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i me THE HUMANITARIAN for one year beginning with the

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nothing. This, if it be true, is the result of improved sanitary arrangements, and the marvellous advance in the science of medicine, and not the result of increased inherent vitality.

If vitality be measured by the power of endurance, it might be proved to have decreased. It is puerile to be content if the returns of this or that asylum do not show that the increase in the latest decade, as compared with some previous . . .

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amp was in s no reason 'hy trouble and crime : and more t is needed. or vile but pout them; for a time ' the life of y of "God es and his

i prayer is to ridicule, striving for se are they intain that ceeping up of diseases cently and on. These

are the individuals who assert that every proposal made by those not incrusted with their selfishness is not an appeal on behalf of the poor and ignorant so much as a bid for mere selfaggrandisement. Above all things it is necessary to have absolute truth on vital statistics. Hence, we maintain that a humanitarian government would place these questions without delay scientifically before the public. It would estab-



lish a test of excellence, and thus it would be able to judge how large a number fell below this standard, and to what degree they are in defect. Beside the mere fact of settling beyond dispute many vital questions, a humanitarian government by establishing such a standard would do more to arouse and educate public opinion on vital subjects than any amount of academic teaching.

Many who have not read the earlier numbers of the HUMANITARIAN have written to say that while entirely agreeing with us as to the evils which are prevalent, they wish to know what is the remedy, or remedies, that we propose. We can only repeat that financial independence for women, greater and more widespread intelligence on vital subjects, scientific propagation, and humanitarian government are the remedies.

There is no greater check to progress than that woman should be obliged to procure her livelihood by trading on her sex, whether by way of marriage for mercenary considerations, or by yet more degrading expedients. The manifold evils to the home and to the individual which follow from such dependence are sapping the vitality of the race.

To ignorance on vital subjects is due a large part of the misery and degradation of invididuals. "If I had only known," is the heart-wail of many a poor soul. A knowledge of consequences is a check upon actions which wreck body and soul alike. How often is not the mother responsible for the dwarfed intellect and rash conduct of a young girl: she neglected to teach and train her child so that she would have been physically and mentally superior. Looking a little deeper into the subject, we find that the mother herself, too, was ignorant, and in turn could reproach her own mother with like neglect. Many miserable mothers have turned and cursed those who have allowed them in ignorance to produce unworthy offspring. Many a man, endowed by nature with superior advantages, has, through ignorance, become a physical wreck. Probably, when he was sent out into the world, his father let him take his chance, as he himself had done.

Could the life-histories be written of those who have been left to take their chance, it would unfold such a tale of horror that the very stoutest heart would quail. A man or woman who walks into a pitfall with no knowledge of its existence, is not to blame; but a man or woman who deliberately walks there knowing the danger, rightly suffers the consequences. This is why we have urged that the elementary laws governing our being should be taught to boys and girls alike ; and have maintained that such laws, intelligently directed, would stamp out disease and vice, and produce a race superior in every quality to any that have gone before. Girls and boys may study the laws and forces which cause the dew to fall upon the parched grass, the clouds to gather and crash, the earth to turn round on its axis, the forces of chemical attraction and repulsion, in short, anything and everything which deals with the natural laws of the world around them. So evident are these laws, that the most superficial observer is able to see their action. How inconsistent are they who discuss openly the breeding of choice animals, but blush at the mere mention that these same laws govern their own breeding. Where constitutional defects are most prominent in the parents, there we find the offspring similarly afflicted. By tracing the pedigrees of sire and dam, the characters which the progeny will possess can be foretold. Where it has been desired to stamp out any defects, there all animals who were predisposed to such defects, have been rejected for breeding purposes. If we desire to stamp out constitutional defects, and to have a superior race of men, the radical remedy is to exclude the unfit from breeding. Hence, how such exclusion can best be accomplished becomes the all-important problem.

We do not lose sight of the conditions which make persons unfit when we say that the continuance of the race should be left to the strongest and healthiest; we do not forget the favourable conditions which make individuals the strongest and healthiest.

In breeding superior horses, it is said that good food must be given to the mare, also that impure air, over-crowded stables, or close confinement must be avoided, or the foal will suffer. The mare must be kept in the best possible condition of health and vigour; she must not be over-worked during pregnancy if a superior foal is to be produced. What must be the effect of impure air, over-crowded rooms, close confinement, and unscientific feeding on the child of the half-starved human mother?

Not forgetting the influences which produce the unfit, we assert that the methods by which unworthy individuals may be excluded from breeding are :—

1. Individual feeling of duty strengthened by educating men and women to the responsibility of becoming parents.

2. To educate public opinion on every possible

occasion on the importance of intelligent breeding until there is a reaction in public sentiment against the crime of perpetuating infirmities.

3. Absolute isolation from society of irresponsible or unfit individuals.

4. Extermination of infantile monstrosities.

5. To establish a high ideal by placing premiums on superior qualities.

If we wish to improve the race, we must do away with false standards of value, such as the possession of money, fictitious patents of nobility, or other inducements which determine modern marriages, but have no real value to breeding *per se.* Who would match horses because their stables were particularly fine, or because they had handsomer and finer clothing than those worn by other horses? They would be matched for the merits which they were known to possess as horses. Similarly in the human race we must establish standards of individual merit which will be transmitted to offspring.

Anyone who is deficient in the qualities on which a premium is placed must be rejected as a partner. Thus whoever proved defective would be avoided as a parent. What kind of children do you want? To have a well-defined purpose in your mind and to select according to that purpose would solve the social problem.

Legislation, forbidding diseased, weak-minded, criminal, or insane persons from going through the legal ceremony of marriage would be useless; they would marry without the legal ceremony. It is only by proper incentives, high ideals, and a more extensive knowledge of physiology, that we shall be able to exterminate diseases and mental defects. It is only by creating a desire to arrive at physical and psychical perfection by placing a premium on superior qualities that the progressive elevation of humanity can be accomplished. Legislation, however, could more effectually aid in scientific propagation, than by forbidding unfit A and B from perpetuating their kind. One of the conditions in procuring a marriage licence should be that the contracting parties have some knowledge of physiology, while a description of the occupation and physical condition of the parents of the contracting parties should be given. And when a child is registered, a similar description by government physicians should be Coming generations would thus be made. benefited. By this means scientific data could be accumulated which would be of immense value in improving the race.

A visit to any Hospital or Infirmary must excite

a feeling of indignation that a community should be so negligent of its duties to itself. At a vast expense these great buildings are kept up, under the care of able-bodied doctors and nurses. Two, and in some cases three, stand over an idiot child three or four months old : at another cot a nurse and a doctor are watching a child with a cleft palate and hare lip; two-thirds of the children in one ward are, and never can be, anything else than a burden and a tax on the State. It is an exhibition of the grossest ignorance on the part of those who are supposed to be charged with the public weal. Thousands of pounds are expended yearly on these monstrosities.

Under a humanitarian government, educated men and women would be employed in every district, parish, and borough, whose duty it would be to find out the physical and mental condition of every man, woman, and child, and to report the same to thoroughly trained officials at headquarters, so that the physical, mental, and moral condition of an entire community might be known almost at an hour's notice. An official gazette would regularly publish the reports from headquarters, so that the people of each district might know the condition of their surroundings as perfectly as they now do that of their own isolated homes. The Government would employ trained scientific teachers in all branches of education, whose business it would be to see that none remained ignorant on any subject pertaining to their mental, moral, or physical well-being. Trained nurses would teach every pregnant woman her duty to herself and her unborn child; and on the birth of each child, its physical condition should be duly reported. By such means there would be implanted in the parents a desire to have as perfect a physical representation of themselves as possible, and even so should there be born a monstrosity of any kind, the public would be in a position to investigate the condition of the parents, and to find out whether, when they demanded a licence to marry, they were both fit subjects for such a purpose. By so doing the people would be made to realize what are the causes to which they owe the ever-growing burden of taxation for the maintenance of the non-effective and useless members of the community.

