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PROFIT *VERSUS* EQUITY.

Laborer.—I know it is the most difficult thing in the world to reconcile the economist's or capitalist's view, that man is a money-making animal, and the laborer's or humanitarian's view that man is a human being; for the two interests are so opposed under present conditions.

Capitalist.—Is not man a money-making animal?

Lab.—Yes; but the feelings which prompt individuals to make money or to get money is the desire to satisfy some want or need. Were there no money man would continue to work to satisfy his needs. Man does not work for the money *per se;* man works for the satisfaction of his desires, the same as other animals who go in search of food when they are hungry. Of course the appelation that man is a money-making animal could only originate with one who looks through political economy spectacles. Legislating for man as a money-making animal, and for man as a human being, clash. Economists estimate the prosperity of a nation by its wealth; humanitarians by the moral, intellectual and physical condition of the people. To show you what I mean I will quote a passage from one of Gladstone's articles. In speaking of the prosperity of England from the economist's standpoint, he says: "To state the annual income on which income tax is paid in the United Kingdom at 650 millions, is, I am convinced, to state it moderately. The increment of returns of income tax gives some aid toward estimating the annual increment of capital. For, in 1855, the entire income on which the tax was levied may be taken at 310 millions. In thirty-five years, therefore, 340 millions have been added to the taxable income, or nearly 10 millions a year." Now if we were to consider the prosperity of the nation from the humanitarian standpoint and were to look into the statesman's year book for 1891, we would find in the items of expenditure given that 53 millions of dollars had to be expended for its poor during the preceding year. We cannot tell how much of this estimated wealth is made up of fictitious values; nor does it show how much pauperism has increased, *pari passu,* with the increase of wealth; nor can the actual physical deterioration of the people as a whole be estimated. But an old Londoner said some time ago that a crowd of British working men are a very different breed from those in the days of his youth. One thing is certain, British and other governments have been obliged to lower the physical standard for enlistment into the various armies. Moral, intellectual and physical well-being are better promoted by humanitarian motives in our relations with our fellows than motives of profit.

Cap.—An assertion is not a proof.

Lab.—We contend that individuals can only labor steadily at the same kind of work a certain number of hours and remain in health. Eight hours is the average. Moreover, if we are working for such low wages that we are unable to lay up anything for old age, when we become incapacitated, we are obliged to become paupers. We say, therefore, to you capitalists, it is morally right and just that we should not work beyond this time.

Cap.—And we say to you that our profits are so small that, to diminish them further by lessening your hours of work at the same pay, would render us unable to continue business.

Lab.—How are we to know that your profits are so small that one per cent., let us say, will cripple your business? It is easy enough to say so; but how are we to prove it? In the name of equity we demand that every business which, by its nature, tends to be a monopoly, should issue a balance sheet showing expenditure and profit; because the business ceases to be a matter of private interest and becomes one of public interest.

Cap.—We would not submit to have our private affairs looked into in this manner. You will never get such a law passed. It would be unpopular; such a measure would be a gross interference with individual liberty.

Lab.—Interference with the liberty of whom? Laws are supposed to protect the weak against the powerful. The condition of the working masses is only improved by the scientific adjustment of society. It is true that we have liberty to overwork ourselves, or to work for mere subsistence wages, or liberty to starve; but that is not the kind of liberty we want. We want the liberty to enjoy to live healthy and perfected lives. In a former state of society it was sufficient for a statesman or a prophet to state that such a law was good, and, thereupon it was conformed to. But to-day we ask is such a law good? and we do not conform blindly to laws as they did of yore. To-day individuals meet and discuss the

merits and demerits of a law, and, although it may be passed by a corrupt government, still persons discuss its consequences, and show their satisfaction or dissatisfaction. We see no reason why present generations should be slaves to past traditions and customs. We ask why, if a valuable franchise was granted of a natural monopoly in a past generation, should future generations be debarred from its benefits? We ask what right had kings or governments to legislate for generations unborn? We ask who has the right to give away the birthright of all? Restitution is what we want; nothing more nor less. There is no more reason that large private concerns, employing hundreds or thousands of individuals, should not be held accountable, than should a monopoly conducted by the government, in which the current expenses of wages, rent and profits are given. Is it right to work us overtime to increase your profits? In some places men are allowed to work themselves to death. Many animals are treated better and more thought of than human beings. I once heard a man who was the possessor of a few trucks say, on seeing a crowd around one of them, when he was told that the driver had been killed: "My God, I thought it was one of the horses. We can get a man any day, but it costs $500 to replace a horse." If you owned us body and soul, it would be to your interest to keep us in a healthy condition, but if we become incapacitated from overwork now, your responsibility is shifted on to the poor tax. Not only this; as age creeps on, the workman stands the chance of having his wages decreased by some individual monopolist, and, if he dares to rebel, the capitalist seizes upon this means to get some younger man to fill his place.

Cap.—Do you really think that, however much the greed of a money-making animal, he would act thus to an old tried and trusted servant?

Lab.—What is to prevent him? Formerly the course of action of a reputable family or firm was guided by the laws of humane feelings, and they were expected to provide for a superannuated servant; but to-day the motive of profit determines the course of action in these matters. The younger and stronger man is more profitable to his employer, and, he being a money-making animal, it is to his interest to shelve the one who is less useful. After all, his action will only be known to himself and to his employé, but if he contributes to some charitable institution it is generally known, and the whole community talks of the public benefactor.

Cap.—Such a case as you cite would be an isolated one. I do not think a man of honor would act thus.

Lab.—A man of honor would not act thus, but a man for profit would. And, what is more, it is done constantly. You say that you cannot give us shorter hours nor employ more men because it will lessen your margin of profit. We admit where profits are small you cannot afford to pay liberal wages; but why are profits the smallest where the workmen are paid the poorest? It is because instead of equity being the guiding principle of trade, there is scarcely any subterfuge or trick you will not resort to, to undersell or ruin a competitor. And in trade as with money, Gresham's law holds good: the cheaper article drives out the superior, if you can get people to take it. When we consider how little chance the working classes have of learning the real value of various objects, it is seen how easy it is to impose upon them by dishonest methods in modern competition. Suppose that there is a demand for particular economic goods, and the buyers being in straightened circumstances feel they cannot afford to buy the best, the cheaper article then would have the preference over the dearer. It is only when the saving of money is not the determining factor that the demand for the best quality is always made. If relatively few control the wealth of the country, the less demand there will be for the first quality. Individualists maintain that, in free competition, the best quality drives out the inferior. We have found that the more ignorant and poorer the majority the less able they are to determine real value. Those who can sell spurious articles at reduced prices can drive the best trade. The more inferior the articles which the public can be induced to accept, the greater profit is made. If you can sell a manufactured article, which, to all appearances, is as good as your neighbor sells but in reality is much inferior, cheaper, in all probability if the ignorant are credulous enough to trust to your honor, you will be able in time to ruin your competitor. And the army of unemployed will be swelled by the workmen of your ruined neighbor. If a wholesale store, by a sweating system, produces quantities of cheaply made goods and the firm become silent partners in several large retail stores, they will be able to cut the prices of the neighboring stores, and eventually ruin them. See what an immense advantage it gives to a large firm, if, by over work and under pay, they can produce goods cheaper than a firm that gives fair wages; why the firm working for profit will be able in time to ruin the firm working under a system of equity! And yet, ye gods, our liberty is interfered with, if we ask a fair statement of wages and profit!

Cap.—The concentration of several small industries into one large one is, nevertheless, in the direction of progress. Although the displacement of labor and the consequent misery are terrible, I will admit, all advances are made on the débris of our dead selves. Old faiths, old creeds are dissipated before the light of science, as we pass ore through the fiery furnace to bring out the pure metal. And the very methods which you condemn will benefit humanity as a whole.

