 1, FAMILY MACHINE.

This machine is constructed on a new principle of mechanism, possessing many rare and valuable improvements, having been examined by the most profound experts, and pronounced to be simplicity and perfection combined.

The following are the principal objections urged against Sewing Machines:

1. Excessive fatigue to the operator.
2. Liability to get out of order.
3. Expense, trouble, and loss of time in repairing.
4. Incapacity to sew every description of material.
5. Disagreeable noise while in operation.

The Empire Sewing Machine is exempt from all these objections. Address the EMPIRE SEWING MACHINE CO., 294 Bowery, N. Y.

For 35 Subscribers and $70,

to THE HERALD OF HEALTH, we will send an Empire Sewing Machine worth $60

WOOD & HOLBROOK,
f-tf 15 Laight Street, New York

Important to Merchants and Manufacturers

WHO WISH TO

Increase their Business.

Correct Lists of all the Business Men, Manufacturers, etc., with important statistics, have been compiled by the undersigned, the object of which is to furnish the public with reliable names of Business Men throughout the country.

To those wishing to send circulars to any particular calling, these lists are invaluable, each business being written out separately in a blank book, and classified in States and Towns; all the information being derived from monthly correspondence in all parts of the States.

J. ARTHURS MURPHY,

MERCANTILE & STATISTICAL AGENCY,

111 Nassau Street, New York.

Reliable correspondents wanted in several towns in the South and West, with whom advantageous arrangements will be made. m-X6t

---

Conant's Binder,

OR BOOK COVERS FOR PERIODICALS.



Adapted to the *Atlantic, Harpers', Putnam's,* and THE HERALD OF HEALTH, 50 cts.

MUSIC SIZE.—Adapted to the various Publishers' *Sheet Music*.....$1 00

A cheap and durable method of Binding Magazines, Papers and Music. Extremely simple. New numbers can be added as received.

We can recommend it as being just the thing for preserving Magazines perfect and clean.—*Gardener's Monthly.*

This is a useful invention, by which a Periodical is inserted in a moment between two durable covers. Various sizes are made. A good thing.—*New York Tribune.*

Conant's Binder is one of the best and cheapest contrivances for keeping Periodicals in good condition that we have ever seen, and it meets a want that has long been felt in every reading family. It is strong and durable, and is designed either for a Temporary or Permanent Binder."—*Dedham Gazette.*

WOOD & HOLBROOK,
15 Laight Street, New York.

Cheapest and Best in the

COUNTRY FOR THE PRICE!—Every Boy and Girl, every Parent, every Sunday-School, Day-School, and Temperance Society should subscribe for

The Young People's Helper,

a Monthly Paper for American Boys and Girls; 16 large pages, illustrated; 50 CENTS A YEAR. Stories, music, poetry, dialogues, puzzles, etc., in every number. Eight years established. The best paper parents can give their children. Pure, fresh, original, lively, vigorous, instructive, and entertaining. *Two-thirds the subscription price in premiums!* Every body sends for it. Samples free. AGENTS WANTED everywhere.

Z. POPE VOSE, PUBLISHER,
a-3t Rockland, Maine.

Saratoga Springs Remedial

INSTITUTE.—New improvements, in modern and elegant style. DRS. STRONG, its Proprietors, are graduates of the Medical Department of New York University, and give special attention to **Lung, Female,** and **Chronic** Diseases.

Among its *special appliances* are the Turkish, Sulphur, Air, Russian, and Electro-Thermal Baths, Equalizer or Vacuum Treatment, Swedish Movement Cure, Hydropathy, etc. etc.

Indorsed by Bishop Simpson, Professor Taylor Lewis, L. L. D., Rev. T. L. Cuyler, D. D., etc. etc.

For description of our appliances, diseases treated, references, etc., *send for circular.* a-tf

---

"Amer. School Inst.," founded

1855, *Is a reliable and practical Educational Bureau*
To aid those who want well-qualified Teachers;
To represent Teachers who seek positions;
To *give* parents information of good Schools;
To sell, rent, and exchange School Properties.
Sixteen years have *proved* it efficient in securing "THE RIGHT TEACHER FOR THE RIGHT PLACE."

J. W. SCHERMERHORN, A. M., Actuary,
Xf-11t 14 *Bond Street, New York.*

See Book Advertisements,

read them carefully, and then ask yourself if you can use your money to better advantage than to purchase, read, and become possessed of information highly important to your well being for ever.