A real aristocracy of blood, established as suggested in the first number of the HUMANITARIAN, would be an object lesson in heredity. Many can trace their pedigrees five or more generations, does this give them any title to our regard? No; the names showing descent are valueless unless they can show that superiority was transmitted with these titles. The thirteenth Earl of B or the eighteenth Duke of S indicate nothing unless the family or life history shows that the individual possesses some of the qualities which gave the first the right to be deemed superior to his fellow kind.

A distinguished Austrian, being contemptuously treated by the so-called nobility, said: "I am the *founder* of a family, you are descendants." A title should represent superiority of the individual, and if the title does not represent such superiority it is of no value. A real aristocracy of blood, the real fittest, would be determined, as we have said before, by the consensus of the very best opinion. Whereas every man or every woman thinks to-day that he or she is the very person who ought to perpetuate the race, the world wouldsoon learn in what way they are deficient. Better have no pedigree than be the degenerate descendant of a line of kings.

# A REMINISCENCE. 24th March, 1893.

#### "Truth is unwelcome, however divine."-Comper.

WHEN I entered St. James's Hall on the 24th of March, 1893, to hear Victoria Woodhull lecture, I did not feel particularly amiable towards those friends who had persuaded me to accompany them, and was anticipating a dull, uninteresting evening. I knew that there are too many people in the world of the wrong sort, but supposed that as it has been in the past, so it must needs be in the future ; and I did not feel much in sympathy with the lady who was going to give the discourse. But, after I had listened awhile to Victoria Woodhull's eloquent address on the evils resulting from the rapid multiplication of the unfit in our great cities, and imprudent marriages everywhere, I became interested, and a new light seemed to dawn upon me; I learned that remedies for these evils were not absolutely impracticable; and when this clever lady's lecture was over, I felt that, had I missed hearing it, it would have been greatly my loss.

In the go-ahead days of this present moneygrubbing time, parents seek and hope to get their children what they call "well married." Rich men are desired for the daughters, and wellportioned wives for the self-indulgent sons; what evil dispositions of body or mind, what hereditary weaknesses and diseases may have been handed down from the great-grandfather to the heiress, or from previous ancestors to the wealthy *parti*, are never thought of or taken into consideration. Indeed, I doubt if the previous generations are ever remembered at all, excepting for the property that may have descended from them; the taint in the blood that has inevitably accompanied the descent, and been handed down from generation to generation, is never thought about or discussed.

I doubt if many in the vast assemblage that gathered together in St. James's Hall that evening are as yet educated up to Victoria Woodhull's views : many would doubtless describe them as "simply shocking," or "positively indecent, vou know." The clever common sense displayed in the lecture would be above their heads; in fact, Victoria Woodhull Biddulph Martin is still half a century in advance of her time. If her ideas could be carried out in their entirety, what a different world this would be ! Life might then be indeed worth living ! Good men, and happy wives and children would then be the rule, and most of the wickedness and misery of the present age would be abolished. If we could walk out and see none of the squalid wretchedness that now abounds ; if there were to be seen in the streets and allevs no more old, drawn faces of half starved and often semi-intoxicated children, made so by virtue of the nature born in them, and the evil tendencies transmitted to them by their parents; if the lunatic asylum and epileptic home were practically things of the past, being no longer required for a healthily born and cleanly living generation ; if the gaol inmates were reduced to an inconsiderable handful, the hereditary crime-taint having been stamped out; what heart-aches might not be saved ! For when we look with understanding upon the waifs and strays of humanity that now surround us on all sides, we perceive that it is not through their own default that they are cast into the world with the vices of the parents who begat them as their only heritage or birthright; and that their failings and crimes belong to the category of preventable evils.

That mankind at large will adopt Mrs. Biddulph Martin's theories, and carry them into practice as a whole, is doubtless too much to expect or hope for. But of a surety the day will come when the people will have learned to appreciate the practical value of her teachings, and when the laws will be formulated more in accordance with the needs of humanity than is the case in this semi-enlightened epoch. Probably when that day dawns, as she herself has said, her voice will be silent; but her name will live when her hearers of to-day have passed away and are forgotten. Would that I could go to sleep for a hundred years, and awake to find the world as she would have it ! The people free from the hereditary taint and predisposition towards drunkenness and licentiousness; crime, madness and profligacy the exceptions instead of everyday matters, unnoticed because of their commonness; and our streets no longer haunted by our fallen sisters!

Eiram Senga.

# AN INVOCATION IN AID OF A GREAT CAUSE.

Come forth from the valley, come forth from the hill,

Come forth from the workshop, the mine, and the mill,

From pleasure or slumber, from study or play,

Come forth in your myriads to aid us to-day :

There's a word to be spoken, a deed to be done, A truth to be utter'd, a cause to be won,

Come forth in your myriads, come forth every one !

Come, youth, in your vigour; come, men, in your prime;

Come, age, with experience fresh gather'd from time ;

Come, workers ! You're welcome; come, thinkers, you must,

Come thick as the clouds in the midsummer dust, Or the waves of the sea gleaming bright in the sun !

There's a truth to be told and a cause to be won, Come forth in your myriads, come forth every one !

Charles Mackay.

Discover what will destroy life, and you are a great man;—what will prolong it, and you are an impostor! Discover some invention in machinery that will make the rich more rich, and the poor more poor, and they will build you a statue. Discover some mystery in art that will equalise physical disparities, and they will pull down their own houses to stone you. Bulwer Lytton.

# MEDICAL DEPARTMENT.

## PRACTICAL DIETETICS.

QUITE different from the salts of fruits and meats, which, when extracted in soups and wines, become almost medicinal, is common salt; which seems to be the chief inorganic product, for which higher orders of animals have normal appetite. It enters immediately into the animalizing fluids, and takes a direct part in the digestive process, and is thus best utilized by being directly cooked with such food as requires its assistance in the assimilative function.

But while common salt (chloride of sodium) is the principal saline ingredient of the blood, other basic salts-insufficiently supplied in low diet-may need to be temporarily indicated by the physician. The Carbonates, the Phosphates and Sulphates of Sodium, Potassium, Lime, Iron, etc., which, after the Chlorides, entering most largely into the composition of the blood, become therefore natural remedies, when these may be utilized by the half-starved invalid. They are important remedies, but they do not enter frequently into the treatment of simple dyspepsia, and are, moreover, only to be administered under the scientific indications of such eyes as, detecting the necessities for these agents, are alone qualified to designate their application.

This must also be especially remarked concerning the use of salts of soda and cream tartar, and baking powders adulterated with ammonia, alum, etc., so rashly used in cooking. The common and habitual use of these medicinal elements of soda and potash in cooking is reprehensible. Very many of the green vegetables are doctored by the cook with soda, to make them appear more green. Soda is also used to render salt fish tender, and save the trouble of soaking it over night.

While spices, as pepper, mustard, etc., may hardly be classified as food, and are very irritating to some invalids, they are none the less sometimes useful aids to the utilization of the high diet, contingent upon other civilizing con-It is discovered that because of the ditions. irritating effects of dress and indoor life upon the skin, that a certain internal impression is essential to establish the equilibrium of the system. This is a principal illustration of the counter irritation which is applied in the treatment of especial maladies-various spices thus become in hot seasons valuable correctives to digestion, and of these red pepper is the most useful, and in some stomachic conditions should be freely adminis-

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tered with food as a carminative and general stimulant. In warm countries, spices constitute a very important part of the diet, but in these latitudes their use partakes more or less of the nature of appetizers, and, if needed at all, they are consequently better utilised at the beginning of the meal. But by many persons of irritable stomach, spices are not well borne, and are, of course, by these to be avoided.

Charles Stuart Welles.

The spirit world around this world of sense Floats like an atmosphere ; and everywhere Wafts through these earthly mists and vapours dense A vital breath of more ethereal air. Longfellow.

