

The Health Reformer.

NATURE'S LAWS, GOD'S LAWS; OBEY AND LIVE.

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The Health Reformer.

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Health and Religion.

THERE has been in years past a strong tendency with some leading health reformers to skepticism. And the fact that not a few in the ranks, especially those of the Fowler and Wells philosophy, are settled unbelievers, has created prejudice with many conscientious believers, and has closed their minds to any investigation of the subject. And this class, which by no means is a small one, suppose there are many statements in the Sacred Scriptures directly opposed to the restrictions of the hygienic system.

On the other hand, leading health reformers have seen and felt deeply the importance of change from the common habits of life in order that the coming generation develop physical, mental, and moral strength, which constitute the basis of a true Christian character. They have urged the health reformation upon the attention of fashionable professors of Christianity in vain. They have seen those who profess to deny themselves, and bear the cross, indulging, not only in the more innocent luxuries of fashionable life, but slaves to such poisons as tea, coffee, and tobacco in its various forms. They have been pained to see ministers and people guilty, not only of gluttony, but of defiling body, mind, and conscience, with the habitual use and the stench of tobacco. They have plead with these professed men of God in vain. The exposure of their excesses and fleshly indulgences has aroused them to retort with some text of holy Scripture, wrested from its true import, and, perhaps, a sneer to cover their sins. And what has seemed still more aggravating, these professed ministers of Christ stand between those who plead for reform and the people. And not discriminating between this kind of religion and the holy, self-denying, clean relig-

ion of the Bible, some have hastily and rashly condemned both, and have joined the ranks of infidelity.

It is said that a popular clergyman and a noted infidel were taking a pleasure walk, when the former, in the dignity of his clerical profession, offered the latter a cigar. "No," said the infidel, "I do not allow myself to indulge in the filthy, degrading habit of smoking. But I swear a little now and then."

The same was also painfully true of some of the early champions of the anti-slavery cause. And the reasonable inquiry comes up, Why should this be? Does the Bible sanction American slavery? No. Do not the Scriptures of the Old and New Testaments plead for the oppressed and proclaim liberty to the captives? Certainly, they do. It was not the Sacred Scriptures, then, that led some of our ablest, bravest, and best anti-slavery pioneers to the shades of infidelity.

These men knew in their very souls that in pleading the cause of the down-trodden slave their work was truly philanthropic and just, and that they deserved the sympathy and co-operation of the gospel ministry and the professed church of Jesus Christ. But instead of enjoying that which they could reasonably expect to sustain them in their self-sacrificing toils, the ministry and the churches, with very few honorable exceptions, gave their weight of influence on the side of public sentiment and slavery, which came down upon the first apostles of emancipation with tremendous, crushing force.

Thirty years since, an Anti-slavery Convention was held in the City Hall, Portland, Me. The eloquent Remen (colored), and other gentlemen of distinguished ability, addressed the small assembly. Appeals had been made for admission into the commodious churches of that city; but every door was bolted against them. And not properly distinguishing between that religion that would close the doors of churches against those who would plead the cause of the

enslaved and the religion of the Bible, skeptical views and feelings naturally took ready root and made rapid growth in the injured and grieved feelings of some of the anti-slavery men.

They saw that moral courage to stand for the right, and real integrity of purpose to speak and act for down-trodden humanity and for God, were wanting in those men who profess to be ambassadors for Christ. They knew that these modern ministers had not the spirit of Christ and that of his first ministers, so far as they could credit the record of what they said and did. Could these philanthropic men have had the support of the churches, or could they have anchored in the religion of the Bible, as an article almost infinitely firmer and purer than that of the popular churches, they might have been balanced and saved from skepticism and rashness.

Those able and eloquent men were then said to be "ultra" and "radical;" but, in the days of Abraham Lincoln and the emancipation proclamation, their words of earnestness and of truth, energized and pressed forth by the pent-up fires of a coming freedom, would have met the public ear and heart, and thousands would have hung upon them with rapt attention. And these very ministers who were most influential and most responsible in closing the doors of the professed churches of Jesus Christ in 1843, because public sentiment was down on the early friends of freedom, would have been the first and the loudest in cheering them when the public sentiment of the North had become renerated by a civil war.

And those leading health reformers who regard the religion of the popular churches identical with the religion of the Bible, and therefore reject both, because the practices and many of the teachings of these modern, fashionable Christians are in direct violation of natural law established in man by the Author of the moral code, are committing an error very similar to that of some of the pioneers in the cause of freedom.

We cling to the Book of books, and design, by the grace of God, to break our way through to the minds and consciences of sincere Christians, and show them that the principles and the restrictions of the hygienic system, properly held, are in harmony with the Sacred Scriptures,

though we are forced to expose the bogus piety of our time. Let God and his living word be true, though all men prove false. We are happy in repeating that the true philosophy of life and health, as presented in the hygienic system, is in harmony with the old, blessed Bible.

CHEERFULNESS,

It is freely admitted on all hands, is conducive to health. The title of one of Dr. Hall's works is, "Fun Better than Physic." Very true. But there is something better than either. It is the strong consolation and good hope of the religion of the Bible. Those who have a hold only on the present life find temporary relief from gloom, which is the legitimate offspring of disease, in the spirit of fun and fashionable amusements. But, thank God, the religion of the Bible graciously offers to the dying sons and daughters of Adam a happy hold on both the life that now is, and of that which is to come.

Dr. Dio Lewis, who says many excellent and cheerful things, and at home or abroad is a real, intellectual gentleman, would have us make the most of this life, and have but very little, if anything, to do with the next, until we enter upon it. This may do much in calling the attention of those whose minds are more or less unbalanced by disease from dwelling with painful forebodings upon the dark future. But while it is freely admitted that benefit for the time being may be derived from this policy in the treatment of gloomy sick people, it is at the same time to be deplored that skeptical feelings and views do creep into the minds and hearts of many of those who adopt this plan.

Disease, pain, sorrow, and death are, as it were, our companions all through this mortal life. We may put thoughts of these out of the mind; but they will come back again in spite of all our efforts. The frequency and certainty of death defies all our efforts to banish its disagreeable features from our minds. Then, instead of laboring to put it out of the mind by fun and frolic, we earnestly recommend to our fellows, sick or well, the blessings of the heirs of promise held forth in the Sacred Scriptures, "that we might have a strong consolation, who have fled for refuge to lay hold upon the hope set before us; which hope we have as an anchor to the soul, both sure and steadfast." Heb. 6: 18, 19.

Let this hope light up the dark future, illu-

minating even the valley of death, extending its golden rays to the immortal shores. Here is strong consolation in which the mind and soul can anchor, and find rest from the painful uncertainty relative to the future under which many suffer in spite of their efforts to forget death and the future.