WOOD & HOLBROOK, 15 Laight St., N. Y.

Digitized by Google

AGENTS WANTED!

Agents wanted in every town in the United States to canvass for THE HERALD OF HEALTH AND JOURNAL OF PHYSICAL CULTURE, and all ou Publications.

We give the most Liberal Inducements, and money can be made and good done at the same time.

For terms, address

WOOD & HOLBROOK, Publishers,
15 Laight Street, New York.

2d LIST OF BOOKS

FOR SALE BY WOOD & HOLBROOK,

15 Laight Street, New York.

DIPTHERIA; Its Nature, History, Causes, Prevention, and Treatment on Hygienic principles, etc. Price, by mail, $1 25.

It contains chapters on the Nosology and Technology of Diptheria, Description and Pathology of Diptheria, the false Membrane, History and Infectiousness of Diptheria, its Causes and Mortality, Complications and Sequelæ, Morbid Anatomy of Diptheria, the Drug and the Hygienic Treatment, Stimulation, etc.

THE TRUE TEMPERANCE PLATFORM; or, An Exposition of the Fallacy of Alcoholic Medication. Being the substance of Addresses delivered in the Queen's Concert Rooms, London; to which is added a Discussion on the Modus Operandi of Alcoholic Medication. Price, by mail, 50 cents.

This excellent Temperance document should be read by every one who would understand the true arguments against the use of alcohol.

WATER CURE FOR THE MILLION.—The processes of the Water Cure Explained, Popular Errors Exposed, containing Rules for Bathing, Dieting, Exercising, Recipes for Cooking, directions for Home Treatment, and cases to illustrate, etc. Price, by mail, 30 cents.

THE TURKISH BATH; Its History and Philosophy. By Erasmus Wilson. With Notes and an Appendix by M. L. Holbrook, M. D.—This is the only book on the Turkish Bath published in this country. Illustrated. Price 25 cents.

TOBACCO AND ITS EFFECTS.—Being a Prize Essay, showing that the use of Tobacco is a physical, mental, moral, and social evil. By Henry Gibbons, M. D., Editor Pacific Medical and Surgical Journal. Price, by mail, 20 cents.

RATHE'S MANUAL OF GYMNASTICS. Illustrated. For Instruction in Classes and Private use. Dio Lewis's System Explained. By W. L. Rathe. Price 40 cents.

DISEASES OF THE THROAT AND LUNGS. Giving their Cause, means of Prevention, and methods of Cure. Price 25 cents.

PARTURITION WITHOUT PAIN. This work, long in preparation, will be ready in a few weeks. Price, by mail, $1 00.

List of Articles for Sale by

WOOD & HOLBROOK, No. 15 Laight Street, New York.

BACON'S HOME GYMNASIUM, with book of explanation and 100 cuts, $10.

——Trapeze Adjustment, with 32 illustrations, $3 50.

——Swing Adjustment, for children, $1 50.

Each part sold separately. The whole, $15.

This is the most valuable piece of Gymnastic apparatus for home use ever invented. Any one can use it. For weak chests, backs, and sides its use is the best remedy known. A half hour's use of it daily would prevent and cure many cases of dyspepsia and consumption.

SYRINGES.—The best styles in market. Usual style, by mail, $3. For children, with Eye and Ear Douche for sores, etc., $2. The Spray Syringe, $3. The Trade supplied.

BOUND VOLUMES.—We still have a few Bound Volumes for 1863, 1864, 1867, 1868 and 1869 for sale, postpaid, by mail, for $3 Soon it will be impossible to obtain them.

HERALD OF HEALTH COVERS—so that every one can bind their numbers and preserve them neatly. 50 cents.

BREAD PANS—for making light, aerated Bread without soda, saleratus, yeast, or other poisonous compounds. Only by Express, $1 25.

HAND MILLS—for cracking Wheat, making Rusk, Hominy, etc. By Express, $8.

BEST GRAHAM CRACKERS—per barrel, $10 Half barrel –38 lbs., $6.

ELECTRIC MACHINES—Kidder's, best Manufactured, $20 to $22.

FILTERS.—Kedzie's, Family Size, $10 50.

Hygienic Home Water Cure,

637 California Street,
SAN FRANCISCO, Cal.

This is by far the most extensive and complete Health Institute on the Pacific Coast, based strictly on the Hygienic principles of treatment.