Lab.—I deny this; it benefits the few and causes the debasement of the many. We use the same argument: we say that although our agitation for shorter hours and more pay will cause a displacement of capital and trade, and consequent misery, the final outcome will be either division of profits or production for mutual benefit; and not for profit. The result will be beneficial to the many, and not to the privileged few. You say labor must go to the wall, and we say capital must go to the wall. For there is a minimum wage, the low water mark of existence, beyond which we cannot pass. A cer-

tain standard of living, of leisure, of comfort, of health we must establish; and if capital cannot adjust itself to this standard, in every instance in which it does not do so, it must go to the wall. Fair wages, fair profit, mutual benefit,—equity must take the place of production for profit.

Cap.—It is easy to say thus and so ought to be the case, but who is going to establish such a system?

Lab.—That system has been already established, but has not reached that completeness which time will give to it. Stephenson's locomotive is very crude being compared to our present day locomotive, and so it is for the establishment of equity. In America there are factories and stores which are worked upon a principle where the combined labor is returned in as near as possible equitable proportions. In Scotland and England, although the system is not perfected, there is a tendency to equity. The adoption of the sliding scale must be known to you. In the system of co-operation in groceries, so successfully worked, there is a return of profits to the consumer. Not only so, but it is proposed, if not in actual existence, to extend the system so that a part of the profit would go for life insurance. Every day, every hour, we are approaching nearer the extinction of production for profit. Never has the pinch of poverty been so keenly felt. Never has the might-have-been roused such bitter resentment in the hearts of human beings as it tolls the dirge of wrecked lives. We see no reason, with the marvellous advance in science, why the conditions should continue, which degrade. Believe us there are but two solutions to this labor problem; one to do away with production for profit; the other to have fair profit. We can only arrive at what is fair profit, when we have some system of estimating profits; how much goes to wages, to other expenses, and to profit. To buy in the cheapest and to sell in the dearest market is demoralizing in the extreme. The poor and ignorant always suffer the most under such a system; it leads to exploiting the laborer every time.

Cap.—I do not exactly understand what you mean by production for mutal benefit. Do you mean by that the collective ownership of capital, land and machinery? I do not see how you could do away with a system of profit without such collective ownership. And as for your second alternative of fair prices how could you fix this, when the cost of production varies so?

Lab.—It is the profit we wish to regulate; if cost of production increases, it would simply advance the price of the article, the profit would remain the same. We would increase the circulating medium, because it is the restriction of money, while business and population have increased so enormously, which hampers industry, enforces idleness and increases the cost of production.

Cap.—Supply and demand regulate prices. If demand is great and the supply scarce, prices go up; if the contrary, prices go down.

Lab.—That is a pet fallacy of many economists. They think they have settled every thing, when they say it is a question of supply and demand. I demand a great many things I am unable to purchase. It is the purchasing power which regulates the demand, and not the demand which regulates the purchasing power. I appreciate a beautiful article or a superior quality of goods, as much as you, perhaps; but I am obliged to do without or to take an inferior quality, because I have not the means to satisfy my desire. I demand a great many things, but I will not be supplied, because I have not the purchasing power. Why should an abundant crop bring ruin to the grower? It is because those who have the money to purchase, are supplied; while those who have not, are obliged to go without. In England instances have been known where fish have been thrown back into the sea, to keep up the prices. Fish is sold to the rich at a high price, but when the fish-monger does not sell out, or has kept the fish as long as he dares, he sells it to the poor at reduced prices. You can often see crowds in the evening around these shops, forming a queue. The poor do not wait from choice, to buy the fish when it is a little off; it is because they have not the purchasing power to buy it, when it was fresh and wholesome. In other countries similar instances occur; the peasants are so poor that they cannot afford to buy fish while it is fresh, but they must wait for the lowered price at which it is sold when tainted. The same thing has occurred with regard to meat; and yet science teaches us that in decomposing animal tissues there are elaborated alkaloidal poisons, which are prejudicial to health. If the purchasing power—money—is controlled by the few, the many will be enforced to demand inferiority through poverty. I demand superior advantages of education and culture for my children: but as I have not the means to pay for these advantages, my children must put up with such an education as I am able to afford. I demand healthy apartments and pure air for my wife and children; but I am obliged to sleep six in a room with my wife and four little children. I have not the means to pay for superior accommodation and that is why you see overcrowded tenements, and you see upon the other hand, houses standing empty with signs 'to let' on them. It is not a question of supply and demand, but of supply and purchasing power. It is absurd to preach to us that we must cultivate the love of the beautiful, when the conditions of poverty in which we live, destroy the power to appreciate the beautiful, and will not permit us to gratify or develop this faculty. It is sarcasm to tell us that we must become imbued with the enthusiasm of health when we are in distress, or when we are obliged to eat what we can get, whether the food be badly cooked or adulterated. It is cruel to preach to us, from the worn out text of self denial, that we must exercise prudence in marriage, when our wretched condition finds in marriage its only ray of sunshine.

Cap.—Are you not ready to admit, though, that man does more for his fellow creatures by the system of barter and sale than when acting from philanthropic motives?

Lab.—I am not prepared to admit anything of the

kind. When free education was proposed for the poor, the capitalists who had the best of the struggle for existence, said they could not comprehend why they should be taxed to support other people's paupers. When, from time to time the laying out of improved streets and avenues have been advocated to make a city more salubrious or beautiful, for instance, when Baron D'Hausmann laid out the boulevards of Paris, the money making animals said the authorities had no right to tax the city to pay for these improvements. When the laying out of Central Park was first suggested, the money making animals opposed the idea, and said it was a pity to appropriate so much valuable land for a public park. When it is proposed to tear down all unsanitary dwellings, which are unfit for human habitation, and to erect sanitary dwellings in their place, which, if properly managed might bring a fair interest, the money-making animals protest and say, such grandmotherly legislation is opposed to all sound views of political economy. Wide streets, beautiful parks, free schools are not money making institutions; they are humanitarian. They are not for the profit of the few, but for the benefit of the many; in fact, the citizens are taxed to support them, but who will deny the benefit of them to the community? They could be made money-making institutions by obliging the public to pay tolls on certain streets, or to pay an entrance to the park, to pay school fees, as they have monopolized other public necessities; but I think there would be a general outcry if anything of the kind were attempted. As I said before, the forces which impel individuals to get money is to gratify some desire. Before compulsory education many of the poor were too ignorant and degraded to send their children to school; they had their desires better gratified by having them money-making animals and having them bring home their little wages so that they may gratify their own selfishness. Even to overcome this selfishness it has been necessary to make education compulsory. By this humanitarian legislation we have created a desire to send children to school. Of course there are some so degraded by conditions of poverty that they try to evade the law. Improved dwellings are advocated on humanitarian grounds; they would not yield the profit that a man, arguing from the money-making standpoint, would wish, but would they not uplift and humanize?

Cap.—Take away from man the incentive to better his condition and do these things for him, would it not be more productive of evil than good?

Lab.—Hope is and always has been a greater incentive to work than despair. A man who has been accustomed to a certain standard of living, strives to maintain it. We are dissatisfied with inferior fare, when we have known what it is to have better. Debased conditions shock more those who are accustomed to refined surroundings, than those who are nurtured in slums.

Cap.—You lose sight of natural history in all your arguments on the labor problem; you mistake animal beings because they have upright walk and articulate speech for human beings. Because men and women work now under present conditions you imagine they will continue to work under other conditions because they like to work. Consider the evolution of animals for a moment! When the mode of life of an animal changed its organs changed; when large canine teeth were no longer needed for self defense they became modified. And so with other organs of self defence of the various animals. You say animals go in search of food when they are hungry; would they work for food if it were provided for them? To work, especially to work continuously, is not a natural instinct of man but an acquired one, acquired by generations upon generations of training. Was slavery a necessary condition or was it not to train men to work in ancient times? Is not slavery, although under the form of wage slavery, a necessary evil, to compel men to work? Instance the savage, he cannot remain steadily at any occupation. The spasmodic efforts of the casual to work and the lack of seriality of thought of the brain-weary, or brain-non-developed, are evidence of retrogression to some more primitive type. Was not the power which the conqueror exercised over the conquered, a means to train men and women to work? Reflect on the incalculable benefit, too, of military training!