"I tell the tale as it was told to me. There had been a period of distress among the farmers, the oats had failed, the hay had been drowned by the weather and the floods, the cattle had had scarcely anything to eat, and there was something like starvation in the dales. The curate had collected a subscription in the lower country, and was himself taking about the money to the different farms, but the distances were so great that he was sometimes kept till quite late at night. One evening on his outward journey he suddenly became aware of a figure moving beside him, and in the gloaming he recognized his brother who had died some time before. He was too awe-struck for any words, and after keeping by his side for some distance over the lonely moor, the silent figure disappeared. He noted down the time and the vision, but nothing occurred to throw any light upon it. Some years after he had taken the duty at a goal in another part of the country, and one of the prisoners, being under sentence, desired to make a confession to him. He told a number of crimes, and ended with, 'I was very near once taking your life, sir. It was in that bad year, I heard as how you went carrying money about in those lonesome dales. I hid behind the big boulders on the brown moor, I seen you coming up, and waited till you should be near enough, but that night you were not alone.""

Verney's " In the Dales Sixty Years Since."

'Tis from high life high characters are drawn ; A saint in crape is twice a saint in lawn.

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Pope.

# PHILOSOPHICAL NOTES AND COMMENTS.

Strong beliefs win strong men and make them stronger. Bulwer Lytton.

The noblest employment of the mind is in the study of nature and truth. Aristotle.

\*\*\* Do not be quick to speak : say much by a modest and judicious silence.

St. Francis of Salis.

As regards most men, it is less dangerous to injure them than to put them under an obligation. La Rochefoucauld.

The greatest cowards of the present day are not to be found among the clergy, but within the pale of science itself. *Prof. Tyndall.* 

It is false to say that equality is a law of nature. Nature does not recognise equality. Her sovereign law is subordination and dependence. Vauvenargues.

How easy 'tis, when destiny proves kind, With full spread sails to run before the wind; But those that 'gainst stiff gales careering go, Must be at once resolved and skilful too.

Dryden.

Not a sound has ever ceased to vibrate through space; not a ripple has ever been lost upon the ocean. Much more is it true that not a true thought, nor a pure resolve, nor a loving act, has ever gone forth in vain. Robertson.

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Any human being, however humble or liable to error, may render an essential service to society by making, through a whole lifetime, a steady, uncompromising, dispassionate declaration of his convictions as they are matured.

Harriet Martineau.

I do not know what I may appear to the world, but to myself I seem to have been only like a boy, playing on the sea-shore, and diverting myself in now and then finding a smoother pebble, or a prettier shell than ordinary, while the great ocean of truth lay all undiscovered before me.

Sir Isaac Newton.

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#### SHAM SYMPATHY.

In the April number of the HUMANITARIAN there appeared an article on "Sympathy." Differing from several of the opinions therein expressed, I will briefly state my objections, and add thereto some views of my own on the subject in question.

The writer of the article says that sympathy is essentially a product of civilization, and that uncivilized man, incessantly labouring to sustain life, has no time for sentiment.

Both these propositions are essentially wrong. Civilization, instead of fostering sympathy, suppresses it; to show real sympathy with a deserving object is excessively vulgar. True, civilization produces plenty of sham sympathy. When a member of a royal house, or noble family, dies, the newspapers announce that the whole nation is plunged in grief, and that it deeply sympathizes with the relatives of the defunct. This is simply a preposterous falsehood. No one enjoys his dinner or drinks a glass of wine the less on that account, and if places of amusement are not shut by authority, they are as crowded on the day of the death which is said to plunge the nation into universal grief, as on any other day. Some great man is dangerously ill; crowds flock to the house to inquire as to how he is progressing; behold sympathy, I shall be told. Behold ridiculous vanity, I reply. The callers merely want to inscribe their names in a book kept for the purpose, and to be considered as belonging to the fashionable mob delighting in this ostentatious sympathy, and cases are not unknown of sympathetic ladies being greatly disappointed at the unexpected recovery of some illustrious moribund. It was disappointing, when they had already seen themselves arrayed in the most bewitching and aristocratic mourning!

I shall probably be reminded of the large contributions annually sent to charitable and benevolent societies as evincing a very practical sympathy with human misery and suffering. This sympathy certainly is an outcome of civilization, but not exactly in your contributor's sense. Canvassers for charitable subscriptions could, were it wise for them to do so, enlighten the public as to the impure sources whence, in many cases, such liberality flows. The successful speculator on the turf, about the most callous creature you can imagine; the self-made man, who by sweating, selling wooden cannon-balls, and brown paper boots, or other kinds of commercial trickery, careless as to how many people were ruined by it, has amassed a fortune, and many other persons of this stamp, are generous subscribers and donors to charity, not that they care one straw for the objects for which their contributions are invited, but, having become rich, they want to be civilized, that is to say, get into what is called highly-civilized society, and be considered the equals of the gentle families into whose midst they have intruded themselves. It may be mere vanity, either to obtain social influence for the furtherance of some pet fad of their own, or with an ultimate view to electioneering contingencies, or twenty other objects, having no tinge of sympathetic feeling in them, but the rich givers are credited with sympathy.

One of the most nauseous exhibitions of pseudo-sympathy is that indulged in by ladies and gentlemen who go to see charity school children at their annual grand dinner, as if they were so many wild beasts to be stared at at feeding time, or who, with impertinent curiosity, attend the distribution of doles to poor, aged people, many of whom may once have been in better positions, and must deeply feel the degradation of their being made a show. The ultra-fine folk, who are guilty of this vulgarity, never seem to realize that fact. This is an outcome of civilization, and not a creditable one.

Uncivilized man, says the author of the essay, incessantly labouring to sustain life, has no time for sentiment. Now the uncivilized or savage man, until the civilized bagman came to him, led a rather dolce far niente existence. He was, says our author, incessantly labouring to sustain life. How could he, when he knew nothing of wages and salary, and pay, commissions, perquisites, pot boilers and sweaters, contractors, concessionaires, betting and racing touts, bookmakers, promoters, contango, backwardation, distringas, jobbers, and bulls, and bears? The savage, even when living in an inhospitable clime, though, generally, he occupies the most favoured regions of the earth-with his bow and arrows, managed pretty well as to necessaries, whilst his women looked after his luxuries. In this latter respect, he certainly was lacking in that chivalry which distinguishes civilized man, where the oppression of woman is unknown, as little as in any incessant labouring to sustain life ! Is there no fierce struggle for bare existence among civilized nations? Is there universal sympathy wherever the Christian religion prevails? Is the companion who lags on the warpath not left to perish? This, at least, is what the author of "Sympathy" would have us

believe, if we follow his argument to its logical issue; yet we all know that civilization and Christianity have had totally different results, and that the sympathy they are supposed specially to foster, as a rule, is as much a sham as the letter writer's "very truly yours," or the pewrenter's, "Lord have mercy upon us."

What authority has the writer to say that "it is among highly-civilized communities only that sympathetic feelings are found"? The experience of travellers among savages proves these latter to have been as sympathetic among themselves, as Christians are supposed to be, until the white men corrupted, I mean civilized, them. One example is as good as many. Captain Cook, in speaking of the people of Otaheite, says that the women undergo the most excruciating tortures from their own hands on the death of relatives; that the natives treated his own countrymen, after prejudices from novelty had subsided, generously and courteously; that a native who, for the theft of a hatchet from one of the ships, had for a short time been made a prisoner, was, on his release, received by his countrymen with the loudest acclamations, and carried off in triumph to the woods. Did not all these actions spring from sympathetic feelings? And yet the Otaheitans, according to our notions, were not civilized, much less highly civilized.