A state of suspense is the most unhappy condition of the human mind, hence the most injurious to health. It is said of a certain criminal, who could stave his sentence off no longer, by money or friends, upon hearing his sentence to be hung, arose and said, "This sentence is unjust; but I feel relieved to know that my case is finally decided." Tens of thousands suffer mentally, and sicken and pine under the cloud of uncertainty that darkens the future. You may divert the attention for the time being from this condition by amusements; but it will relapse back again. But there is permanent relief for such; not, however, in the sentence which they may have so long feared, but in that hope which the religion of the Bible holds out to the trembling, fainting, doubting, and sorrowing.

"Come unto me," says the blessed Redeemer, "all ye that labor, and are heavy laden, and I will give you rest." Matt. 11 : 28. The trembling, sorrowing, feeble ones may come to Christ, and find rest. He is as ready to receive them, and give them joy for sorrow, as when his great heart of love sympathized with human woe as he walked the streets of Bethlehem. He then gave sight to the blind, and hearing and speech to the dumb. He said to the paralytic, "Stretch forth thine hand," and it was made whole; and to another, "Take up thy bed, and walk." He, who knew no sin, has been touched with the feelings of, not only our sins, but our sicknesses and woes.

Obedience to moral and physical law paves the way to find in the Redeemer that rest and consolation conducive to health. "Oh, that thou hadst hearkened to my commandments!" said God to rebellious Israel, "then had thy peace been as a river, and thy righteousness as the waves of the sea." Isa. 48 : 18.

THE aim of all intellectual training for the mass of the people should be to cultivate common sense; to qualify them for forming a sound practical judgment of the circumstances by which they are surrounded.

Well-Directed Labor.

MAN was formed for activity. It was the design of the Creator that he should derive his chief delights from those pursuits that would demand physical and mental action. Before sin entered happy Eden, the representatives of the race were put into the garden, "to dress it and to keep it," where their minds could trace, in a thousand varied forms, the perfections and power of the divine creative Hand. In the estimation of God, and his Son, and of the holy angels, labor was honorable and for the good of man, even for sinless hands in holy Eden.

After the transgression, God said to Adam, "Cursed be the ground for thy sake." The earth was cursed in consequence of Adam's sin; but the fact that he was to eat his bread by the sweat of his face was not the curse. Increased labor was simply a consequence which, considering his fallen condition, was for his best good.

"God is love." We must not view the curse in the light of retaliation on the part of the gracious Creator. We call in question that lazy idea that makes work almost the sum and substance of the curse. This view, however, may be very congenial to the feelings of those who are constitutionally tired, and look forward to the time when their immaterial spirits shall go to an immaterial Heaven to get rid of work, and sit on the edge of a cloud and sing hallelujahs to all eternity.

Labor, first instituted in holy Eden, was for man's best good in his fallen condition out of Eden. And as for the future, give us the tangible inheritance of the saints in light, in the earth redeemed from the curse, and happy Eden restored upon it again. There the redeemed, in all the gladness of immortal life, will enjoy the delights of activity of body and mind in a world of inexhaustible variety, bearing the impress of both the creating and the redeeming hand.

Well-directed labor is important to both physical and mental strength. Most great men labored hard in youth.

Adam Clarke was noted, when at school, for his great physical strength in rolling stones.

John Wesley rode on horseback and walked many thousand miles, and it was this habitual

exercise which prepared his gigantic intellect to put forth those efforts which enabled him to do so much good.

Clay was a poor boy, and worked for a living. Henry Bascom, the great Western orator, traveled West on foot, with his ax on his shoulder.

The Roman and Grecian orators took a large amount of exercise in order to prepare themselves for public speaking. They put in practice the principle of strengthening the voice by gymnastic exercises. A good muscular system is important to a good voice.

Sir Walter Scott, after confining himself to study till his mental energies had become exhausted, would mount his horse, call out his dogs, and follow the chase for several days, then would return to his studies rested and refreshed.

When Byron entered college, fearing that his tendency to corpulency would injure his personal beauty, he took extremely severe exercise daily, in order to reduce it, besides leading a very abstemious life.

Webster, in his Saratoga speech, in 1844, said that he was a backwoodsman, born in a log cabin, on the border of the unbroken forest, and inured to hard labor. Franklin, a practical printer, was a hard worker.

The eloquent Patrick Henry labored on the farm while young. He often followed the chase, sometimes camping out for weeks in true hunters' style.

Washington, when not employed by his country, labored upon his farm, and was actually following his plow when he received the news of his election as president. Burns, the Scotch poet, composed much of his poetry when at work on a farm.

President Dwight, the great theologian and scholar, attributed much of his mental vigor to daily labor in his garden.

John Quincy Adams, one of the most learned men of his time, said he found much daily exercise indispensable.

A recent writer well says, under the caption, *Overwork*, that "the complaint is quite universal that, in our American life, we over-strain the muscle, over-wear the brain, and over-burden the heart. Men, at the hottest point of enterprise, give out, and consumption takes the body, lunacy the mind, avarice the affections.

Prominent men drop suddenly here and there, when they are all aglow with perspiration, and dilated eye, and absorption of success. The epitaph is, 'Died of overwork.' It should be, 'Died of mismanaged work.' That wheel on the car is not hot because it rolls faster than the other wheels, nor because it is weaker or stronger; but because its journal was not packed as well—because some unusual friction has heated it."

Many persons of temperate habits have been able to continue systematic mental labor into advanced age. H. W. B., in *New York Observer*, under the caption, *Mental Vigor in Old Age*, says:—

"Of a celebrated writer, whose age was 67, it is said: 'He now lives in retirement, having given up all labors, literary and otherwise.' How often is this record made of men whose powers are unimpaired and whose labors, if continued, might bless the world to the end of time.

"It is related of Arnauld, the Jansenist, that he wished his friend Nicole to assist him in a new work. Nicole replied: 'We are now old; is it not time to rest?' 'Rest!' exclaimed Arnauld, 'have we not all eternity to rest in?'

"Dr. Samuel Miller says: 'There is no doubt that the premature dotage of many distinguished men has arisen from their ceasing, in advanced life, to exert their faculties, under the impression that they were too old to engage in any new enterprise.'

"When John Adams was 90 years of age, he was asked how he kept the vigor of his faculties up to that great age. He replied: 'By constantly employing them; the mind of an old man is like an old horse; if you would get any work out of it, you must work it all the time.'

"We have many remarkable instances of earnest and successful workers, after they had passed into the period known as old age.

"Ecclesiastical history tells the story of Casiodorus, who, at the age of 70, retired to a monastery, and devoted the remaining twenty years of his life to literature and religion; and of Epiphanius, who became an author at 64, and wrote several large works before his death.

"Between the age of 58 and 67, Baxter wrote forty works; after the age of 66, some of his most valuable works were written.

"When an old man, Baxter was brought be-

fore the notorious Judge Jeffries on a charge of sedition. During the trial, Baxter ventured to put in a word for himself.

“‘Richard, Richard,’ roared the Judge, ‘dost thou think we will hear thee poison the Court? Richard, thou art an old fellow, an old knave; thou hast written books enough to load a cart; every one as full of sedition—I might say treason—as an egg is full of meat. Hadst thou been whipped out of the writing trade forty years ago, it had been happy.’