Lab.—I think you are right in differentiating the animal beings from the human beings; but I object to a system which embrutes and keeps individuals at the animal stage. That animal beings only seek satisfaction of material wants—and if their material wants were satisfied they would not exert themselves—might have been true in former times; but to-day the masses desire those things which refine and elevate them as well as the privileged few. This idea that men must be compelled to work, only holds good where money rules. Religion has inspired and awakened into life some of the grandest efforts of human beings, the most melodious music, heroic deeds, immortal paintings, and exquisite gems in literature. Science has many workers who are not actuated by a motive of pecuniary recompense; on the contrary it is often pursued at great personal loss to the individual. A mother's labor for her children is a labor of love. In our industrial system how many follow a trade or occupation because it is a labor of love, of pleasure, of inclination? Formerly an artist could devote years to one piece of work; to-day they work at high pressure. It is no longer a question of art, but how much will this or that fetch. Very often canvas is supplied at so much a foot, libraries of books to the *nouveau riche* at so much a hundred, houses furnished by an upholsterer at so much down. Formerly an artist was satisfied to work for years under his *maestro;* now those who have a reputation to make, try to excel; once they get a reputation it becomes a question, can I make a fortune? Formerly a piece of work was part of the artist; he grew to love it, and when the work came into the hand of a salesman, he pointed out its beauties and said a connoisseur would tell at once whose work it was. The element of money takes away the charm of the work of the artist; there ceases to be an inward force demanding outward expression of beauty

of form, the satisfaction of work well done. What makes the musician slave for hours to give expression to the musical harmonies which haunt him? Travellers will toil up mountains for the satisfaction of viewing the elements in some grander combination, at what cost, fatigue and worry—but how repaid? Why a hundredfold in the few moments of exaltation, when the body has become the servant of the spirit. Can we bring individuals to the standard, that their energies will be directed to insure the welfare of their fellow creatures, instead of selfish ends? Time will show. To the workers in the cause of humanity, each man's good becomes each man's aim. What wondrous power goes forth in that divine command, "Love ye one another!" And when this becomes universal, we will attain the ideal for which humanity is striving.

To the Editor of THE HUMANITARIAN:

I have read your articles upon marriage and I have heard you lecture, and everybody knows that you insisted upon intelligent motherhood, and that girls intending to marry should be scientifically educated, so that the gross negligence of ignorant mothers, too often seen to-day in the broken health of the children grown to adult life, might be avoided. But how can you expect to educate the masses to these questions, when these are subjects which cannot be discussed! My own experience has been that personal teaching is the only way this subject can be taught. Why do you not advocate teaching physiology in the public schools now, as you did then? To simply rely upon the chance of people seeing an article upon these subjects in this or that scientific journal, which only the educated read, is useless.

Your chief aim in your paper should be to hammer away at the officials and make them adopt some system of training children in the schools, and the same criticism applies to some of the other plans proposed in your platform in the October number of THE HUMANITARIAN, viz.: To establish tribunals of health, bureaus of anthropology, laboratories for analysis of food, and improved dwellings for the poor, etc.

Instead of reiterating and elaborating your well known theories upon proper mating of the sexes, I, for one, regret to see so little space given in your journal to these important regulations in the schools and sanitary system of cities, upon the adoption of which so much could be then accomplished in the regulation of the sexes.

Please excuse the frankness of my criticism, and allow me to congratulate you upon your never flagging interest in the cause of reform and in the elevation and emancipation of your sex.

ALICIA MONTGOMERY.

PHILOSOPHICAL NOTES AND COMMENTS.

Essential to all remedies is the truth.

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Society depends upon women. The nations who confine them are unsociable.

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Experience does take dreadfully high school-wages; but he teaches like no other!

***

There is nothing which marks more decidedly the character of men or of nations than the manner in which they treat women.—*Herder.*

***

If you want to find out the truth about anything, commit the task to time; nothing can be accurately discerned at a time of disturbance.—*Seneca.*

***

A wise man is known by three things—by making his enemy his friend, the ignorant learned, and by reforming the evil disposition into goodness.—*Aristotle.*

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The achievements of one age are but swaddling bands for the next; the husk, which is a home for the seed when it is dormant, is a prison for the seed when it is quickened.

***

We have employments assigned to us for every circumstance in life. When we are alone, we have our thoughts to watch; in our family, our tempers; and in society, our tongues.—*Hannah Moore.*

***

Good birth is a great advantage, for it gives a man a chance at the age of eighteen, making him known and respected as an ordinary man is on his merits at fifty. Here are thirty years gained at a stroke.—*Pascal.*

***

Assure yourself that employment is one of the best remedies for the disappointments of life. Let even your calamity have the liberal effect of occupying you in some active virtue, so shall you in a manner remember others, till you forget yourself.—*Pratt.*

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It is impossible that he who trembles at sight of the prodigies of Nature, and who is alarmed by all the events of life, should ever be happy; let him penetrate the realm of things and cure his mind of the absurd infection of fables: without a knowledge of physical things there can be no true happiness.—*Epicurus.*

LITTLE GIRLS.

It is curious that but one immortal girl child has been drawn by a woman. To the strange, fantastic genius of William Blake we owe the introduction of childhood into our literature. He writes of the

Little boy, Little girl,
Full of joy; Sweet and small,

making the whole book of "Innocence" a transcript of the ecstacy, the tinkling music of child life. A new note is struck; we shall hear it again in many of his poems, and seen in Wordsworth with a richer, deeper tone. When the "Lyrical Ballads" were given to the world they were a reaction against worn-out conventions in form and thought and poetical subject. Most of them treat of some phase of child life. "Lucy Gray" is a story of a little girl lost on the wild moor in the snow. Nothing could be simpler, yet the poet has given it a tender pathos which makes it one of the prettiest of his ballads. "Alice Fell," the most daringly commonplace of all Wordsworth's poems, tells of a poor girl on a coach, crying over her clock, torn on the wheels. "We Are Seven," with the child's passionate faith in the immortality of love. "The Pet Lamb," "Three Years She Grew in Sun and Shade," and the "Intimations" are a few of the poems which indicate the new and pervading spirit of Wordsworth's work. The child was to him an object of interest in itself; he deals largely with children apart from their parents; the personality was emphasized as distinct from relationship. Above all is the child as the echo of the divine, the symbol of purity, with something of the glory of the world whence he came still enfolding him. Wordsworth was thoroughly in sympathy with young life, and described it with a grace and precision born of loving observation.

Coleridge has left a few most exquisite bits of insight and sympathy with children, but Dickens! What troops of childish figures rise at the mention of his name! He has brought out with infinite tenderness and fidelity the wounded sensibility, the struggles, the suffering of youth. The interest is in them directly; his children do not always "grow up" in the books, and hence are not studied as explanations of their later lives, but for themselves, pure and simple. Even the hardened old critic, Jeffrey, in manhood, was not ashamed of tears for little Nell.

For the perfect child life we must turn to George Eliot. "The Mill on the Floss" is the deepest, truest record of the boy and girl nature. Maggie and Tom are immortal children; almost equally life-like and vivid are the common figures, Lucy and Bob Jakin. It is not the elder Maggie, struggling with the problems of destiny, who appeals so powerfully, it is the eager young creature, "full of passionate longing for all that is beautiful and glad, thirsty for all knowledge, with an ear straining after dreamy music that dies away and will not come near to her." In her life are mirrored all the experiences, the aspirations of the woman child. Jane Eyre, even, is not actually interesting as a child; her childhood is only a prelude, not the song, as in the other cases. It would be an interesting subject for some deep thinker to unravel just why it is that woman, in whose actual life the love of a child has always been the second strongest feeling, should so seldom have done lasting work with a young life for a subject.