I agree with the author when he says that the sentiment [of sympathy] is very illogical, and that the course of human nature is as much regulated by the dictates of the emotional as of the reasoning faculties. I should say much more so, hence the constantly recurring instances of misplaced sympathy indulged in by the public. We find fault with the Italians who, when a man has stabbed, perhaps killed, another, and is obliged to fly from justice, sympathize not with the victim, but with the assassin, who is sympathetically spoken of as the poveretto; the man wounded, or slain, is not thought of. Are we any more just or logical? Some thirty years ago, one Müller, murdered, in a railway train, a Mr. Briggs, robbed him of a triffing sum, and, after making his escape from the train, took a passage in a sailing ship bound for America. But before his arrival there he was intercepted, brought back to this country, put on his trial, found guilty, and in due course hanged. I well remember a young lady, as gentle a creature as ever lived, who would save a fly from drowning, expressing to me her regret at the verdict of guilty. To her he was simply a poveretto, who had been cruelly hunted across the Atlantic, in order to be hanged

here. And she simply represented the sympathy widely felt for the villain, which culminated in a deputation of gentlemen (?) waiting on the widow of the murdered man to ask her to intercede with the Queen to extend her royal mercy to the assassin. Are we more logical in our sympathy now? It is but a few months ago that Government granted a week's reprieve to one of the most diabolical poisoners who ever disgraced the world. Luckily, the fiend was finally hanged. The sympathy shown by the public and the press for lady thieves, forgers and poisoners; for gentlemanly swindlers, who, knowing they are bankrupt, yet invite trusting and ignorant people to deposit their lives' savings with them, to the ruin of thousands; for fraudulent trustees; for sanctimonious philanthropists; for crafty parsons, cunning company-mongers, deceitful patentees, and similar vermin, is not a healthy sign of the morality of the present time, but it is the sympathy now prevailing. There are thousands of girls, working hard to keep themselves, and perhaps maintain aged parents, or helpless brothers and sisters, and no one practically sympathizes with them; but let a young woman give way to evil courses, and at last, commit some act which brings her within the meshes of the law, and no end of philanthropic ladies and gentlemen rush forward, ready to receive and provide for her. The most worthless member of a family is the one most sympathized with, for whom the greatest sacrifices are made, for whose salvation all the other members of the family must be victimized. This is the sympathy of civilization !

C. W. Heckethorn.

#### THE PHILOSOPHER'S STONE.

WITH regard to the familiar legend itself, its history takes us back to the very remotest antiquity. Of course, to call it legendary is to use what Archbishop Whately termed a "questionbegging epithet." Certainly, if we are to judge by the received Vincentian maxim, quod semper, quod ubique, quod ab omnibus, etc., this would show itself as no legend at all, but at the very least as a latent truth. It answers, in fact, to two primary and innocent desires of humanity, namely, the aspiration for long life and for adequate means of sustaining that life. If, as theologians sometimes argue, the strong desire for immortality proves immortality to be attainable, there is

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something like a foregone conclusion as to the truth of this doctrine. The theologian makes it a portion of what has been termed "other worldliness," while the alchemist holds that it can be realised in this world. Life, health, and wealth can be compassed by those who know and put in practice the secret doctrine.

That doctrine found its way into Europe through the Arabs, who, in their turn, traced it back to Egypt, the land of Hermes, whence it has always been termed the Hermetic Mystery. We are also told that it existed in China many thousands of years before the Christian Era, under the title of "The Water of Immortality." The Philosopher's Stone and the Elixir Vitæ are, no doubt, fundamentally the same. Mere life without means of sustaining it would be no blessing, but might easily be a curse.

So far back as 1317, Pope John XXII. issued a bull condemning to perpetual imprisonment those who practised the transmutation of metals. It is not only churches that thrive by persecution; by the end of the century in which that bull was fulminated, our Henry IV. addressed letters patent to the professors, nobles, and *priests*, inciting them to prosecute the search after the Philosopher's Stone as a means of enabling him to pay off the debt of the state—the National Debt of the period.

Passing over as incapable of proof or disproof the theory that the translation of Enoch is, in fact, an incident in the Hermetic Science, it is at least curious that the Bible makes so prominent a feature of longevity in its records of patriarchal life. The metallic work of Tubal-cain is said to have been laid down on the lines of transmutation. The Golden Calf and its destruction by Moses are each assigned to the Hermetic Art which he had acquired in Egypt; and Lord Bacon himself, the father of inductive science, speaking of the art of transmutation with special reference to Paracelsus, went so far as to say "The work itself I judge to be possible, for we conceive that a perfect good concoction, or digestion, or maturation of some metals will produce gold." (Nat. Hist. Vol. iv.).

Keeping in mind, then, the fact that the object of this quest was twofold, one to convert metals into gold, and the other to protract indefinitely the period of human life, it is worth while to glance at the theory on which the idea was based.

"The perfection of every art properly so called," says Paracelsus, "requires a new birth, as that which thou sowest is not quickened except it die; but here death is taken for mutation, and not for rotting under the clods." Translated into more modern phraseology, it was held that there were certain primitive atoms under the control of spiritual agency. Creation was the arrangement of these elementary atoms by certain established laws; and the aim of the Hermetic philosopher was to ascertain these laws of nature and imitate them by art; say rather, so to identify himself with nature that he might become in like manner a medium of divine agency for this new creation.

Coming to comparatively modern times, and passing over the name of Raymond Sully, who died in 1315, and was placed by Dante in his *Paradiso*, we may fix on Peter John Isbar, who has been spoken of as the most enthusiastic champion in "the Field of Gold," and who published his doctrines to the world in 1644, denouncing all who differed from him as heartily as though he had been a mediæval pope. All things, said Isbar, as well as metals, are subject to alchemy, so that life and health, as well as simple transmutation, came within the scope of the Hermetic art.

As to what may be called the theological, or rather the religious attitude assumed by the old alchemists, it cannot be deemed other than orthodox, except by those who require us to close our eyes and accept every dogma they choose to offer us on their own unquestioned authority. Sandivogius, the author of the "The New Light of Alchemy," published in 1650, lays down his teaching on lines which might emanate from the more advanced teachers of the University of Oxford in the present year of grace. "There is," he says, "abundance of knowledge, yet but little truth known. The generality of our knowledge is but a castle in the air, or groundless fancies. I know but two ways that are ordained for the getting of wisdom, namely, the Book of God and of nature, and these also but as they are read with reason. Many look upon the former as a thing below them; upon the latter as a ground of atheism, and therefore neglect both. It is my judgment that, as to search the Scriptures is necessary, so without reason it is impossible . . . If I cannot understand by reason how everything is, yet I will see some reason that a thing is so before I believe it to be so. I will ground my believing of the Scripture upon reason; I will improve my reason by philosophy."

True happiness consists not in the multitude of friends, but in the worth and choice.

## HOW ENGLAND AND AMERICA BECAME FRIENDS.

On the 24th of February, 1785, Congress elected John Adams to the post of Envoy to the Court of St. James. Adams was at that time in Paris, and the Dake of Dorset, then the British ambassador in France, remarked to him that in London he would be stared at a great deal. This does not seem to have been the case ; but the position of Adams was one of great difficulty, requiring no small amount of sense, feeling, and tact. He had to represent his country at the court of its former Sovereign, towards whom he had for several years stood in the position of a rebel; and it was necessary that he should do this in a way which should neither compromise the new power nor offend the old. It was in the month of May that he arrived in England on his delicate mission ; it was on the 1st of June that he was presented to George III., at St. James's Palace. The only other person present on this occasion was Lord Carmarthen, the Secretary for Foreign Affairs ; and the addresses then delivered have been reported only by Adams. After assuring his Majesty that it was the unanimous disposition of the United States to cultivate the most friendly and liberal intercourse between his Majesty's subjects and their citizens, and expressing the best wishes of his country for his Majesty's health and happiness, and for that of the Roval Family, Adams entered on the real subject-matter of his speech.

"I think myself more fortunate than all my fellow-citizens," said the American, addressing the monarch to whom he had once borne allegiance, "in having the distinguished honour to be the first to stand in your Majesty's Royal presence in a diplomatic character; and I shall esteem myself the happiest of men if I can be instrumental in recommending my country more and more to your Majesty's Royal benevolence, and of restoring an entire esteem, confidence, affection, or, in better words, the old good-nature and the old goodhumour, between people who, though separated by an ocean, and under different Governments, have the same language, a similar religion, and kindred blood. I beg your Majesty's permission to add that, although I have some time before been instructed by my country, it was never in my whole life in a manner so agreeable to myself."