Dr. Smith has built and arranged the Home with special reference to its supplying the place in San Francisco that the Laight Street House and Hygienic Institute furnishes to the friends of Health Reform in New York city. The Medical Department is ample for the cure of all who may desire hospitalities, and the Boarding Department is well arranged for the accommodation of the friends of Hygiene throughout the coast. All are cordially invited to visit our healthful Home.

BALLOW J. SMITH, M. D.,
Consulting Physician.
R. S. MACBETH, M. D.,
aug-tf Attending Physician.

Boot and Shoe Store, No. 415

Canal Street. Ladies', Gentlemen's, Boys', Misses' and Children's Boots, Shoes and Rubbers, in all their varieties, always on hand. Work made to order, and Repairing done on the shortest notice and reasonable terms.

DAVID WALKER,
n-1y No. 415 Canal, corner Sullivan Street.

D. H. Prime, *Printer, at the Hygienic Institute, N. Y.*

Digitized by Google



THE NEW YORK HYGIENIC INSTITUTE,

13 & 15 Laight Street, New York City.

A. L. WOOD, M. D., Physician.

THE objects of this institution, which has been in successful operation for more than twenty years, are two-fold, viz: 1. The Treatment and Cure of the Sick, without poisoning them, by Hygienic agencies alone.

2. To furnish a pleasant, genial HOME to friends of Hygiene throughout the world, whenever they visit this city.

CURE DEPARTMENT.

Thousands of Invalids have been successfully treated at this institution during the past twenty years, and its fame is known wherever the English language is spoken. Its appliances for the treatment of disease without the use of poisonous drugs are the most extensive and complete of any institute in America. They comprise the celebrated **Turkish Baths, Electric Baths, Vapor Baths, Swedish Movement Cure, Machine Vibrations,** the varied and extensive resources of the **Water Cure, Lifting Cure, Magnetism,** Healthful Food, a Pleasant Home, etc. etc. Particular attention is given to the treatment of all forms of CHRONIC DISEASE, especially of Rheumatism, Gout, Dyspepsia, Constipation, Torpidity of the Liver, Weak Lungs, and Incipient Consumption, Paralysis, Poor Circulation, General Debility, Curvature of the Spine, Scrofula, Diseases of the Skin, Uterine Weaknesses and Displacements, Spermatorrhea, etc. Any one wishing further information should **Send for a Circular,** containing further particulars, terms, etc., which will be sent free by return mail.

BOARDING DEPARTMENT.

We are open at all hours of the Day and Night for the reception of Boarders and Patients. Our location is convenient of access *from* the Railroad Depots and Steamboat Landings, and *to* the business part of the city. Street cars pass near the doors to all parts of the city, making it a very convenient stopping-place for persons visiting the city on business or pleasure. Our table is supplied with the *Best Kinds of Food, Healthfully Prepared, and Plenty of it.* In these respects it is unequaled. Come and See! and learn how to live healthfully at home. Terms reasonable.

WOOD & HOLBROOK, Proprietors.

Digitized by Google

ATTENTION! FARMERS, OCEAN COUNTY, NEW JERSEY, 44 Miles from New York, on the Railroad to Philadelphia. Soil, fine loam; superior for all crops. Country just rol enough for beauty and utility. Climate, mild and proverbially healthy. Water, soft and pure. No fever and ague. Sold only to actual settlers, on easy terms. Price per acre, $25 and upward. For culars and Maps, address ROBERT CAMPBELL, No. 153 Broadway, New York

A NEW CATALOGUE OF BOOKS

Published by WOOD & HOLBROOK, 15 Laight St., N. Y.

MINNESOTA AND ITS CLIMATE,

as adapted to Consumptives, Invalids, and all who wish to make the State a Home. By LEDYARD BILL, Author of "A Winter in Florida." Price $1.25, postpaid, by mail.

This delightful book, while a godsend to invalids and consumptives, will be found equally interesting to sportsmen and settlers, who would find a home in this far-famed State. It contains a beautiful view of Minnehaha Falls, and also chapters on the climate of all those places which are most desirable as resorts for invalids, including Florida, Nassau, the Adirondacks, California, the White Mountains, etc. etc. This work, and the one on Florida should be in the hands of every one who wishes to find the best resorts for health.

A WINTER IN FLORIDA. By

LEDYARD BILL. With illustrations by Forbes, comprising views of the old city of St. Augustine, and the Natural Scenery and objects in Eastern Florida. Tourists, Sportsmen, Invalids, and all who would escape the rigors of a Northern Winter, or find a Home in a delightful clime, should read this book; so also those who would know all about the resources of the country, and its adaptation for Horticulture, Orange culture, and for cheap and desirable homes. It contains 250 pages. Price $1.25, by mail.