THE GOLD PRODUCTION OF THE WORLD.

Year by year the gold production of the world is increasing, and the results for 1891 were the largest on record. In round numbers, the production for the last five years was as follows.—1887, 5,097,600 oz; 1888, 5,251,000 oz; 1889, 5,641,000 oz; 1890, 5,586,000 oz; and 1891, 6,033,000 oz. For the first time for many years there was a slight set-back in 1890. A noticeable feature of recent years has been the development of the Witwatersrand Goldfields. The production of these fields has been as follows:—1887, 34,897 oz; 1888, 230,917 oz; 1889, 379,733 oz; 1890, 494,801 oz; and 1891, 729,213 oz. Adding in 1891, the output of other Transvaal goldfields, which amounted to about 107,000 oz; the total production of the Transvaal for 1891, reaches 836,250 oz. For the current year it is expected that the production will quite reach 1,250,000 oz. In 1888, the Transvaal only produced 4½ per cent. of the world's yield, but in 1891, the proportion had risen to 13.8 per cent. and this year it is tolerably certain to reach 21 per cent. The following was the production in 1890 for the countries named:—United States, about 1,586,500 oz; Australia, 1,469,200 oz; and Russia, 1,019,000 oz. As the return for these countries has not altered to any large extent, the Transvaal will probably take the third place for the current year and very likely the second place in 1893. Mining in the Transvaal has not yet reached its culminating point, as new mines are being constantly opened and old ones still further developed.

The *Debats* states that whereas in 1869 there were only 365,878 establishments licensed for the sale of intoxicating drink in France, there are now over 448,000, or at the rate of one per 87 inhabitants. The annual average consumption of alcohol per head is 4 1-2 litres, or a little more than 7 1-2 pints.

JAY GOULD SEVENTY-TWO MILLIONS, AND JAY GOULD TWO TWENTY-ONE A HALF.

The principles of Humanitarianism, while elucidated with unusual emphasis in the following comparison, would, we think, have been more accurate had the writer dealt with the state of society which permitted such an accumulation of wealth and the methods by which it was acquired:

JAY GOULD $72,000,000. JAY GOULD 2:21½.

A Study in Breeding by Dr. Billings.

It may perhaps shock even the readers of *Resources*, who are somewhat accustomed to my boldness of expression, for me to call their attention to a comparative study of a man and a horse. The fact that they both have the same name suggested the study. The first question coming to mind is, why should we study them? What is there in either worthy of study? To that I answer "more than the majority of people have any realization of." "Jay Gould $72,000,000, Jay Gould 2:21½." What do these figures mean? Do they not mean that both these magnificent specimens of different species of the animal kingdom were "record breakers" in their day and generations? Both man and horse crowned themselves "kings" by their own individual merits. They were kings because they were "*bred to win.*" Individually, neither man nor horse ever showed a grain of "duffer" breeding. Let us consider the breeding of each a moment, giving the equine animal the precedence, because he was the "better bred." I use that term purposely. We have

Jay Gould..... { Hambletonian, 10. { Abdallah. / Kent Mare. } / Lady Sanford.... { American Star, 14. / Old Sorrel. }

That was good breeding—royal breeding in 1864. But "royal" as it was, in using the term "better bred" in relation to the horse, I had an entirely different meaning in my mind. The horse, Jay Gould, was better bred than the man Jay Gould, because the result, the breeding, was an intentional act on the part of the owner of the dam. When Richard Sears took Lady Sanford, a Star mare, to the embrace of Hambletonian 10, he had done some thinking; he had studied the results of such a cross; he knew by previous crosses of the same kind that he was lessening his chances of failure in getting a winner and making a paying investment, to the smallest margin possible. That his judgment was correct the record shows. Jay Gould, 2:21½, was the champion stallion record, the "world's stallion record" for many years. Even so the man Jay Gould's seventy-two millions is the "world's record," the wonder of human achievement of the centuries. In all truth he was the "King of Finance," judged by the results only.

In the case of the man, however, while we have before us the indisputable fact that "he was bred to win," we do not know how he was bred, we have no data, as in case of the horse, from which we can draw a valuable lesson—why he did win? We do know that there was no intent either to breed a winner when his parents married, or to beget one when they united for mere sexual gratification. So far as the begetting of the man Jay Gould was concerned, as an intelligent act on the part of his parents, it was a mere accident, and yet he won! When I proposed writing this paper, my friend Reed said, "Jay Gould was a freak, as many a wonderful performer on the turf is." The begetting of a child may have been a freak of passion on the part of the parents, but there the "freak" ends. To the unintelligent nature may produce freaks, but to the observing and thinking man nothing occurs without cause. The word freak simply means, for us, some astonishing natural phenomenon, something out of the usual course, the causes of which are beyond our present ken. The horse Jay Gould was not a "freak" in any sense. The breeding of his sire and dam, and the results of similar breeding in other cases, the Star Hambletonian cross warranted the prognostication that a "winner" would result. Further breeding in the same line since then, and the record of the horse as a sire, strengthen the judgment of the man who owned the dam still more. The family trots. The family wins. Not so with the man so far as we know of his ancestors or his brothers and sisters. We have no record by which to know why Jay Gould (man) was bred in winning lines. This is why the editor of *Resources* considered him a freak, a *lapsus naturæ*. But the man was not such by any means. There were reasons why, crosses why, prepotencies, which, crystallized in him, that caused his success. The trouble is we have paid no attention to these things in connection with our own species, things we are learning to do as in breeding animals to meet our desires. But one thing is certain, neither man nor horse were self-made. Each owed their excellence to qualities transmitted to them and in some sense exquisitely manifested or concentrated in them from a long line of ancestors. Those of the horse were the best selected, however, because there is a record of more winners. The horse was as self-made as the man. Neither could have won had he not been bred to

EXTRACTS FROM LECTURE.

[Boston Herald, October 2nd, 1876.]