"Sir," replied the King, "the circumstances of this audience are so extraordinary, the language you have now held is so extremely proper, and the feelings you have discovered are so justly

adapted to this occasion, that I must say I not only receive with pleasure the assurance of the friendly dispositions of the United States, but that I am very glad the choice has fallen upon you to be their Minister. I wish you, sir, to believe, and that it may be understood in America, that I have done nothing in the late contest but what I thought myself indispensably bound to do by the duty which I owed to my people. I will be very frank with you. I was the last to consent to the separation ; but, the separation having been made, and having become inevitable, I have always said, as I say now, that I would be the first to meet the friendship of the United States as an independent power. The moment I see such sentiments and language as yours prevail, and a disposition to give to this country the preference, that moment I shall say, let the circumstances of language, religion, and blood have their natural and full effect.".

#### LOVE OF COUNTRY.

AMIEL speaks thus touching the love of country : "Which nation is best worth belonging to? There is not one in which the good is not counterbalanced Each is a caricature of man, a proof by evil. that no one among them deserves to crush the others, and that all have something to learn from all. I am conscious of no preference for the defects of north or south, of west or east ; and I should find a difficulty in stating my own predi-The only type which pleases me is lections. perfection-man, in short, the ideal man. As for the national man, I bear with and study him, but I have no admiration for him. I can only admire the fine specimens of the race, the great men, the geniuses, the loftv characters and noble souls; and specimens of these are to be found in all the ethnographical divisions. I feel no greater inclination towards the French, the Germans, the Swiss, the English, the Poles, the Italians, than towards the Brazilians or the Chinese. The illusions of patriotism do not exist for me. I love only justice and fairness." Now it may easily be that few of us can regard all nationalities with an equal eve, and it is not, perhaps, desirable that we should, for the illusions of patriotism, like some other supposed illusions, may exert a very practical and benign influence upon us; but most of us will recognise the soul of truth in Amiel's estimate of nationality, and acknowledge that character is a far more sovereign thing than ethnology.

W. L. Watkinson.

MAY, 1893.

that it would promote, in many minds, a habit of morbid introspection, and in case of illness would have a deleterious effect. It is often said that doctors themselves are worse to deal with than anybody else when taken ill, being deprived of the bliss of ignorance. But, first, it can hardly be maintained that knowledge of any kind, from the macrocosm to the microcosm, can ever have a permanently injurious effect. We are, indeed, told that a little knowledge is a dangerous thing: that well-worn platitude can be traversed by the contention that a little knowledge is better than And, secondly, it is not, after all, the none. study of pathology, but of the simpler elements of anatomy that is here advocated, to be cheerfully and practically taught, as a means of impressing men and women, rich and poor, with more respect for the much abused "garment of the flesh." The materialism of the age, though not the most elevating outcome of human thought, has yet borne some mission to mankind. One result is a greater respect and desire for the physical wellbeing of mankind. With the greater importance attached to matter as the possible all, has arisen a realization of the duty of mitigating human suffering. Many materialists argue somewhat in these terms: "if this life be all, we will livenot 'to eat and drink for to-morrow we die,' but we will rather so live that those around us may be the happier for our being, and our descendants the inheritors of a healthy physique. The individual may, indeed, pass away, but we are sure that the influence of the individual life does not pass away, and this entails a serious responsibility on each and all."

Many noble minds are in this stage of materialism. Is it not a lesson to certain of the comfortable, parasitical Christians (so called) to whom allusion has been made? Would it not be well if imitated by some who spend hours daily and weekly in enforcing the doctrine : "By faith ye are saved, not by works," or in listening with devout satisfaction to eloquent sermons on the theme of "vicarious suffering ?" All honour to the truer Christians whose sincere faith is shown by their works, whose faith leads them to active service to their fellow men. But we want more of this practical Christianity-more recognition of its existence among those who are silent as regards doctrine. This is the Christianity of life, and not of dogma. This is the imitation of One, who, beginning with the body, arrested the course of human suffering around Him, and left the highest example of a noble life.

Bertha Garnett.

#### WOMEN IN POLITICS.

WOMEN in politics can vary but little, save in a misjudged way, from any of their sex in other civilized conditions of life.

Many opponents to Woman's Suffrage base their opposition, mainly, on the erroneous presumption that the female sex naturally lack the mental and physical strength essential for political struggle, which supposition may be, to some extent, practically true, but it can never be accorded a general application to woman-kind. The lack of mental or bodily strength is not necessarily confined to the female sex only, nor should its discovery in a few, be made a barrier to the progress of the masses of either sex. Brainless and physically incapacitated men are found among representative political leaders of all nations at the present day, yet their personal deficiencies do not seem materially to affect their ability to manipulate the various political machines assigned to their control.

Another weak argument against the voting privilege of women is the over-sensitiveness and squeamish modesty ascribed to them, which, it is surmised, would be endangered to rude assailment at the polls. Persons afflicted with such morbid notions must be also imbued with a very degraded opinion of men in general.

The picture of women at the polls has been grossly overdrawn and made hideous by the imaginations of those who have, perchance, heard of the vile scheming, profanity, and other demoralising occurrences at public voting places.

It is a fact that such debasing influences often exist at the voting places, yet, not any more so, than at countless other assemblages of promiscuous humanity where the male sex predominates.

But even such a fact should not deter womankind from aiming to lend their refining presence at the polls and to cast their legitimate votes, with a view to ameliorate the manners, morals, and general conditions of *mankind*.

Another common argument against the right of woman to be identified with political interests, is that she is apt to forego or neglect her domestic requirements for foolish ambitions of public preferment. This is another distorted view, mainly the result of male prejudices against the advancement of womankind beyond the limited sphere of the household, and regardless of the fact, that all women, as all men, were not born for the simple treadmill of mechanical domestic duty; but with brains for higher and equally important conditions of existence. 2 8 196

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The pursuance of a legitimate course of politics can never lessen the sanctity of true home-life, or the respect for womankind; on the contrary, it will, by closer public association of the sexes, have a gradual tendency to promote their mutual respect and improvement in all that characterises the highest and purest standards of humanity.

Annie M. Toohey.

### FATHERS OF GREAT MEN.

George Washington's father was a farmer. The father of Samuel Pepys was a tailor.

Shakespeare's father was a wool merchant.

Lincoln's father was a poor farmer and labourer. The Emperor Diocletian was the son of a

slave.

Cardinal Antonelli's father was an Italian bandit.

The father of Martin Luther was a peasant and woodman.

Virgil's father was a porter, and for many years a slave.

Demosthenes was the son of a sword maker and blacksmith.

The father of Sir Robert Peel, the statesman, was a day labourer.

Benjamin Franklin was the son of a soap boiler, and was himself a printer.

Daniel Webster was the son of a farmer in very humble circumstances.

Harvey, who discovered the circulation of the blood, was a farmer's boy.

Christopher Columbus was the son of a weaver, and himself learned that trade.

John Calvin was the son of a cooper, and helped his father in this humble calling.

Sophocles, the Greek poet, was the son of a blacksmith, whose wife had been a slave.

The father of Thomas Paine was a corset maker, and taught his son the same trade.

Faraday's father was a blacksmith, and disapproved of his son's experiments with chemicals.

Æsop's father was a slave, and the writer of fables is believed to have been in servitude most of his days.

Thiers, the historian of the French revolution, and afterward president of France, was the son of a lock mender.

Gen. Grant's father was a tanner, and the son followed the same occupation when a boy.