“‘The only remarkable thing,’ says Hannah More, ‘which belonged to me as an authoress, was that I had written eleven books after the age of 60.’

“Says Lord Brougham, at the conclusion of his autobiography, ‘If many statements have been feebly and some inaccurately rendered, let it be remembered that I began this attempt after I was 83 years of age, with enfeebled intellect, failing memory, and but slight materials by me to assist it.’

“Plato died at the age of 81, it is said, with pen in hand; and an account is given of another who wrote a history of his times, at the age of 115.”

We witnessed, at Eagle Harbor, N. Y., at the house of a hospitable friend, some ten years since, a remarkable illustration of the error of ceasing mental labor in advanced age. Our friend was a wealthy merchant, and his father at the age of seventy was still managing his farm. The son, out of tender regard for his father, prevailed on him to leave the farm, throw off all care, and enjoy the luxuries of his village home. But it was at the expense of mental vigor. In less than two years from the change, at the time we spent a day in the family, the father, although he had physical strength to walk one mile quite briskly, had not mental vigor left sufficient to turn his chair, which his son had placed back to the table to show us his mental condition.

We buried our venerable father at the age of eighty-six. One year before his death, he refused our offered assistance at casting interest, stating that he dare not stop such mental exercises.

God made man for activity. Physical action stimulates and strengthens the mind. And mental action stimulates and benefits the system. And we have long been of the opinion that wrong physical habits of life break down

the mental strength of one hundred, where overwork of the brain breaks down one.

Our readers will find the following, by R. T. Trall, M. D., from the Philadelphia *Evening Star*, of deep interest. After introducing the illustration of the human brain by a seventy-year clock, the Doctor says:—

“A majority of the human brains that are born do not run five years; only one-fourth part run a quarter of a century; and less than one in a hundred take a note of time for seventy years. Occasionally, however, some brain will work on and work well for more than a hundred years. Humboldt, for example, at the age of ninety-five, was working his brain as vigorously on his great “Cosmos” as he worked it seventy years before.

“Now the capacity of the brain to run and to endure is to be measured by its greatest achievement, not its shortest duration; and I am inclined to think that brain labor cannot be excessive, that the brain organ knows nothing of fatigue, wear and tear, exhaustion, etc., which are so frequently ascribed to it by ‘hard thinking’ persons. Indeed, I regard the whole hue and cry about overworked brains, excessive mental activity, too much head for the body, etc., as veritable humbug.

“The brain is a mass of nervous convolutions, soft, pulpy, exceedingly mobile, and composed of more than seven-eighths water. Its molecules really float in water, so as to have the greatest possible freedom of motion with no appreciable friction. A million drops of water might be placed in a vessel and shaken up and tumbled against each other forever, without the least friction or wear, as in the case with the drops whose aggregate constitutes the ever-rolling ocean. The brain is nearly exempt from abrading friction. And the organ of mind should be so.

“Moreover, the brain has nothing to do with constructing and repairing the vital machinery. It has no supplying nor depurating functions, hence is not liable to obstructions, as are all of the merely vital organs. It is simply the organ of external relations. Its function is simply the recognition of actual subjects, this recognition being manifested in thought and feeling, or intellection and affection.

“Through the nervous cords—its telegraphic channels—the mind transmits its influence to the muscles, thus inducing all voluntary motions. The mind recognizes objects through

the media of the senses—seeing, hearing, smelling, tasting, and feeling. Is it hard work to see, hear, etc.? No; the brain never tires. But all parts of the living body, except the brain, may be overworked or underworked, or otherwise misused and abused or destroyed.

“Brains are especially protected from friction by their semi-fluidity, and from adverse external influences by a bony wall. There is no inlet except through the nerves, and no way to hurt them except by mechanical injuries from without or bad blood from within. If the body is well cared for, the brain will run regularly and keep good time till the last breath. There are living to-day men and women who at four-score years are wielding their pens as easily, and perhaps more effectively, than they did fifty years ago. Witness William Cullen Bryant and Sarah J. Hale.

“Those who perform much brain labor, and die young, do not damage their brains. They only destroy their bodies. If they maintain the normal vital conditions, they cannot hurt the brain by any amount of work it can be made to do. I have had many supposed cases of ‘softening of the brain’ to treat, and I invariably found the difficulty to be hardening of the bowels. The nutritive channels were clogged, or the outlets of the body were obstructed; some organs were overloaded with blood, and others were deficient; hence the balance of the circulation was destroyed, and the wear and tear of the vital machinery, not of the brain, but of the supplying and depurating organs, were very great, and sometimes speedily fatal.

“Show me the person who complains of mental weariness, and I will find in him a torpid liver, obstructed kidneys, a dyspeptic stomach, constipated bowels, or an inactive skin. If the brain-worker does not sleep enough, nor exercise enough, nor eat enough, or if he eats too much, or takes improper food, his digestive organs run down, and the clock-work of the brain, having no way to reconstruct the machinery through which it receives impressions and transmits volitions and impulses, is obliged to cease work.

“The moral is, in brief, keep the body in health, and the brain will take care of itself, work it all you can.”

THROW life into a method, that every hour may have its employment, and every employment have its hour.

Proper Diet for Man.—No. 2.

MOVEMENTS OF MASTICATION.

ONE very remarkable distinction between herbivorous and carnivorous animals is the difference in the movements of their jaws in the mastication of food. In the herbivorous there are two distinct movements—a vertical or hinge-like movement and a lateral movement. Both of these motions are essential for the purpose of grinding the coarse herbage upon which some of them feed. The lateral movement, however, is unnecessary in the carnivora, as the flesh upon which they feed needs only to be cut into small bits to make it susceptible of digestion. This being the case, the muscles employed in this process are proportionally large and powerful in the herbivora, while they are quite weak or partially wanting in carnivorous animals. It may also be well remarked that in the herbivora the salivary glands are very large and the flow of saliva very copious, while they are small in the other class and the flow scanty. It is interesting to note which of these two classes man most resembles in these particulars. Upon careful comparison we find that the likeness is decidedly strong between man and the herbivora. He has the same lateral motion of the lower jaw, and also quite strong muscles of mastication; but still the similarity is by no means strong enough to warrant us in claiming grass to be the natural food of man, the salivary glands being comparatively small, though they are quite active. All that is established by this comparison is the fact that man approaches more nearly to the herbivora than to the carnivora.

ALIMENTARY CANAL.

Another particular in which the several classes of animals seem to differ quite widely is in the proportionate length of the alimentary canal when compared with that of the body. Naturalists have laid it down as a general rule that the alimentary canal of herbivorous animals is much longer than in carnivorous animals. Thus, in the carnivora this canal is usually from one to eight times the length of the body. In herbivorous animals it is from eight to twenty-eight times that length. In obtaining all these measurements the length is invariably taken from the snout to the end of the backbone. Astonishing as it may appear, this rule is entirely ignored in obtaining the measurement for man, by those who argue in favor of a flesh diet, the length being taken from the top of the head to the bottom of the heel.