The Boston Theatre, last evening, was filled to overflowing with people of both sexes. An analysis of the audience showed some of the brightest lights of Boston society. About five minutes before eight o'clock, Mrs. Woodhull appeared upon the platform from a side room, where she had been waiting with her mother, and was greeted with enthusiastic and long-continued applause. Holding a Bible in her hand, she began her lecture by quoting from Corinthians iii. 16, 17, to show that the human body, her subject, was the temple of God. She said there were hundreds of thousands of women all over the country now waiting in quiet, painful, agonizing watchfulness for society to recognize her true needs in her great and pitiful extremity. "My only desire is to bring the world to look upon the frightful evils now fast spreading their pernicious influence, their incalculably bad example everywhere abroad over this beautiful world of nature and of God, and I have been denied a hearing. For four years the halls of Boston have been closed to me, but I know that the time is near when every mother, realizing her position, and every father informing himself as to his, will no longer allow Mrs. Woodhull to sue in vain for admittance. The time is near when our best people will view this question I discuss in its proper light; will convince themselves that it must be settled before any advancement can be made in the condition of society. The time is coming when everyone of any intelligence will see that there is nothing vulgar save ignorance. (Loud applause.) When this is thoroughly understood there will be no more opposition to freedom of speech. If there is any gentleman in this place to-night who thinks this is not a fit entertainment to which to bring his wife or daughter, he had better leave at once, for every place that is fit for him is fit for either his wife or child." (Applause.) Speaking of her recent visit to Europe, and alluding to the Paris Louvre, and the large number of paintings and sculpture on exhibition there, Mrs. Woodhull said the sight brought a blush to none save the countenances of ignorant women. The vulgarity was not in the pictures nor in the sculpture, she said, but in the minds of the observers. She would teach the young woman of the country her true position, and what belongs to her as a woman, and the rights she has to guard and the privileges she has to insist upon. She would teach the young man of the world what every mother should teach her boy, to respect every other mother's daughter. "I demand the same purity of the man who asks the woman's hand in marriage that is demanded of her. Society, if forced to admit the truth, would acknowledge, as women in society have acknowledged to me, that if women asked the same purity of men that these ask of women, there would be fewer marriages." The speaker here pictured the horrible agony that racks a woman's breast who lives to follow her child to the gallows, and spoke of the crowded state of our prisons and houses of refuge. She said: "I ask of every mother never to bear a child that can by any possibility fill a criminal cell or an idiot room. I ask that our mothers understand in all its importance this mighty problem; I ask that the ignorance which now hides it from her vision be at once and for ever dissipated, even though it exposes the truth in all its horrible and ghastly realism. You patronize horse trots and cattle shows; you discuss publicly, and have it reported in the newspapers, how to raise Durham bulls, and how to create fine stallions, and how to graft the good elements of one animal into those of another, and nobody remarks it; but if the poor mother, torn by conflicting emotions, racked with an agony none but a mother can conceive or realize, cries out in despair, 'In the name of God, tell me how to create my child; tell me, in order that I shall not bear an idiot or a criminal,' every one would hold up their hands in holy horror. 'Oh! she's vulgar; don't go near her,' they would say. Who that boasts an acquaintance with the matter, will dare deny the fact, that one-half of our young men are dying of disease, induced by ignorance of the axiom 'Know thyself;' seven-tenths of our girls arrive at maternity unfit, totally and entirely unfit, for the functions of a woman and a mother. The evil began and perhaps reached fruition at a boarding-school. We inquire, 'Is this so?' and receive the answer, 'Yes, but don't speak of it,' and thus it goes on. How many intelligent parents in this audience to-night dare tell their children the truth about the first question that a child thinks of asking? The speaker then pictured a child asking its mother the question, 'Who made me?' and being told to 'Hush, and never talk so again,' how that child learns the fact upon the street, and acts upon it secretly, and learns to conceal its knowledge from the parent who taught it concealment. She then drew another picture of the child's receiving the information it sought, from a holy woman, a pure mother—"*Who made you, darling?* Mamma carried you under her heart days, weeks, and weary months, and at last went into the Garden of Gethsemane to bear you into the world. Now, my precious child, you can see why mamma loves you

so; why she would give her life to save yours"—and basing its whole after-life and the current of its thoughts and actions on that frank avowal; she said, in conclusion, "that child would never commit an act of which it would not dare tell its mother, because its mother had rendered concealment unnecessary and out of the question. When you understand this mighty problem of proper generation, all the mock modesty you have hitherto felt will die within you, and to this understanding the ideas Mrs. Woodhull have put forth will lead. The medical world says that one-half of our children do not reach the age of five years, and the reason is plainly apparent to any who understand the problem of proper generation. Not one in a thousand women is fit to become a mother, and the number of men fit to become fathers is still less. People call me a Free-Lover. The first place I ever heard the word free-love mentioned was in a Methodist church. The minister was holding one of those protracted meetings, and telling everybody to come forward to the mourner's bench where the love of God was free to all. There for the first time the idea that this was true struck me to fruition. God is love, and love is God. Who dare tell me, to-night, that the love of God is not as free to me as to you? On the one side is pure, undefiled love; on the other is abominable enforced lust. I appeal for the former, and my appeal has closed the halls of Boston to me for four years. Your abominable lust I abhor, and God's intelligent love I adore." (Applause.) Speaking again of a mother's influence, she said, "how can a boy with the pleading, imploring face of his lady mother before him boldly and calmly meditate crime? The very face of such a mother checks all incentive to crime." "Mothers of Boston," she said, "become the teachers of your own families; become the confessor of your boy, and make it impossible for him ever to become reckless and unmanly. To-night, if I had the power, I would make it impossible—I would make it a crime for men and women to marry ignorant of parental responsibility. They have no right to marry and people these abominable institutions, for it is almost entirely from such sources that the recruits to these places come from. I want our people to recognize the divinity of marriage in its broadest and deepest sense. I hold that when two people come together they ought to understand the responsibilities of marriage. When our mothers teach their sons the responsibility of creating a human being, and when they teach their daughters the great responsibility of maternity, you will have your son saying, 'Mother, dare I marry?' and your daughter saying, 'Mother, I do not know that I am worthy of marriage.' (Applause.) A mother should proceed with the enthusiasm and the conception of her subject that an artist possesses. Besides her pride in her production as a mother, she should have an æsthetic feeling of satisfaction with the completeness and thoroughness of the result she produces." The speaker then drew a portrait of the common errands of mammas at the watering-places to dispose of their daughters in as business-like a manner as possible. "I know hundreds of women," said the speaker, "who are in sympathy, in strong sympathy with the views I advance, who cannot render practical assistance because they would forfeit the respect of society and their kindred. But what do I suffer in this respect while fighting the terrible fight? Oh, God! how few there are who have a just conception of what agony I have endured. People who are afraid of losing their respectability usually have none to lose. The woman who cannot listen to a discussion of the great question of proper generation, ought not to be allowed to become a mother." Resuming the discussion of the subject of the human body as the temple of God, she said: "This great truth, for which I am pleading and giving up my life, must be settled before any further advancement can be made. As long as the mothers of America read the statement in the daily papers unblushingly that one thousand criminals had descended from one Margaret, surely I have nothing to fear in the discussion of this question, save the ignorance that makes such a statement possible. Our mothers will not teach their children what they should, above all others, acquire perfect knowledge of. Women are responsible for almost all the misery and evil that accurse the country to-day." The speaker then described the many and peculiar influences to which woman subjects the child during the period of gestation. "Why close your halls to Mrs. Woodhull, and oppose her errand to strip the veil which hides from the people the engulfing dangers that surround them? I have only to wait; the future will redress the wrongs that have been done me. In my soul I have no ill-feeling for anyone who has ever uttered a harsh or vulgar word about me. During the four years you have persecuted me I have taken my children and walked the streets of New York seeking for admittance here, admittance there, with my little girl's arm about my neck. I have suffered as no mother ever suffered before, and it is because I have suffered so deeply that I am here to-night to put forth my claim. It will be granted, if not for the woman, but for the principle. You cannot crush me in the future any more than you have crushed me in the past; you cannot heap any more indignities upon my head; time will right me, and the near future establish my principles." She closed her address at ten o'clock. Her thanks to the audience were interrupted by long-continued applause.

MEDICAL DEPARTMENT.

PRACTICAL DIETETICS AND OUTLINE OF MEDICINE.

PART I.

THE HABITS OF HEALTH.

Man's normal habits may be here most conveniently classified for purposes of consideration, under the several heads: Sleep, Air, Water, Food and Exercise.

Under this classification, the reciprocal attributes of health may be the more easily comprehended; for, while being thus separately considered, each habit may be also treated in its relation to the others.

SLEEP AND AIR.

Patience and rest are the first indications in the scheme of recovery from sickness. Patience first, because it must sometimes be exercised to cause the unhappy sufferer to take rest. Laziness can hardly be called rest, yet it is evidently an indication of imperfect health. It may result from simple gluttony, when laziness, certainly not the disease, is still a natural desire for rest by the disordered organism.

Rest during the daytime is often necessary to prevent excessive fatigue, and is often required by the delicate, after eating. Sleeping in the daytime is not, however, a natural or healthful habit, and the invalid, by a proper course of hygienic assistance, will be lifted out of this necessity, and will find the most desirable sleep to be "a good night's rest." At this time the intelligent forces of the body, which direct the exercises of life, obtain their nourishment; for the whole physical being is relaxed in sleep that these nervous powers may be re-invigorated. Fed by the unceasing, deeply drawn breath, which during the night contributes to the system seventy per cent. of the daily required oxygen of air, the blood is stimulated on by the faithful heart-strings, to refresh and reform the fatigued and wasting structure.