# ANCESTRY OF GENIUS.

MR. FRAS. GALTON, the scientist who has made such interesting explorations in anthropology, finds that the best scientists come from a comparatively pure and unmixed race. Mr. Havelock Ellis, in the March number of the Atlantic Monthly, on the other hand, makes out a strong case for the claim that in works of imagination, as poetry and art, genius most abounds in the descendants of mixed races. Selecting the twelve most eminent British imaginative writers of the present generation, the author finds that not one of the dozen is pure English, while ten of the twelve show marked traces of foreign blood. He finds, upon careful investigation into the ancestral stock, similar conditions in Germany and France. The explanation given is that the combinations of cross-breeding give accretion of power and produce startling mental compounds which fascinate by their uniqueness and eccentric singularity.

Tennyson seems to have been very nearly equally of Danish extraction on the one hand and of Plantagenet ancestry on the other, with a strain of French blood intermingled. Swinburne is pretty equally divided between the Celtic and Scandinavian race stocks. William Morris is predominantly Welsh, but with Anglo-Danish intermixture. Rossetti is 25 per cent. English, and has a northern strain in his Italian origin. Robert Browning could scarcely have a more complex racial ancestry. His great-grandfather was of West Saxon stock, modified with old British blood, and married a Creole wife. Browning's mother was German on one side and Scotch on the other. The author finds that very few of the English poets of the day are of pure English stock. The majority are of Irish, Gaelic, Welsh, or Cornish race, with varying intermixtures. In France the commingling of races is reported as still more remarkable in the production of literary genius. Alexandre Dumas has negro blood; and Flaubert, Iroquois blood. Victor Hugo belonged on his father's side to the fair and powerful Germanic race of Lorraine, and on his mother's side to the dark and stocky race of Bretons. Zola is the son of an Italian mathematician, and has French, Italian, and Greek blood in his veins. Ibsen is nearly as much German as Scandinavian, and has Scotch blood in his make-up. Napoleon was the result of the mixture of the Tuscans and Corsicans, Boulanger had a Scotch mother.

Mr. Ellis finds that the German districts which produced that nation's crop of poets showed marks of Celtic blood, and that the English

districts most productive of poets were along the Irish, Welsh and Scotch borders. The Auglo-Welsh and Anglo-Irish descendants whom Galton found to be least adapted to science, Mr. Ellis finds to be most prolific of imaginative genius. Gladstone claims to be pure Scotch, but the Atlantic's contributor discovers that Gladstone was descended from the Saxon low-landers on his father's side and from the Celtic highlanders on his mother's side, two distinct races whom accident threw together. The finest flowering of imaginative genius he finds, not in the pure fair races of the extreme North, or in the pure, dark races of the South; but in the crossed Celts and Teutons of Lorraine, in the crossed Gaels and Saxons of the Scotch lowlands, in the mixed breeds of Normandy and Tuscany and Swabia, and in the crossed dark and light bloods of England's borders. The author pertinently adds that cross-breeding is only one of the several factors. Were it otherwise it would be common to find imaginative genius commonly shared by an entire family of brothers and sisters.

#### LAW SUPREME IN NATURE.

"The progress from deepest ignorance to highest enlightenment, is a progress from entire unconsciousness of law, to the conviction that law is universal and inevitable.

"There are no suspensions of these forces. Either Society has laws or it has not. If it has not, there can be no order, no certainty, no system in its phenomena. If it has, then are they like the other laws of the universe, sure, inflexible, ever active, and having no exceptions."

#### Herbert Spencer.

Is there Continuity in the laws of nature both in Space and Time?

When we speak of the law of universal gravitation, or the laws of motion, or of chemical laws, we use the word law, as a law of nature, in a wider sense than we speak of a legislative, civil, or criminal law.

In the first case, the word applies to certain fixed relations between all things in nature by which they are connected together.

We can trace that all men have advanced from their primitive state by finding out these fixed relations, and by acting on a belief that they would continue fixed : and it is on this certainty

that all systems of philosophy are based. If there were no continuity or connection between past, present and future phenomena, we could not have any science. When we examine the rude weapons of primitive men, we infer that they noticed cause and effect. If contingence were possible, and there were no constant law, the savage could never have shaped his flint to purpose, or made his bow and arrow; nor, if he had found out by chance such a mode of forming weapons, could he have acquired skill, or ever been sure that his arrow would hit the mark. If some further laws of nature had not been observed in after ages, the wandering nomad could not have domesticated his flocks and herds, or availed himself of the regular return of herbage at stated seasons in different places to feed them, or grown rich with their products. A still further acquaintance with the laws of nature induced the earliest agriculturist to sow seeds and plant trees, to produce crops, and store up the harvest both for use and exchange.

We infer that these men, in every case in proportion to their knowledge of the laws of nature, adopted such habits and customs as were most adapted to their situation. We still do just the same, our necessities or desires force us to a closer study of the laws of nature, and the fruit of this study is modern progress. Hence, it may be inferred that the progress and well-being of man in every age and country are in proportion to their wants, and their knowledge and observance of the laws of nature.

When a certain recurrence of things was experienced, primitive men appear to have acted on their knowledge of such recurrence without thought of the causes. As they took little note of the immediate cause or condition of anything, they ascribed everything to supernatural causes, and the slightest change in the usual order of nature was attributed to the same influences. If the hunter missed his aim, he supposed that his weapon might be charmed; if the flocks perished, the herdsman attributed his loss to enchantments; if storms destroyed his crops, the agriculturist ascribed the destruction to the anger of the gods.

Nature, though always before us, and always inviting us to its study by the great prizes which it holds out to us, yet appears so mysterious to those who are ignorant of its laws, that we cannot be surprised if, in many cases, reason cannot get the better of fear.

The masses of our population reason little better than their rude ancestors; and their usual teachers and guides, while they give them no general ideas of the laws of nature, usually teach them that the commonest events in their lives are to be attributed to the direct intervention of Providence.

We are apt to be amused at times at the superstitious notions of savages, but we forget that no man is secure from superstition unless he knows that not only some things, but that all things, happen in accordance with fixed laws, and that it is not possible that it can be otherwise.

M. Quetelet, in his "Physique Sociale" (p. 391), well expresses the state of mind of such a person. "On le voit s'étonner d'abord à l'aspect de tout ce qui sort du cercle ordinaire des choses, et attribuer au caprice d'êtres surnaturels les effets les plus simples, au lieu de les déduire de lois immuables."

This may appear to some a very low estimate of the power of mind shown by some educated men of the present day, but it has been remarked, and there is every reason to suppose that the statement is correct, that even many men of science question the truth of universal law. This statement appeared in *The Scotsman* in a review of Mr. Fowler's work on "Inductive Logic," and the writer says :—

"The man of scientific habits of thought would probably decline to commit himself to any opinion about what was universal, or what prevailed in nature outside of the corner of it with which he was familiar, and would explain that all he understood by these laws was, that all events had their causes, and all events were preceded by similar causes in the region of the universe accessible to men."

To confine our idea of universal causation to the region of the universe accessible to man, detracts from the grandeur of the conception of the oneness of nature, but even this limited view of causality, if fairly taught, would free men from erroneous superstitions. If we can teach that no single thing in our corner of the universe can happen by chance or by the will of a supernatural being, and unpreceded by certain conditions, that is sufficient to establish the reign of law in the universe accessible to us, and with which alone men have any concern, so long as they are inhabitants of this world. Such men might ignore and deny the statement that nature in its widest extent is linked together as one. Such denial, however, could only be temporary. Men would, when they had got thus far, soon be tempted to ask where the limits to the state of universal law could be fixed, and in this way the truth would

gradually dawn in their minds that there is no limit and can be no limit to nature.

The great point remains, however, as a fact, that most men do not receive or acknowledge the universality of law, even in the corner of the world with which they are familiar, and that it is nowhere taught as a first principle. Yet it is clear that, if there be one thing more important than another to know or be taught, it is this very point, whether or not, in all things whatsoever, some definite law does not prevail. This is the great fact that underlies all educational questions, and, unless we recognize the importance of a right solution of this question, we can make only very imperfect attempts to mould the minds of the masses.