In this way man has been associated with carnivorous animals. If the true measurement is taken, the comparative length in man is found to be from ten to twelve, which is evidently correct. As will be seen at once, this places man among animals which subsist entirely upon vegetable food. Any one can test these statements for himself, simply remembering that the usual length of the alimentary canal in man is thirty feet. It really appears like a sign of weakness when men resort to such manifestly unfair means to establish their theories.

But since we have established the fact that anatomy, at least, does not show man to be carnivorous in his nature, perhaps some one may say, as many claim, that man is an omnivorous animal, and so should use both vegetable and animal food. We will consider this objection somewhat carefully. If man is omnivorous in dietetic character, we ought to find a strict correspondence between his alimentary organs and those of omnivorous animals, if we can find such a class. The hog and bear furnish the best examples of this class, although even these animals show a decided preference for vegetable food when in a state of nature. Upon examining the teeth of the hog, which is admitted to be omnivorous, we find no resemblance whatever in either the front or side teeth to those of man. Nothing could be more unlike the cuspids of the human species than are the ugly, protruding tusks of the hog; and the projecting incisors show no greater similarity. The back teeth of the hog are such as indicate a frugivorous character, and these bear such a strong resemblance to those of man that they might easily be mistaken for them, but are the only ones which show any similarity whatever, as already shown. All the evidence we can obtain, then, from this source is in favor of a vegetable diet as the most natural for human beings. We find the same true when we examine the teeth of the bear.

But we have yet found nothing very satisfactory or conclusive in our investigation, having examined no class of animals which presented correspondence sufficiently striking to identify the human species as members of the class. Now unless we find some such class of animals, this problem must still remain unsolved. We are not yet left to abandon the subject, however; for there is still a class of animals which we have not considered.

If we now look, as we should have done at first, at the class of animals next below man in the scale of being, we see at once a most striking similarity. And, indeed, this is just what we

should naturally expect. The teeth of the orang outang are precisely the same in number and order of arrangement as those of man, the principal, and almost the sole, difference being that the cuspids are somewhat longer, and more powerful and pointed. The front and back teeth are entirely similar, as are also the articulation and motion of the jaws. The alimentary canal is a trifle shorter, however, and the cuspids are separated a little from the other teeth; which facts, together with that previously mentioned in regard to the cuspids, would place this class of animals rather nearer the carnivora, but, at the same time, plainly place man at a still greater distance from the latter class. It is a well-known fact, however, that in a wild state the orang outang lives exclusively upon fruits, nuts, and esculent roots, at least when not urged by hunger to do otherwise; they are consequently frugivorous. This being established by fair and unequivocal reasoning, and the intimate dietetic relation of the human species with this class having also been established, we seem to be shut up to the conclusion that man is also a frugivorous animal. Since, then, all the productions used as food by this class of animals belong to the vegetable kingdom, are we not compelled to acknowledge that man's diet should also be derived from the same source?

While it is true that some eminent men contend that man is carnivorous in his dietetic character, it is also true that many of our ablest anatomists and physiologists, who have bestowed both time and attention upon the investigation of this important subject, when expressing their candid convictions in regard to the matter, unhesitatingly pronounced man to be purely frugivorous as regards his dietetic character, when viewed from the standpoint of anatomy. We will give the testimony of some of them.

Sir Everard Home says: "While mankind remained in a state of innocence there is every reason to believe that their only food was the produce of the vegetable kingdom."

Said the great naturalist, Linnæus, in speaking of the dietetic character of man, "His organization, when compared with that of other animals, shows that fruits and esculent vegetables constitute his most suitable food."

Baron Cuvier, one of the very highest authorities on comparative anatomy, says, "The natural food of man, then, judging from his structure, appears to consist of fruits, roots, and esculent parts of vegetables."

Prof. Lawrence, of England, fully agrees with Baron Cuvier, and remarks that the opinion held

by some that man holds a middle ground between carnivorous and herbivorous animals appears to have been derived from experience rather than from comparative anatomy.

Mr. Thomas Bell, who occupied the position of lecturer on anatomy and diseases of the teeth at Guy's Hospital, in a work upon the subject says, "The opinion which I venture to give has not been hastily formed, nor without what appeared to me sufficient grounds. It is not, I think, going too far to say that every fact connected with human organization goes to prove that man was formed a frugivorous animal."

Many other names of equal celebrity might be cited; but these are sufficient to convince that class of persons who judge of the truth of any theory more by the great names appended than by the real strength of argument, that evidence of this character is not wanting in support of the positions taken.

We have now examined some of the anatomical evidences upon this subject, and we think the candid reader who has carefully weighed them will not be unwilling to acknowledge that the unequivocal testimony of anatomy is in favor of a vegetable diet for man, at least in his primitive state. We have seen how little weight and real force there are in the arguments based upon the so-called canine teeth of man, and upon the comparative length of his alimentary canal. Indeed, it must be evident that those arguments were never framed from a careful consideration of the evidences of comparative anatomy, but were seized upon as a sort of apology for the practice of meat eating so prevalent in this country and England at the present time.

Many more evidences might be drawn from comparative anatomy, but we forbear, feeling confident that the arguments already elucidated are sufficient to fully establish that man is in no sense a carnivorous or omnivorous animal, but that he rightly belongs to the frugivorous class, and consequently should derive his food exclusively from the vegetable kingdom.

We are aware that some objections are urged against this view upon other than anatomical grounds; but these shall be considered in due time.

In our next article we will consider the nature of man's diet when viewed from a physiological standpoint. In this branch of the subject we shall find many points of much interest.

J. H. KELLOGG, M. D.

School Poisoning in New York.

DURING the last few months Mr. Leeds of New York city has been making some very startling disclosures relative to the deplorable condition of the city school buildings with reference to proper ventilation. Some time since, the gentleman mentioned was requested by two members of the Board of Education of New York city to investigate the condition of the city school buildings. This he did, preparing a careful and thorough report, which he handed to the chairman of the Committee on Hygiene to be brought to the attention of the Board. The report was suppressed, however, and no notice was taken of it until its subsequent publication in the *Sanitarian*. Since making the report, Mr. Leeds has visited many other of the school buildings and gives a detailed account of the condition in which he found the various buildings visited. In many cases he found ventilating flues of very inadequate dimensions, which terminated in the open space beneath the roof, having no connection with the external air. Of course the foul air at first arose, filling this space, and then upon cooling, from contact with the cold roof, settled back again into the rooms below, deluging the feet of the unfortunate children with a flood of poison-freighted cold air. The flues were often no more than four inches square, and so would have been of no practical value had their efficiency not been wholly prevented by the absurd arrangement mentioned.

In other buildings there were found the same farcical arrangements for the removal of the foul air, with not the slightest provision for a regular supply of fresh. Mr. Leeds remarks, "They could keep the windows open much of the time, and get fresh air in that way; but in stormy and cold weather when they could not keep the windows open, the air soon became filthy. It is perfectly horrid to keep children confined in such an atmosphere; and, indeed, it would be shameful cruelty to animals."