Eating necessitates a tendency of this circulating fluid to the abdominal regions and requires activity or exercise to re-adjust the circulation. The habit of excessive late eating is thus evidently pernicious, depriving the nervous system of its recuperative right, thus disordering the body and inducing disease. Such an untoward habit is, therefore, to be avoided and patience exercised, that a good night's rest may be obtained, just as it itself is necessary, that other habits may, in turn, be well regulated. Yet sleep may become, upon the other hand, quite impossible, because of the very opposite extreme of hunger; in which case something should be eaten—better late than never! A glass of milk or of soda water, or a sandwich, or like simple food, should suffice as a late supper.

The night's rest should be under comfortable covering, and in a reasonably cool and well ventilated apartment; but ventilation does not necessarily imply open windows and chilly rooms, only sufficient air at regular temperature.

AIR AND EXERCISE.

Air might be said to be the constant quantity, and exercise the unknown, in any given health proposition. Given, however, the proportions of water and food properly assimilated by a man, air being constant, his capabilities of exercise and almost of thought become determinative. Neither physical exercise, nor the employment of the mind is, therefore, the basis of health, nor a principal agent, even, in the cure of sickness; for, although normal physical or mental exercise does assist, reciprocally, the metamorphosis of tissue, it is nevertheless objective, and all other considerations of being, seem to have been primarily proposed, that this exercise of body and mind may be carried on.

It would seem, therefore, criminal in the extreme, for the physician to send away the delicate patient, with the advice that he needs only a voyage at sea or hard work upon a farm to regain his health—abandoning home comforts, mental interest and companionship and all for the sake of air and exercise; just as though a man could not walk the streets of a healthy seaboard city, as well as the roads of a dusty town or the deck of an ocean steamer. The unsophisticated or even unreasonable patient, is told to effect a metamorphosis of material, when the necessities of new tissue are neither presented to nor assimilated by his disordered organism.

There are, of course, specific diseases which may be benefited by the strong air of the open sea, but these are not the indications of the ordinary dyspeptic; and exercise is seldom of itself the corrective. The man would better have been unadvised, than to be shamed into some unnecessary extreme. By far too many a delicate child, even, has been directly killed from its having been made to work hard that it might become strong.

Expansive exercise, then, can only be in proportion to the ingested material, and such exercises as may be sustained in desirable temperatures—elevating, however, the desires as rapidly as possible—are simply determinative of the amount of health enjoyed. The fuller the conditions of health, the greater the capacity to sustain cold, or mental and physical activity. Gardening and general activity in the conntry are, however, good exercises for the convalescent, bringing, as they do, the various parts of the body into action in a pure atmosphere, but only as adaptable to the strength of the invalid; and it is for this reason that farm life is indicated especially for the dyspeptic. It can only be valuable, however, as far as it may be well borne, without overworking the invalid; and diet and appropriate medical assistance are paramount.

WATER.

A glass of water is desired by many for drink upon arising; but this want is better supplied by the warm breakfast drink, which, either by itself or augmented by some simple dish, should constitute the morning meal.

In general, when other habits are well regulated, the needs of the body indicate by natural thirst the proper use of water as a drink; and in the full diet, where some warm drink, as coffee or tea, is taken in the morning, and tea or wine with water and soups and vegetables, with other aqueous food, are taken at the principal meals, little other drink is required.

This requirement is, however, in general supplied by the incidental beverages of the season—syrups, or sugar with water, water-ices, beers, light wines and punches, soda or mineral water, etc.; for it is often desirable to use some agent with water strongly alkaline, as in some localities. Although by first boiling hard water and cooling it for drinking, it may be purified; and water impregnated with organic matters should be filtered.

As regards bathing, it is invigorating as well as cleanly to wash the whole body with water of a tonic temperature; but as there are comparatively few persons who manage to sustain otherwise sufficiently healthful habits to warrant frequent bathing, it can scarcely be considered a health habit. Some general ablution to fortify the skin must, however, be considered an important adjunct to ultimate success in sustaining the round of enjoyable health. At the least, the head and hands are daily refreshed by delicate persons, and an occasional full bath or foot bath is taken for general purposes. In this connection it is important to remember that no full bath of importance, excepting perhaps some vapor and medicated baths—taken upon full stomachs—should be taken immediately before, nor sooner than two hours after a substantial meal.

When taken only occasionally the full warm bath is a delightful luxury; the cool bath is, however, none the less a luxury, taken within the power of the bather to react, and so taken, is best applied of a temperature varying according to the person, between 60° and 85° F. as a tonic wash, immediately upon arising. Where a large tub may not be at hand, a general immersion may be obtained by squatting in a sitz-tub (partly filled with water and left standing in the room over night) and sousing one's self with a large sponge. But, as before remarked, there are comparatively few persons, who, building themselves gradually up by active pursuits and appropriate diet, are enabled to derive harmonious results from the cold morning bath. For this habit, while being most appropriate to the summer season, is then only to be advised when relished, the bather experiencing decidedly invigorating effects. So sustained, it is beneficial; and the power to utilize the sponge bath, is thus evidence of an active condition of the health in general. But such as are unable to fully utilize this very tonic regimen, may derive benefit from the full tepid bath.

Such bathing is, in general, tonic, and it is most advantageously utilized early in the day—better upon arising; and whatever be the temperature or form of this tonic ablution best suited to the idiosyncrasy of the individual, the effort should be made to direct this habit in harmony with the life led.

When it is considered that the excretory function of the skin is three-fifths as compared with two-fifths of the internal organs combined, the importance of not injuring the skin by unwise bathing is manifest.

In general terms, therefore, it must be patent that the patient is his own best guide to the use of the daily or occasional bath; whether it be a cold or tepid sponge, shower or full bath, or simply a rubbing from head downward with wet hands, or only a head and hand wash. As much of this tonic bathing as is taken with pleasurable effects is beneficial; but if, on the contrary, it shocks or is productive of persistent chilliness or other unpleasant result, as headache, it is more or less pernicious. The form of the bath had better be changed in some manner, or be deferred until the more vital difficulties are corrected or be associated with such correction.

Too much bathing not only over exerts the skin, but, denuding it of its natural oil and filmy scales, exposes the superficial nerves and renders the system susceptible to cold.

Dry friction with gloves or brushes may be some times substituted to advantage; and the wearing of woolen or merino underclothing, serves as a continual skin tonic, and is usually an essential consideration of these latitudes.

The enema, vapor baths, and other uses of water, will be considered in Part II. as assistants to health habits.

ABOU BEN ADHEM AND THE ANGEL.

Abou Ben Adhem (may his tribe increase)
Awoke one night from a deep dream of peace,
And saw within the moonlight in his room,
Making it rich and like a lily in bloom,
An angel writing in a book of gold:—
Exceeding peace had made Ben Adhem bold,
And to the presence in the room he said:
"What writest thou?" The vision raised its head,
And with a look made all of sweet accord,
Answered; "The names of those who love the Lord."
"And is mine one?" said Abou. "Nay, not so,"
Replied the angel. Abou spoke more low,
But cheerily still, and said: "I pray thee, then,
Write me as one that loves his fellow-men."
The angel wrote and vanished. The next night
It came again with a great wakening light,
And showed the names who love of God had blessed.
And lo! Ben Adhem's name led all the rest.

LEIGH HUNT.

BEHIND THE MASK.

Oliver Wendell Holmes, in his "Autocrat of the Breakfast-Table," says that in a conversation between Jack and Tom three individuals take part on either side, namely:

1.—The real Jack, known only to his Creator;

2.—The Jack, not at all like him, and only known to himself, and

3.—The Jack, quite different from either and not at all more like the real Jack than the second;

and conversely that there are three Toms on the other side.

The author thus puts into a familiar form the problem of the complex nature of our personal individuality; a problem which must have presented itself to many who have never perplexed themselves with the study of metaphysical subtleties. In truth it is not to the student and philosopher only that this complexity of our subjective existence offers itself as an enigma; the man of action even in his most occupied moments, must ever and anon be haunted by the thought:

> "Is this acting, working being my true self? Is there no under the guise of this eidolon, as it appears to me and to others, a still more subtle essence that directs the movements of both the one and the other?"