The author justifies the predictions of the climate, saying that it is so delightful that no disease can experience it without favorable effect.

SEXUAL PHYSIOLOGY. — This

work contains the latest and most important Discoveries in the Anatomy and Physiology of the Sexes; Explains the origin of Human Life; how and when Menstruation, Impregnation, and Conception occur; giving the laws by which the number and sex of offspring are controlled, and valuable information in regard to the begetting and rearing of beautiful and healthy children. With 80 fine engravings. *Agents wanted.* Send stamp for Circular. Price, by mail, $2.

It is high-toned, and should be read by the members of every family. As an evidence of its popularity, we may remark that Eleven Thousand Copies have been sold, and the demand is still unabated. If a copy of this work could be in the hands of every young man and woman, it would not only make them purer and better, but give them a knowledge all should possess.

PHYSICAL PERFECTION. — Con-

taining Chapter on Structure of the Human Body; the Perfect Man and Woman; the Temperaments; Laws of Human Configuration; Embryology; Childhood; Effects of Mental Culture; Moral and Emotional Influences; Social Conditions and Occupations; Effects of Climate and Locality; Direct Physical Culture; Practical Hygiene; Womanhood; the Secret of Longevity; the Arts of Beauty; External Indications of Figure, etc. etc. Beautifully Illustrated with 100 Engravings, and handsomely bound. Price, by mail, $1.50.

This work has been through many editions, and has given great satisfaction to thousands.

TALKS TO MY PATIENTS.—Hints

on Getting Well, and Keeping Well. By Mrs. R. B. GLEASON, M. D.

Women Agents wanted everywhere. Thousands of copies of the work are being sold. Full contents, and terms of agency sent on application. Price, by mail, $1.50.

This book is designed mainly for women, of all ages. It treats principally on the Diseases of Women, and includes chapters on Child Bearing, and the Care of Children. Harper's Magazine, in reviewing the work, says:

"Mrs. Gleason is able to say something to wives and to mothers which no man could say. There can be no difference of opinion about the value of the practical suggestions she affords, which are characterised by sound philosophy and clear, good, sterling common sense. We wish the chapter, "Confidential to Mothers," might be published as a tract, and sent to every mother in the land."

Mrs. Dr. Sayles, after reading it, says, "I would rather have written that book than been queen of the greatest empire on this small globe of ours!"

No woman can read it without being made wiser and better, and without being better qualified for all the duties of life.

MORAL, INTELLECTUAL, AND

PHYSICAL CULTURE; OR, THE PHILOSOPHY OF TRUE LIVING. By Professor F. G. WELCH, Superintendent of Physical Culture in Yale College. It contains over 400 pages, and is beautifully bound. Price, by mail, $2.25.

This book is the most perfect Encyclopedia of Gymnastic exercises of the most approved method in existence. It tells in plain language how to do every thing, from the building of a gymnasium and choosing apparatus to doing the exercises. The series of exercises with the Indian clubs alone, is the best ever published. Those who want a work on gymnastic culture should not fail to get this one. Dr. Dio Lewis says, "This is an admirable guide to physical culture."

THE TREE OF LIFE; or, HUMAN

DEGENERACY, ITS NATURE AND REMEDY. By ISAAC JENNINGS, M. D. Price, by mail, $1.50.

This work, prepared by a conscientious and philanthropical thinker, is full of interest to all who are seeking light on the important questions of which it treats. It is deeply religious in its tone, and contains a multitude of valuable hints on the treatment of diseases by natural means. Any person sending us a new subscriber for THE HERALD OF HEALTH and $2, shall have this work FREE.

THE NEW HYGIENIC COOK-

BOOK. By Mrs. M. M. JONES. This work contains several hundred recipes for cooking the most palatable and wholesome food without the use of deleterious compounds. Also, directions for Washing, Ironing, removing Stains, Canning Fruit, etc. Price 30 cents, postpaid. Several thousands have been sold.

WOMAN'S DRESS; with numerous

Engravings, showing how Woman's Clothing can be made beautiful, healthful, and comfortable. Price 30 cents.

Any or all of the above works sent free, by mail, on the receipt of the price.

Digitized by Google

Digitized by Google

Digitized by Google