Of another new building which had a few separate flues in the outside walls, with no fresh air supply, he says:—

"Attempts have been made to connect the flues from the rooms with the ventilating caps on the ridge by wooden boxes under the roof, but a space two or three feet in length is left open near the center, breaking the connection, which is about as sensible a piece of engineer-

ing as it would be to exsect two or three feet of water-supply pipe so as to have water handy in the cellar."

Mr. Leeds also visited the new Normal College which he describes as follows :—

"Here we have one splendid new building, where the greatest attention has been given to secure the latest and most perfect ideas that the Board could command for the instruction of the teachers themselves in all that belonged to the most perfect development of the body and mind of the young citizens of New York. The heating apparatus alone must have cost from thirty thousand to forty thousand dollars. Radiators were scattered around in great profusion in proper and improper places, but there is not one single foot of regular fresh air supply provided for in the entire building.

Innumerable handsome ventilating registers ornament the walls at the top, in the middle, and at the bottom of the rooms, so that one only has to look up at these perforated walls to feel assured that the invigorating and vivifying streams of pure air must be constantly flowing through the room in great abundance, although they cannot be felt. But if the visitor should happen to be of an inquisitive turn of mind, or a little suspicious of all ventilating registers, as too many have been taught to be by sad experience, and should venture to try the velocity of the current through those registers, if any at all is found, it is as likely to be out into the room as from the room into the flue. And by inquiring a little further, all the flues will be found to terminate in the vacant space under the roof, so that the warmed air that may at times go up the flues on one side of the building will be cooled by contact with the cold roof, and fall down the flues on the other side."

"There are, to be sure, a few insignificant little ventilating cowls on the ridge of the roof with a crack of two or three inches around the top, which is probably in the aggregate about one-fortieth part of the open space that makes such a splendid show in all the rooms. Now there is an abundance of materials used here, and a sufficient outlay has been incurred to make this building a perfect model of a delightfully warmed and thoroughly ventilated building. But it occurred to me while examining it, that if the Shah of Persia should order a dozen locomotives and a dozen bridges of uniform size and an even hundred miles of railroad track, and his men should lay the track wherever they could find the best ground for it, and put up the bridges wherever they would best fit the rivers, without any regard to connecting the different pieces of railroad, and should put all the locomotives on the portion nearest the landing, he would have a piece of engineering skill about as creditable as the engineering of

the ventilating and warming of this building."

What hope can be entertained that children subjected to such potent influences for the production of disease would be able to survive their school days? or what prospect that the knowledge "crammed" into them under such pernicious circumstances would ever be of the slightest benefit to either them or any individual of the human family? Mr. Leeds is certainly doing a noble and philanthropic work in calling attention to these enormous violations of sanitary laws and common sense, and good results seem to be attending his labors in this direction.

J. H. K.

Another Warning.

AN exchange informs us that at the recent great cattle show in Islington, England, large numbers of cattle were seized with fatal symptoms of disease from the noxious character of the exhalations with which they were surrounded in densely crowded and ill-ventilated stables. This does not seem at all strange to any one acquainted with the conditions requisite to animal health; but the reporter adds that many of the animals died, and it was found necessary to slaughter more than fifty of them in order to *save* their flesh! Quite likely the diseased carcasses are already consumed by unsuspecting flesh-eaters, and are doing their work of generating disease and hastening death.

An illustrated paper gives a revolting picture of several large hogs which were also on exhibition on the same occasion, remarking that "their fortunate owner received a silver cup in recognition of his success in raising the most monstrous specimens of brutish obesity to be found in England." This eminent success had been attained by literally stuffing the brutes with mangel-wurzel and oil-cake. When we consider that such a condition is one the most thoroughly diseased, what reason can be given why the keepers of such monsters should not be fined for cruelty to animals, and the venders held accountable for the horrid train of ills which inevitably follow their use as food?

J. H. K.

DUTY is the first step to greatness—the helm that steers man safely over the billows of life. If we fail in our duty, we bid farewell to the land of promise—to the haven of hope; man's honorable occupation is gone.

MRS. WHITE'S DEPARTMENT.

MY MOTHER'S HANDS.

SUCH beautiful, beautiful hands !
 They're neither white nor small,
 And you, I know, would scarcely think
 That they were fair at all.
 I've looked on hands whose form and hue
 A sculptor's dream might be,
 Yet are those aged, wrinkled hands,
 More beautiful to me.

Such beautiful, beautiful hands !
 Though heart were weary and sad,
 Those patient hands kept toiling on
 That children might be glad,
 I almost weep, as looking back
 To childhood's distant day,
 I think how those hands rested not
 When mine were at their play.

Such beautiful, beautiful hands !
 They're growing feeble now ;
 For time and pain have left their work
 On hand, and heart, and brow.
 Alas ! alas ! the nearing time,
 And the sad, sad day to me,
 When 'neath the daises out of sight
 Those hands will folded be.

But oh ! beyond this shadowy damp,
 Where all is bright and fair,
 I know full well those dear old hands
 Will palms of victory bear ;
 Where crystal streams through endless years
 Flow over golden sands,
 And where the old grow young again
 I'll clasp my mother's hands.

— William M' Carrell.

Fashionable Dress.

It is evident that fashionable ladies are losing the consciousness that true beauty of dress consists in its simplicity, rather than in ruffles, flounces, puffs, tucks, and elaborate embroidery. The arranging of jewelry, sashes, laces, and unnecessary ornaments upon their persons, alone must occupy a large share of their time. It is apparent that women professing godliness have their minds and thoughts absorbed with, "What shall we eat? or, What shall we drink? or, Wherewithal shall we be clothed?" It really seems to be the mission and object of a large class of women to exhibit their wardrobe. Their burdens, trials, and perplexities, are mostly in regard to dress.

The churches in our country when the congregations are assembled appear more like rooms for the exhibition of the fashions of the day than for the worship of God. How does the Saviour of the world look upon this exhibition? The minds of a large number of those assem-

bled are preoccupied, and there is no room for Bible truth. The six days have been devoted mostly to the preparation of dress, to make a sensation at church. And all this display in the house dedicated to the Lord!

Mothers sacrifice to fashion their God-given time, which should be devoted to the formation of the characters of their children. Health is sacrificed in bending over sewing, within doors, shut away from the sunshine and open air. Opportunities are sacrificed that should be improved in educating the mind, and storing it with knowledge, that they may be qualified to instruct and train their children for usefulness in this world, and be fitted for the better world.

Women are bending their shoulders to accept a cross heavy to bear. Should Christ demand of them to bear so heavy a cross, and make so great a sacrifice to be his disciples, they would feel that indeed the cross was heavy, and the burden unbearable. Christ requires none of his followers to bear so heavy a cross as they subject themselves to in being the slaves of fashion.