Few can have escaped this sensation, unless it be those whose minds have never been matured to analytic thought; it comes on us like a flash in the busiest moments as well as in hours of reflection and self-contemplation, and attains greater force in the former case from the contrasted light in which it shows our real and our apparent self. The conventionalities of civilization and society, by accustoming us to conceal our real thoughts and emotions even from our familiar friends, and still more from the world at large, have further contributed to this effect; we habituate ourselves under all circunstances to show the same mask to the world, until we are almost oblivious that it is assumed only, and are well-nigh incapable of putting it aside. While all is well with us we do not so closely mark this; when any heavy trouble or annoyance is on us we realise its full weight. We go, it may be, into society, and our friends see us as they have ever been accustomed to see us; yet we are sensible of the fox under our cloak, and cannot but reflect that similarly the vulture of Prometheus is ever present to those around us. When we and our friends are thus outwardly gay and indifferent, are we each thinking—Is this I? and we each know that it is not so. But habit and custom are all-powerful, and we cannot lay aside the disguise for a moment, however conscious we may be of its existence. When we are again alone this levity appears incomprehensible to us,—but now again we see ourselves in a new light, and say—That was not I, nor is this I that am almost vexed at myself for being so hypocritically light-hearted when I was really sad; this sorrow does not affect my real self which is still more deeply hidden, and cannot be touched by any external circumstances of my life.

The late W. Gifford Palgrave in his Oriental tale, Herrmann Agha, cleverly puts into the mouth of his hero this conflicting state of the mind. He is watching anxiously the approach of some Arabs at whose hands his life would be immediately sacrificed did they but discover his identity, while he is in perplexity about his lost lady-love, and he says—

> "I had even coolness and reflection enough at the time to wonder at my ownself, divided it seemed into two persons, one of whom was talking with and listening to my fellow-riders, the other lost in thought and anxiety and far away. I might have added to these a third person, namely my own conscious and individual self, commenting on the other two, and interested in, I had almost said, amused, by their performance."

In Bulwer's "Kenelm Chillingley," there is a passage to the same effect:

> "Do you then feel, as I often do, that there is a second, possibly a native self, deep hid beneath the self—not merely what we show to the world is common (that may be merely a mask) but the self that we ordinarily accept even when in solitude as our own; an inner, innermost self; oh, so different, and so rarely coming forth from its hiding-place; asserting its rights of sovereignty and putting out the other self as the sun puts out a star?"

George Elliot, in "Middlemarch," has a passage somewhat to the same effect, though recognising a dual division only.

> "Strange that some of us with quick alternate vision, see beyond our infatuation, and even while we rave on the heights, behold the wide plain where our persistent self pauses and awaits us."

It is perhaps singular that the author of this last passage, distinguished as she was in the delineation of character and the springs of action, should have given in the above passage an incomplete account of this complexity of our being. The first quoted author, though his tale is one of action and incident, furnishes a far more accurate analysis.

Lastly a passage may be given from an author more modern than any of those above quoted. Zola, in his recent work "La Débacle," describes the panic-stricken retreat of a division of the French army. He paints vividly the sufferings of one of his characters under the physical distress caused by hunger, heat, and the burden of his equipment; but he says:

> "He was still more tormented by the death throes of his moral being in one of those crises of despair to which he was subject. Suddenly, without power of resistance, he found himself looking on at the ruin of his will-power, he fell into the vile instincts and self-abandonment which the next moment overwhelmed him with shame. In Paris his faults had never been more than the faults of what he called "that other fellow"—that weak youth which he became in moments of cowardice, capable of the worst villainies."

What is, then, the solution of this mystery, which we each carry about in us, and how are we to reconcile it with the uniformity of action which results

from this complexity of mental process? There does not appear to be any other answer than this, that the calmer being, who is only now and then distinguishable to us, standing aloof from the excitement either of pleasure or pain, is our real self, whom we have accustomed ourselves unconsciously to thrust aside and ignore, while we deliberately and consciously conceal from the world even that disguised and distorted image of ourselves which we have almost trained ourselves to accept as our true self. There can, however, be no more convincing proof of the immortality of the soul than is furnished by this vision of ourselves dimly seen through the veil of our outward selves, and the more we habituate ourselves to such self-contemplation the more readily shall we be able to estimate at their true value the troubles and vexations which otherwise at times would tempt us to despair, and to say that in very truth all is vanity.

REMEDIES FOR DRUNKENNESS.

If we would revert the backward tendency of the effects of alcohol we must not deal with the effects but with the causes. Time and again we are confronted with lists of figures, supposedly statistics, which, while showing an increase as regards intemperance, is carelessly glanced over, and there it ends. Many communities have dealt with it in as many different ways, with very partial success or no success whatever. Isolation, restriction, local option, high revenues imposed by the community for the sale of alcohol, full legal command of the traffic, and so forth, have all been tried, but still the effects are meagerly counteracted. In Scotland an agitation has been begun to isolate the dipsomaniac to the Island of St. Kilda. In England, as well as in America, homes in which different kinds of treatment are resorted to has been of little use in thwarting this communal poison. In all European countries there is some sort of method to deal with this question, but without notable results. The various States of America deal with it according to the inclination of the majority. The latest departure is in South Carolina, where a law came into force on January 2d, 1893, which provides that at a salary of $1,800 a State dispenser is appointed by the Governor. He has the control of the traffic, and all liquors are purchased and dispensed by him. Of course he has the appointment of sub-deputies for the different counties and districts, and to see that they do their duty there is a board of control, consisting of three persons. The profits, after paying all expenses of the county dispensary, are divided equally between the county treasury and the municipal corporation where the dispensary is located, and the settlements are made monthly. This experiment will be watched with some interest by the Prohibitionists. But this attempt to regulate the liquor traffic does not necessarily affect in any way the excessive drinker, and there seems to be some difficulty in doing so. Again, the establishment of homes by governmental bodies for diseases—such as epilepsy—which are only too often the direct results of alcoholism, while humane, does not end their duties in this connection. While such corporate bodies must accept the situation as it is, it must not be lost sight of that they are dealing not with causes but effects, and it is questionable if the grouping together of such persons is advisable. Almshouses and kindred institutes should be temporary not permanent, but they are with us because we entirely ignore the cause of the effect. Bureaus of health should be established where disease in all its forms should not only be treated, but the cause should be thoroughly investigated and removed. The stuff sold across the bar, as well as bread, should be up to a standard of quality under a heavy penalty. Labor should be so controlled that nature's rest would be sufficient for recuperation, and the laborer's environment should be attended to. Our legislators should have some scientific education, and should not be of the saloon-money-partisan-parasite species, depending upon a besotten vote for their living. Humanity rests at the alleviation of suffering, and so far so good, but we must go further; we must do away with the cause of that suffering so as not to have a repetition. This is Humanitarian.

It is the common practice at the Swiss hotels to print the official notices in English. The following is taken from the wine list of a hotel at the top of Rigi: "In this hotel the wine leaves the traveler nothing to hope for." Such a statement is not likely to produce the effect intended.

A true bill was returned by the Grand Jury at the Kent (England) Assizes against a man for feloniously wounding, with intent to murder, two young ladies. Upon the case being called, the medical officer of the goal gave evidence to the effect that the prisoner, since his removal to prison, had had five *epileptic fits*, and that at the present time he was not in a fit state to understand the nature of an oath. Other experts also gave it as their opinion that prisoner was insane. Judgment given accordingly. If this prisoner's case was inquired into, the hereditary weakness here shown would probably be one of drink. It is beyond doubt that an epileptic is the result of parental drunkenness in very many cases.

DARE TO DO WHAT'S RIGHT.

When right and wrong contending rise
For mastery in the fight,
Choose thou for God and Truth ;—despise
The coward's refuge of lies,
And dare to do what's right.