Men may believe in prodigies, but few believe in sudden reversals of the laws of nature. Except in dogmatic assertion, no one seriously argues the case, or thinks of showing any proof or reason against the universality of law. The most credulous believers in catastrophes in nature usually confine their belief in the marvellous to some great exertion of the forces of fire and water, and refuse to think that fire will cease to burn or water cease to drown.

On the other hand, plain and cogent reasons can be shown for the presumption in favour of universal law.

To some it will appear evident that continuity of force or matter cannot be supposed without continuity of law, and that, like the proofs of the laws of motion, the proofs of the unity and continuity of law must ever increase with their recognition, as all science is based thereon.

Students in mechanics are at first taught to take for granted the proofs of the truth of the laws of motion, and they find their progress facilitated by so doing, for the proofs of the truth of the laws can only be shown by the deductions made from them, and these deductions increase with their progress. It is exactly the same in regard to every other generalisation which we call the law of nature ; the proofs are not direct, but indirect, and based on the numerous deductions from those laws which we find verified every day. As the same reasoning applies to every law of nature, what is true of all the parts severally must be true of the whole collectively, and therefore there must be a unity and continuity in all laws of nature.

Nature indeed is a continued growth, a perpetual evolution, in which there is not an exact reproduction of the same from the same, but in which child resembles parent, and sister, brother. "Nature is ever new and fair, Is ever shaping new forms : What is, never has been, and comes not again ; All is ever new, and yet is but the old. Her laws are unchangeable."

Goethe.

What we do observe in nature is, an increasing succession of phenomena evolved by law and continued through countless ages. We trace the various races of plants, insects, reptiles, fish, birds, mammals and men, each following their own respective careers, based on fixed laws. Nor can anything escape the control of nature's laws. If we could imagine such a thing to be possible, it would be produced of nothing, because of nothing, and so be of no effect at all. We do not know, and can never know any such phenomena.

Our own place in nature is rigorously determined by law. Man is a living function of law. His volition is the resultant of all the forces which move within him or around him, and it varies at each instant as they vary, by the onward progress and motion of the great physical forces acting on all bodies.

Though not exempt from law, we can reason on it. We find ourselves endowed with faculties of perceiving, judging and reflecting on the various phenomena in nature, and with capacity for classifying them, generalising from them, and so abstracting law.

We reason as confidently and firmly respecting phenomena remote in space as in time. We observe that the sun or more distant stars are all bound up with us in the same laws of universal gravitation and motion. The phenomena in distant planets, as in distant continents of the earth, may be different from any with which we are acquainted, but we know and are certain that they must all be evolved out of conditions based on universal law. The proofs of the truth of this reasoning are as universal as the phenomena, for no single case ever has been or can be shewn to militate against it.

All phenomena require conditions of being, and whenever we see the slightest trace of nature's work in past time or distant space, we have proof that nature's laws did or do exist there.

The observance of this continuity of law, this universal causation, gave to some minds a glorious idea of the Creator. The thought of geological evolutions lasting for myriads of ages, or the still more extended periods of astronomical cycles, and the fixity of all physical or chemical laws exhibited during those ages, led them to infer that those laws are co-eternal with creation, co-expansive with space, and unchangeable; and that the source whence they proceed is, as are they, the same yesterday, to-day, and for ever.

What is meant by scientific teaching or science teaching is usually teaching according to law: and every student of nature must see that in his own particular department the facts he studies are connected by law, and that this law is invariable.

"All phenomena of every order exist by virtue of the unchangeable laws of nature."\*

The object of a student is to search for the conditions of existence of phenomena, and if he fails to discover the law regulating those conditions, he never attributes his failure to the absence of law, but to his own want of He argues that, as we have observation. discovered so many laws all intimately connected and all so clearly proceeding on one common principle of uniformity, we are justified in concluding that all unexplained phenomena must also have their peculiar law connecting them with the rest of nature, and for this law he seeks. The student does not suppose that he can ever know all the laws of nature; it is enough for his purpose if he knows that there are laws, that these laws are strictly connected and are unceasing in their action.

What is wanted in primary teaching is to bring this fact prominently forward. It is not enough to teach science by bits and scraps, where the student sees no connection of parts, or uniformity of method or design, but the youthful mind should be led to consider Nature as one great whole, based on unchangeable laws. We may thus strive to foster in the plastic mind of youth a deeper and wider sense of humanity, and a growing hope of a brighter future when not only man to man will brother be, but the humane man will also stoop to the claims of a wider brotherhood; and while he knows that he is lord of the brute and the beast, he will remember that he is also akin to them, one touch of nature making the whole world kin.

In Nature's laws, as there is no change so there can not be any suspension. To suppose that those laws can ever under any circumstances be set aside is a wonderful simplicity of ignorance, and shows such a sublime indifference to truth or error, that it is difficult to believe how it can continue to be much longer taught as an axiom,

\*Claud Bernard, Revue des Deux Mondes, 1st August, 1865.

the belief in which is of supreme necessity. Yet when we consider that in almost every primary school such erroneous teaching is the common pabulum on which all classes and sects are mentally fed, and that this teaching is what is supposed to be able to fit them for the common business of life, we need seek no further for the cause of all the ignorance, and much of the crime in the country.

The first principles of all education or elevation of mind are based on the knowledge of the fact of fixed laws in nature, and that all things move and vary in accordance with laws which never move or vary. The stars in the sky, and earth and all that is on it, the flowing sea, and running streams, the waves, the winds, the calms and storms, the creatures of the sea, and of the land, the plant, the fish, the reptile, bird and beast, with man himself and all his works, do not exist by chance but are regulated by fixed laws, which it is man's highest duty and greatest interests to study and know.

The common expressions, higher intelligence, largeness of heart, humanizing principles, universal benevolence, liberality of mind, love of freedom,-epithets only applicable to great and good men,-all suppose a great intuitive perception of the wider bearing of the laws of nature, and their more universal application, than in common men. It is a truism worth repeating that the well-being of all men in all times and places is dependent on their knowledge and observance of the fixed laws of nature, and all education is comprehended in this. Let those who talk so much of education, and the need of it for the masses, think what it is, and what they mean by the word. Do they think it to be a means of unfolding man's powers, of developing man in harmony with nature, and giving man power over nature by showing him the conditions of being ? Do they know that education cannot add to the innate force, that it may mar a man but cannot make him? The hot-house forces the growth but weakens the plants, and it forces equally grapes or thistles: the innate power is in the seed and its natural conditions. No Act of Parliament can make plants grow and yield fruit, or men virtuous and manly except under natural conditions, but Acts of Parliament may do much to prevent both.

Some day we shall find out that Sabbath Observance Acts, or laws to make men good, or moral Acts for restraining different immoral tendencies of the people, are all false in principle, pernicious in practice, and often productive of the very evils they were intended to restrain. If there are evil tendencies like diseases in the body politic it is better that they should not be driven into the system, but allowed to come to the surface. On the surface they will correct themselves. Repressive laws have, in addition, the bad effect of weakening the force of Government, and misdirecting it from its proper object, but their worst effect is their opposition to free, healthy mental growth.

In education, two opposing systems are at work,—one sectarian, of different kinds, and one secular. All kinds of sectarian teaching are founded on dogma; while secular teaching is but another name for rudimentary science teaching. For ages all elementary teaching in Christendom has been founded on dogma rather than on cautious reasoning.

While men of science are seeking for laws which regulate all phenomena, and begin to recognize them even in all social statistics, such as births, marriages, crimes, disease and death, we still force on the mass of the population the dogmas of the middle ages, which exclude law. We oblige them in every possible form of words to assent to terms of belief, which many of the best educated men have long since ceased to regard any more than as the dry bones of an extinct theology.