If Christian women would lead out in the good work of reform, and set the example of dressing with neatness and simplicity, there would be a universal reform in dress. If they would work from a high and elevated standpoint, they would bring their eating and dressing into conformity with the laws of their being, and in obedience to their moral obligation to God. And there would be less money, less brain-nerve power, and less physical strength, squandered for artificial decorations to the sacrifice of natural beauty. We should then have more practical wives and mothers, and there would be a very happy change in many families that are now wretched because of their incorrect ideas of life.

The apostle raises his voice against overdressing. He exhorts "that women adorn themselves in modest apparel, with shamefacedness and sobriety; not with braided hair, or gold, or pearls, or costly array; but (which becometh women professing godliness) with good works." There is enough for all of us to do in this working world, in benefiting others by acts of benevolence, visiting the widow and the fatherless in their affliction, and showing that we do love our neighbor as ourselves. Good works should not be wanting in the Christian. The great amount of time and labor expended in preparing needless things for

ornamentation is just so much time we have stolen from God and our neighbor, to glorify ourselves.

Christian parents should, by their example in dress, show to all that they feel under solemn obligation to God to train their children for usefulness and duty, rather than for display. They should educate them to love natural simplicity, rather than to cultivate in them pride and vanity. The hours that are spent in preparing ruffles, tucks, scallops, edging, and embroidery, are worse than lost. All this needless labor requires nervous energy, confinement in-doors, and wearisome care. And what do these devotees of fashion gain? Only the satisfaction of being admired, like a butterfly.

Instead of laying up in store for themselves a stock of good works, in merciful attention to the poor and needy, seeking to bless those who are discouraged, and by their consistent life winning souls to Jesus, they have devoted time to pleasing themselves, and have brought condemnation upon their own souls. Our good works cannot atone for one sin. But Jesus knew this, and he came from Heaven to the earth to bring to us this divine help, that through his excellence of character, and through our faith in him, our human efforts would be acceptable with God, and we should finally be rewarded as our works have been.

Fashion binds upon the heads of women needless appendages. It requires them to sacrifice the natural form and beauty of the head for artificial deformity. These have a direct tendency to induce blood to the brain, because overheated by artificial braids of hair, cotton, or jute. In order to conform to fashion's standard, the limbs are left nearly naked, with merely one thickness of woolen or cotton. When the air circulates about these unprotected limbs, the blood is driven from the extremities to the internal and more vital organs of the body. The result is congestion, to a greater or less extent, of these organs. It is painful to reflecting minds to thus see innocent children, as well as those of mature age, dressed like victims for sacrifice, in order to make a display.

Women do not properly clothe their limbs, because it is not fashionable. For want of coverings, the blood is chilled back from the extremities, and the extra covering over the base of the brain attracts the blood to the head, and congestion of the brain is the result. The panniers, and extra coverings in overskirts worn

over the sensitive organs of the back, induce heat, and cause inflammation. The walk of females thus dressed is awkward and painful. The limbs, which should have even more coverings than any other portions of the body, because farthest from the center of circulation, are chilled, because not suitably protected. These organs are robbed of their due proportion of blood, therefore cannot be properly nourished, and the result is, the almost universally slender, undeveloped limbs.

Ladies expect, in walking in snow and mud, and in going up and down stairs, in getting in and out of carriages, to expose their limbs by raising their dresses. Some being ashamed of their slender limbs supply the deficiency by artificial calves. The votaries of fashion sell their birthright at the mart of fashion for a very poor equivalent.

Certainly, these should be the last to profess to have their modesty shocked by seeing ladies with the reform dress, short enough to clear the snow and wet, mud and filth, ascend stairs, and get in and out of carriages, without requiring the use of the hands to elevate the dress. Their lower limbs are clothed as well as the arms.

The slaves to fashion may say the feet and limbs are exposed. I beg pardon: the limbs are not exposed. It is true the reform dress reveals the fact that women have feet and limbs, and when they are modestly and sensibly clothed, making exposure impossible, she is not ashamed of the fact. But the fact that women have feet and limbs is not, as we have said, concealed by the length of the dress. We have decided that health and modesty require that women clothe their limbs as thoroughly as they do other parts of the body.

Christian women have a higher and holier mission to perform. They should have their moral sensibilities fully aroused to see and feel the crime of following absurd fashions to the sacrifice of natural simplicity and beauty, and consequently to the sacrifice of health. The only excuse that Christian women can urge for wearing the uncomfortable and monstrous deformity upon their backs is, that it is fashion.

It is impossible for those who wear them to walk naturally, or even sit in a natural position. The back cannot be supported against the back of the chair; for the large protuberance inclines them forward, which unnatural position cramps the lungs and chest. This

heavy, deforming cross women submit to carry because fashion has prescribed it. If the votaries of fashion will sacrifice health and natural beauty to lift this cross that fashion has prepared for them, should not Christian health reformers have the moral courage to adopt the reform dress, which has so many advantages over the fashionable dress? This dress is both healthful and convenient, and lays the least tax on the physical strength. The only cross they lift in this case is, they wear a dress which fashion has not instituted.

The Creator knew how to form the human body. He did not need to consult mantuamakers in regard to their ideas of beauty. God, who created everything that is rich, lovely, and glorious, in nature, understood how to make the human form beautiful and healthful. The modern improvements upon God's plan are insulting to the Creator. They deform that which God made perfect. Woman, as God made her, was a perfect and lovely image of the divine ideal of womanhood. Compare the modern taste with infinite wisdom, and what a contrast! How few preserve the original ideal!

If woman would answer the object of God in her creation she would claim the aid of divine grace, and by faithful improvement of every heavenly gift aim to high and harmonious development of physical, mental, and moral strength.

It is a sacred duty which woman owes to her Creator to become intelligent in regard to her own physical being, that she may understandingly guard the health God has given her. A diseased body affects the mind. How can the majority of professed Christians, who are following the modern fashions, obey the injunction of the inspired apostle, "I beseech you by the mercies of God that ye present your bodies a living sacrifice, holy, acceptable unto God, which is your reasonable service. And be not conformed to this world; but be ye transformed by the renewing of your mind, that ye may prove what is that good and acceptable and perfect will of God?"

We recommend to our Christian sisters a style of dress every way modest, convenient, and healthful, which, if conscientiously adopted, will prove a safeguard against health-and-life-destroying fashion. The fashionable dress, with its inconveniences, is in conflict with physical, intellectual, and moral health. We recommend, in contrast with the fashionable dress, the

modest, convenient, healthful reform dress. Will my Christian sisters stand for the right, with moral courage, in the ranks of health reform? And will they see the work which is to be done, and, fully comprehending the difficulties in the way of its accomplishment, give their influence on the right side?

"Honor thy Mother."

WHEN the law was delivered upon Mount Sinai, it was given to Moses upon two tables of stone. On the first of these were recorded those laws which refer particularly to our duty toward God; on the second, those which relate to our fellow-men.