Trust thou in God, and face the foe,
However fierce and strong ;
Nor be deceived by spurious show,
But, brave in spirit, answer No !
When tempted to do wrong.

'Tis only he is true and brave
Who dares for good to fight ;
While he's to craven fear, a slave,
And worthy of a coward's grave,
Who dares not do what's right.

The angel hosts are looking down ;
Be valiant, then, and strong ;
Resolve, despite man's sneer or frown,
In life's arena of renown,
That right *shall* conquer wrong.

RECENT SCIENCE.

The following will illustrate to our readers the results of the most recent investigations into heredity :

Weismann's work has exercised a considerable influence on biologists, especially in this country ; he has fervent admirers in England. His essays were admirably written and eminently suggestive ; they touched upon a quite novel subject ; they embodied the results of capital anatomical works, hardly known a few years ago to the biologist ; and his theory of heredity appeared very acceptable in its substantial parts. But when the first impression is gone, and we calmly consult the anatomical works themselves upon which Weismann's generalizations are based, and see that those who have themselves studied the phenomena of heredity under the microscope came to very different conclusions, we are besieged by doubts.

So long as Weismann simply maintains the continuity of the germ-plasm, and shows us how elements derived from two lines of ancestors mix together to produce the individual ; so long as he thus elaborates a working hypothesis of heredity which explains the tenacity of racial characters, he stands on firm ground. But does the germ-plasm really lead the isolated life—the "enchanted life of isolation," as Geddes says—which Weismann claims for it ? Those anatomists at least whose work is at the basis of Weismann's hypothesis have *not* seen proofs of this isolated life, and some of them simply deny it. A few years ago, when the wonderful reproductive phenomena in the nucleus became known, there was a tendency to exaggerate its importance. But now that the protoplasm which surrounds the nucleus is closely studied in its turn, the part which it takes in the phenomena of fecundation becomes more and more apparent—and living protoplasm cannot lead that isolated life : it must stand in contact with the protoplasm of the whole body.

Maupas, who by studies of conjugation in Infusoria has thrown so much light on the whole question, insists on the important part played by the surrounding protoplasm. He shows how the nucleolus grows before conjugation, increasing its volume eight times, and he points out that it is the surrounding protoplasm which penetrates into it in a liquid state, builds it up, and takes away the useless elements. Max Verworn, another authority in the matter, in a work devoted to a general review of the question, insists upon the intimate relation between the nucleus and the cell-plasm. The latter is as important as the former ; both stand in the closest relation. The brothers Hertwig, in a series of recent works, come round to the same views as to the interdependence between the nuclear and the extra-nuclear plasm ; they consider both nucleus and cytoplasm as centres of reproductive activity ; and I hardly need add that Flemming and Guignard, who have brought into prominence the part taken in fertilization by the "central bodies" originating in the protoplasm, are quite opposed to the exaggerated importance which was attributed a few years ago to the nucleus. In short, if during the years 1880–1887 there was a tendency to attribute to the nucleus a predominant part in reproduction—which tendency culminated in Weismann's theory of isolated germ-plasm—the discovery of Van Beneden of the "central bodies" within the protoplasm (in 1887) has shaken this view, the tendency now being to consider both cytoplasm and nucleoplasm as the bearers of the hereditary dispositions.

Not only upon this special point, but altogether the views upon the mechanism of heredity have undergone such a modification during the last five years, that a new and deeper hypothesis of "Intracellular Pangenesis," which is advocated by the Dutch botanist De Vries and bears some likeness to Darwin's "Pangenesis," has already obtained many suffrages. We saw how the nucleus behaves during fertilization. It behaves like a separate organism, and it really is an organism in itself, which

grows, subdivides, and produces new nuclei. Now, De Vries claims the same independence for all constituent parts of the cells, and he supports his claims by a series of quite novel observations. Thus, chlorophyll-grains were formerly considered as arising from protoplasm. But Schmitz has proved in 1882, and his conclusions are confirmed by Weiss, that partition is the only way in which chromatophores originate in algæ. There is no spontaneous generation of chromatophores, and in order to multiply, they must have been transmitted as such from the parents. Working in the same direction upon the colorless organs of the young cells which generate starch, Schimper found that these organs of the cell also multiply only by subdivision, and Arthur Meyer's later observations confirm his views. The same is true of the vacuoles which we see under the microscope within the protoplasm. They are not spaces filled with water, as we were taught for a long time, but they are surrounded by a *living* wall and are independent organisms, or organs of the protoplasm, which also multiply by subdivision, as proved by De Vries and confirmed by F. Went. These discoveries entirely change the previous position. While it was supposed until now that the phenomena which go on in the nucleus are something specific to it, it now appears that all the constituent parts of the cell—vacuoles, chlorophyll-grains, starch-producing spots, &c.—also are separate, independent organisms, and undergo the same divisions. It is even probable, though not yet fully proved, that the exterior membrane of the cell, the plasm of the nucleus, and even the special oil-producing spots of protoplasm, belong to the same category. The protoplasm of the cell is thus a compound organism, a colony. De Vries proposes, therefore, to give the name of *protoplast* to the *ensemble* of the cell, and of *pangenes* to its different organs: chromatophores, vacuoles, and so on.

In De Vries' theory, the hereditary transmission, of organization is effected through the transmission, not of the nuclei alone, but also of all 'pangenes;' and the countless possible combinations of these relatively few independent elements of heredity produce the countless multitude of variations and individual forms. The pangenes grow in the offspring like separate organisms; they multiply, and during the partition of the cells they must be distributed over the whole of the body. As to the nucleus and the protoplasm which surrounds it (cytoplasm), they are both built of the same pangenes which are dormant in the former and active in the growing body-cells. More than that, nucleus and cytoplasm stand in a real intercourse through very slow currents of transports which are visible under the microscope, if their slowness only be taken into account. And Tagl, Russow, and many others have shown the direct connection between the protoplasm of neighboring cells which is established through the fine orifices of the cell-walls. Heredity, De Vries says, is a function of the nucleus, and evolution is a function of the cytoplasm, the two taking their own separate lines of development. But we must abandon the idea of summing up this extremely interesting but too technical part of the theory, which deals with the two lines of development of the nucleus and the other pangenes, and their possible relations. It is sufficient to say that, leaving aside for the time being the other theories of heredity which have recently been advocated, discovery goes on so rapidly in this domain that we certainly are not yet in possession of a theory of heredity which could have a serious bearing upon researches in evolution. Microscopical anatomy is evidently making but the first steps for constructing such a theory, and cannot yet have a decisive voice in the great fundamental question of biology.

As to Weismann's criticism of the theory of transmission of hereditary characters, it is known that he has submitted to a sharp criticism the chief facts which had previously been quoted in support of the transmission, and he has shown that some of the alleged facts were not proved at all, while others could receive a different interpretation. He has certainly confirmed naturalists in their idea that superficial scars and mutilations are seldom transmitted. But he has failed to bring round most naturalists to his opinions; and when H. F. Osborn, before delivering his remarkable lectures on *The Difficulties in the Heredity Theory*, tried to ascertain, partly by correspondence, what are the opinions of the most prominent biologists in Europe and America upon this subject, he found them as equally divided on both sides as they were before. The question remains unsettled from want of direct experiment. True that Weismann has bred white mice, clipping their tails off for five consecutive generations, without obtaining mice either tailless or with abnormal tails. But he himself recognizes that this experiment is of no avail; under his own hypothesis it ought to be continued for a longer time. And our ignorance of the whole subject is such that, when we learn from a letter addressed to Osborn by Dr. C. E. Lockwood, that he has obtained tailless mice after clipping the tails in seven generations, we have no reason, either experimental or theoretical, for disbelieving the accuracy of the statement. We only must recognize that Foster was quite right in maintaining that the whole question must be taken in hand by physiologists. From them it surely would receive a definite solution.—*Prince Krapotkine, in the Nineteenth Century.*