In all controversies on education one party assumes that secular instruction is something opposed to religion. This is incorrect, as secular education includes the teaching of the purest and most enlightened religion. The laws of this great world are the highest manifestation of Supreme Intelligence that man can investigate with positive results, and those laws are the ultimate bases of all things that we can know, religion included. No religion can exclude from its formularies or teaching some notice, however imperfect, of the laws of the world. Such teaching is secular, and the only question is whether such teaching shall be as much in accordance with truth as is possible, or shall only represent the idea that prevailed in long past ages. Such old ideas have been condensed into dogmas, and hitherto have been the only principles that have been generally taught in most primary schools. In most works of religious instruction for children, the accounts of miraculous and providential interventions in the creation of the world, and in the history of the Jews, are largely dwelt on. The children are taught that the laws of nature were continually set aside and disregarded. Not only are they so taught, but they are also carefully taught to pray

that such laws may even now be set aside in case of need in their own special favour.

What is universally taught by dogma is that there have been repeated and continual changes or suspensions of the laws of nature, and that it is our duty to pray for the intervention of providence. To teach the people to pray thus, and to tell them that God sends bad crops, or famine, or any natural calamity for their sins, is injurious to the cause of truth, and tends to excite in the minds of the poor bitter feelings against the rich, who are less exposed to such calamities.

Such statements, as they are opposed to truth, are directly opposed to religion. What do such doctrines teach? They teach that the Creator of this world has made his work so ill, and that the laws which regulate it are so inefficient, that, like a watch, or a work of man's hands, it requires continual repair. The wisdom and power of the Creator is thus shown to consist not in the excellence of His laws, but in His power to break through His laws, and act contrary to them when they are defective. It shows that these laws are not the best possible, but that something else is, from time to time, better and required to be substituted for them.

Fortunately such teaching is seldom carried Those who teach out to its fullest extent. dogmatic forms do so from custom, more than from real belief in them, and recoil from the legitimate inferences of their doctrines. This is the cause of the irreligion of the day. Few teachers are honest and true in the expression of their belief, and so they cannot influence their pupils. They either have not the power or lack the faith to realise to themselves the great truths of religion which they might and should teach, or they fear to be branded as infidels if they express an honest opinion. They forget that the laws and economy of God's creation include laws of His providence, differing indeed from that which is commonly called so, but differing only in the far wider scope of its purpose and bearings.

Right labour always brings its due reward, as deviation from God's laws always brings its due punishment. In this there is certainty, and no exceptions or deviations. God's laws are not accidental or intermittent, and from them there can be no reprieve.

Those who look athwart the great web of life's drama, see but the crossing and intersection of a small portion of its innumerable lines of phenomena, and we call certain events accidents. But He who sees the end from the beginning sees no accident; the plan or pattern of His work is in all respects sure and certain; it is not accidental or contingent, but elaborated according to His invariable and universal will or law. Religion is belief in this law, the binding up in a heartfelt belief of the highest truths of philosophy. In this sense it is the greatest subject of human thought, and yet its truths are suited to the lowest intellects that are capable of reverence, obedience, and love.

We build temples and we forget God. We forget that the whole living choir of worshippers is the church of God—the temple, not made with hands, but whose foundations are living stones. This is the temple of which we are all members, each bound to each by ties of affinity and communion as common brethren, and bound by nature's laws, which are unchangeable.

The study of these laws is, of all studies, the most ennobling and the most humanizing, and in nature's great temple we can best learn to adore the hand of God. If we ask for certainty it is here alone that we can find it, for here alone is there no variableness or shadow of turning. These are the steps of the only ladder that can lead to a higher life, for whatever is beyond is based on what is here, and we must mount step by step.

If, then, religion alone makes life worth having, and that to know the truth respecting it—as far as it can be known—is so far better than all science and all learning, as eternity is greater than time, then it is here that we must begin the study of it.

The great book of nature is open to all, the pages of the past are written on the rockseach day, and hour, and minute gives us a new picture of the present, and he that runs may read, and mark the signs of the future, seeing in all the great hand of God and his fixed laws. In all there is a note of harmony, a beauty and a grace which fills him with love and admiration for the author of his being, and a continual God's providence. desire to know him more. that cares for the sparrow and the worm, is, to the man who reads his Maker's laws aright, no sign of a cruel destiny, but the law best adapted to give the greatest good to each in his order. His law is perfect.

Nathaniel A. Staples.

We must live nobly to love nobly.

The noblest mind the best contentment has.

The total profits of these years have been divided as follows :---

Credited to	Workers	-	-	-	£1,874,	=	40	p. c.
"	Customers	-	-	•	937,	,,	20	•
** **	Officers and	Comm	ittee	-	562,	**	12	.,
"	Provident F	und	-	-	468,		10	
	Capital (inac	ldition	to5%	5)	468,	,,	10	,,
,,	Education	-	-	-	234,	"	5	,,
· "	Special Servi	ice Fu	nd	-	140,	,,	3	,,
					£4,683,		100	"
"	Reserve Fun	d	-	-	348			
"	Propagandis	t and	char	i-				
	table agen		-		102			
"	Other purpo		•	-	67			
				e.	£5,200			

The steady increase in the strength and number of societies such as this cannot fail to have a most beneficial effect upon the workers in the trades in which they exist, tending more and more to attract them to the principle of co-operation as a means of raising their position.

Experience has taught that those political governments rest upon the safest foundation, and are the most successful, where the extension of self-government has been gradual, and where each step has been discussed from a practical as well as a theoretical point of view; not where, by a sudden stroke of policy, the whole principle has been universally conceded. Recognising this, the Association seeks and works for the gradual introduction into industry of the principle of co-partnership of the worker.

1st. Where a body of workers show that they have the requisite capacity, honesty of purpose, and loyalty towards each other to conduct their business upon a co-operative basis.

2nd. Where an employer and his workers have sufficient confidence in each other to work for slow development of the principle, taking profitsharing as a first instalment. Wherever practicable the workers' share of profit should be added to the interest in the capital of the business in which they are employed, because it is when the individual has something appreciable at stake that he begins to feel his responsibility.

3rd. By urging upon monopolies and public bodies the importance of introducing the principle of the workers' sharing in profits, and, through this, acquiring a share of control wherever possible.

Experience teaches that in cases where industry is municipalised or nationalised, the position of the worker is not necessarily rendered satisfactory in the fullest sense of the word.

As the movement strengthens its hold upon the trade and commerce of the country, it will be able to offer such positions, and pay such rates of remuneration as will command a far larger share of the commercial and organising ability of the country than has been the case in the past.

Some methods of reform have a tendency to cover up the present failings of human nature. Co-operation tends to bring them to the front and remove them.

Co-operation is not opposed to the efforts of other industrial reformers, but its advocates feel that by the gradual introduction of its principles into industry, and through the strong impetus which independence of action and thought, and the linking of labour to its reward, give to the development of the great forces which nature and science have placed at the disposal of humanity, some of the evils of unregulated competition may be escaped.

Co-operation, unlike some forms of state socialism, promotes a collectivism based upon strong, self-disciplined individuality. It is only in cases where the individual is in a position to be daily made conscious of the effect of his own actions upon the happiness of himself and his fellow-men that he will feel the sense of responsibility which is essential if he is to take an honourable part in the government of the industry upon which the happiness of millions of human beings depends.

> Henry Vivian, Secretary of the Labour Association for Promoting Co-operative Production, London, Eng.

#### A MOTIVE.

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WHAT the world must have for its welfare and improvement is some motive power, which shall bring out the faculties of men and women and develop them to the utmost. What that motive shall be, must depend upon the mental and moral condition which society has attained. Competition is such a power at the present time; but it is neither the highest or the lowest. It is far superior to the compulsory force which once ruled the slave or the serf and drew unwilling labour out of them. It is far inferior to that love of excellence which influences some few people to put forth their very best efforts, and which commands the admiration of all, even of those who do not respond to it themselves. Such as it is, however, it occupies the vantage ground at the present time, and, with the large majority, it is the moving force which brings forth capacity, energy, industry, perseverance, courage, success,