Of the latter, the command, "Honor thy father and thy mother," occupies the first place. It is the foundation of the others, and if properly observed, will afford the strongest safeguard against the sins they forbid. It is, too, as the apostle terms it, the "commandment with promise." "Children, obey your parents, in the Lord: for this is right. Honor thy father and mother, * * * that it may be well with thee, and thou mayest live long upon the earth," wrote Paul to the Ephesian children, thus confirming to those living under the Christian dispensation the "promise made to the children of Israel."

When the Israelites entered the land of Canaan, after their forty years' wanderings in the wilderness, Moses directed that the Levites should say unto all the men of Israel with a loud voice, "Cursed be he that setteth light by his father or his mother, and all the people shall answer and say, Amen." This curse was only preceded by one upon the man who should make any graven or molten image, and put it in any secret place, that he might worship it as God. This shows the importance which God attached to the fifth commandment—a commandment which at the present day is regarded by Christians of comparatively little importance.

In Leviticus, we read: "The Lord spake unto Moses saying, Speak unto all the congregation of the children of Israel, and say unto them, * * * Ye shall fear every man his mother and his father. * * * I am the Lord your God." It is interesting here to observe that the usual order of speaking of parents is reversed, the mother being mentioned first, from which we may readily infer that the father, although the acknowledged head of the family, has no claim to obedience which the mother does not at the same time possess.

The fearful and terrible punishment which the Levitical law pronounced on the stubborn and rebellious son, who would not obey the voice of his father, or the voice of his mother, and would not hearken to them even when

they had chastened him, clearly proves the enormity of the sin of disobedience to parents. What a warning is such a law to parents to be faithful in training their children, and to require of them that prompt and full obedience which should secure them from such penalty. What a restraint, too, to children, when tempted to forget the commands of parents, or to regard them as of no binding force. We have no reason to suppose that God looks with any less disapprobation upon filial disobedience now than he did then, nor does he require less of Christian parents than he required of those under the old dispensation.

If we would secure for our children the blessings of this life, we must teach them to honor their father and their mother; if we would prepare them for a seat at God's right hand in Heaven, it is no less important that we should teach them the same lesson. "I have ever found," remarked a distinguished and successful preacher, "that those who are accustomed to obey their parents yield readily to the requirements of the gospel, while those whose wills have never yielded to man find it almost impossible to yield to the demands of God." It is a fearful responsibility a mother takes upon herself, when she allows disobedience in her children. It is almost the greatest injury she can inflict upon them. She perils both their present and future happiness.

Upon the mother, necessarily, devolves the principal care of the young. From her they receive their earliest lessons. To her they look to supply all their need. She stands in the place of God to them. Her will is law—from her there is no appeal. She is the arbiter of their destiny. If she cannot mold them altogether as she pleases, she can yet control and direct, and leave the impress of her own will upon them. But to do this she must be a true woman. She must feel her responsibility—her dependence upon divine aid. She must be strong in God and in the power of his might. She must not consult her own ease, or her present comfort, but must ever remember that precious souls are committed to her keeping, and demand her most watchful and prayerful care. A mother's life is by no means a life of ease. It is freighted with innumerable burdens and anxieties. It is, too, delightfully filled with bright hopes and cheerful anticipations, and is soothed by the warmest affection of loving hearts. To be a mother is to occupy the most important and honorable position a woman can occupy.

So long as a child honors his mother, he may be considered comparatively safe. Sin will have few attractions for him, and if led away, he will speedily repent, and confess his fault to her whom he considers his best friend.

The very first idea impressed on a child's

mind should be that of obedience to parents. He should never find that he can disobey. If he attempts it, the attempt should prove a failure. Obedience should be the unvarying rule. There are many ways of enforcing this obedience, and each succeeds best by her own method. The rod is rarely necessary, though perhaps it may not altogether be dispensed with, especially in early childhood. Young parents, however, are often inclined to resort to it too frequently. The mother should never appeal to the father, as possessing authority superior to her own. She is his equal in everything which pertains to family government, and she should never weaken her power over the minds of her children by in any way implying that he can enforce obedience when she cannot. If she is not obeyed from an authority her children feel to be inherent in herself, she is not obeyed at all. If her husband enforces outward obedience to her, it is only outward. The obedience in such circumstances is rendered to the father, not to the mother, and is not in accordance with the requirement of the fifth commandment.

Occasionally we hear of a father who does not endeavor to sustain his wife in establishing her authority over her family, and whose influence seems directly opposed to this God-appointed law, who will teach his children not to regard her authority, and will grant them liberties she has expressly forbidden. A fearful responsibility rests upon such a parent. The blood of his children's souls may stain his garments. It does not, however, relieve the mother from the proper exercise of her duty, although it makes it more difficult to perform, and diminishes her hope of success.

The mother should ever remember the dignity and importance of the relation she sustains. She cannot divest herself of responsibility. She must not forget that the welfare of her child depends, to a great extent, upon herself. Her time may be occupied with domestic cares, and she may have but little leisure for formal teaching, yet work need not hinder praying, nor the giving here a little and there a little of such instruction as a child needs. If a mother has an earnest purpose in the education of her children, she will seldom fail to make her influence felt. Children are close observers, and good judges of character. They know whether their mother is a person to be obeyed, or one whose commands may be disregarded. Love should be the controlling power in the mother's heart—love to God and love for her children. The *instinct* of love is not sufficient; that she possesses in common with all the animal creation; but love as a *principle* is what she needs to enable her wisely to discharge her duty.

No son who truly honors his mother will think lightly of woman. The respect felt for the individual is in a degree transferred to her

sex, and this respect is one of the strongest safeguards against vice.

"Honor thy mother" is a command not to be forgotten, and is one a mother has the earliest opportunities of enforcing. She must be careful to deserve this by her integrity of heart, and she will most surely save her children from many temptations to disobedience.

Disregard of parental authority is one of the crying sins of the day. From it, as a nation, we have more to fear than from any other, and for this mothers are particularly responsible. They have the destiny of our country in their own hands. Their influence is superior to that of the greatest statesmen or politicians. It is for them to decide whether our future shall be one of honor and virtue, or one of oppression, violence, and crime. If children are not taught to honor their mother, and to forsake not her law, it requires no prophets here to discern years of darkness and trouble in the coming time.—*Sel.*

"Give Us Manly Boys—not Boyish Men."

As we listened to the utterance of this sentiment by one beloved and honored, we were deeply impressed with its force and importance. We mentally added, Give us also womanly girls—not girlish women.

But who are to give us such boys and girls? Is there any special need for such a demand at the present day?

Upon the parents, guardians, and educators of our youth does society make this claim, and it needs no marked astuteness to describe the necessity of the claim.

The great aim of the juveniles of both sexes now-a-days, it would seem, is to doff, as early as possible, the habiliments that savor of childhood, and to don those of maturity, together with the habits and manners of the beau and the belle. We hate too sudden transitions from the nursery and short clothes to "society" and full dress.

The time our young people should spend in preparing for life, they are too eager to devote to self-exhibition and the enjoyment of life.

And our daughters marry while yet they need natural guidance, and our sons launch out upon life, without stamina, without moral development, without manly vigor; they find themselves boys where they should show themselves men, because, forsooth, they neglected the manly culture in their boyhood, which would have secured a strong maturity.

We do not sympathize with those who think "old heads should be found upon young shoulders," but we do believe in strengthening and preparing those "young shoulders" to carry the head with firmness—with manly and womanly grace, when crowned with dignity, and weighty with the responsibilities of maturity. To this end, we would have the young longer limited to

the sphere of discipline, subordination, and study—longer subjected to domestic and practical training than present custom seems to sanction.

Our sons and daughters *come out* too early. They somehow contrive to throw off all too soon, and too easily, parental authority, and to think and act for themselves. Their minds are diverted from the most important studies and pursuits at just the period when *months* are worth precious *YEARS*, and *years* comprehend in their results and advantages whole *decades*.

Why cannot our youth see that it is character, culture, habits, and principles, that make the man or woman? It is not dress, nor gallantries, nor flirtations, nor affected airs, nor unsoiled hands, nor personal beauty—neither is it wealthy parents or friends, nor aught that wealth can produce, that makes a true and noble man or woman. We have often found all these combined where every element of a high-toned and desirable character was wanting.

How beautiful is that disciplined resolution, industry, subordination to authority, honorable aims and ambitions, with the buoyancy and enthusiasm of youth. But is there not many a boy of sixteen who feels that a well-fitting suit from his tailor's, incipient whiskers, a good cigar, a fashionable hair-dresser, and the privilege of controlling his own time, and of determining his own out-goings and in-comings, are by far the more important helps toward the attainment of manly dignity. What, think such ones, are respect and obedience to parents—what affection and reverence for the silvery-haired grand-parents—what the manifestation of delicate attentions to sisters, compared with these weightier considerations? From such a boyhood, we gather no hopes more cheering than what cluster about a puerile and contracted, if not a vicious and baneful, manhood.

He who takes but one stride from early boyhood to the uncontrolled freedom of the man, fails to live; he *blots out and omits* one most important and salutary period of his existence.

Fitness for the responsibilities of manhood, *capacity* for the struggles and labors of heroic conflicts that beset and ennoble life, are only to be acquired by a well-spent and well-disciplined youth. He who would govern well, in the State, the church, or the household, must learn in his childhood, and practice through his youth, the lessons of obedience he would exact from others.

Youth! 'tis the golden period of life's seed-time and culture. 'Tis that portion of probation when questions of fundamental importance are agitated and settled for the untried future, both for time and for eternity. 'Tis a period when, if ever, industry, self-culture, habits of application, and the love of home, honor, and virtue put forth their green and tender blades of promise. Who would wish to blot out this period from his life? Who would voluntarily and unnecessarily shorten it? Ah! the youth who does, and turns the rather to effeminate pleasure and indolence, or wraps him-

self around with reckless indifference to aught beyond the present, shall find in the harvest day of manhood that the sheaves for his gleanings are few, and the ears upon them, worthless.

There is a noble, a strong, a pure, and generous manhood. It is attainable by all—it is worthy the ambition of every boy. Its title and its prerogatives may be secured, despite worldly disadvantages. Now, young man, in this period of your youth, will you have it? Then shrink not from the wholesome restraints of your home or parental authority. Meet with resolution and energy those difficulties that lie in your pathway. Accept gladly and gratefully the discipline of study and labor, and seek to be strong and manly, to be true and worthful, in your inner life and feelings. Leave the fopperies and pleasures, and meaningless gallantries of grown up dandies, till you are grown up—perchance you will then find neither time nor taste for them. It may be that having tasted the purer, more sparkling wine of a vigorous and manly life, you will regard the other as stale and flat, even to disgust.

Above all things, to prove yourself manly, never ignore the authority of your mother, or the influence of your sisters, or boast that no woman ever did or shall govern you. Such boasts never came from brave and manly lips.

There are very intelligent and refined people who really think a boy in his teens appears more manly and more admirable in escorting his sisters where they wish to go, or in piloting the way for his mother, or some maiden aunt, or some elderly friend who needs, but has not, some strong young arm to lean upon.

There are sons and brothers who leave the ladies of the home circle to such attentions as they may chance to pick up, while they talk small talk, and play the beau to some half-grown girl who dangles upon their arm, and who should be out under the escort of her father or brother, or else at home with her mother or her books.

Depend upon it, you will be more successful and more worthy of success in high-toned and valuable female society, if you spend the years of adolescence in fitting yourself for future life in adorning your life and character, and in making valuable acquirements, than if you wasted those years in trying to throw off restraints and in aping ill-developed manhood. In the latter case, should the years of maturity ever be reached, in mental and moral developments and in true manliness, you will present but a sorry specimen of "boyish men."

Those are not the bravest spirits that chafe continually under legitimate and wholesome authority. Nor are those the most manly boys who assert their superiority over their sisters and disdain home regulations, and spend time as they list and where they list. Nor do they give promise of the speediest manhood who saunter through the streets during hours for labor or school, puffing smoke of bad cigars into the faces of ladies who pass

them, and leaving the filthy mark of tobacco-chewer wherever they go.

They are not the most *generous boys*, nor do they make the most *liberal men*, who begin early to buy expensive trinkets for *some other boy's sister*, and to make bills at the livery stables, and to think their own dress of more importance than that of any other member of the family. These are the boys who punctiliously remember St. Valentine's day, and write innumerable *billet-doux* to girls as verdant and silly as themselves, but who often, when absent from their parents, keep them waiting mail after mail for tidings from them, or perhaps do not write home at all, unless the purse runs low and a *remittance* is desired.

I have known just such most-grown boys cry—yes, actually cry, like a girl or a little boy, because their father required some disagreeable task of them, or refused them some indulgence they much desired.

I have known just such would-be-men allow their mother or sisters to black their boots for them, or cook them an extra breakfast when they were perfectly able to be up with the rest of the family. I have even known them to permit their sisters to bring in wood, and make fires, and perform other tasks belonging to them, while they sat in the easy chair with feet elevated to the mantle or to the arm of the sofa, with a spittoon by their side, and a novel in their hand.

Out upon such manliness! Woe be to the hapless woman who at some future day shall blindly unite her destiny for life to such "boyish manhood."

Parents, to you we repeat the utterance of our pastor—"Give us manly boys—not boyish men." Yield not up too early, nor too readily, the reins of control. Do not spoil your boys by weak indulgence nor an unwise discipline. But, oh! seek their good in your system of family education, rather than your ease, or their present pleasure. Give us not only manly boys, but large-souled, true-hearted, noble, and upright men. Give us men upon whom the weak may lean and find strength, upon whom the crushed and sorrowing may look, and their faces brighten—even in the atmosphere of whose lives the flowers of virtue and innocence may luxuriantly flourish, and in whom right and justice may ever find advocates and friends.

Then shall the generation to whom you give them rejoice in them, and their affluent and noble manhood shall be your crown of rejoicing, and your insignia of home.—*Advocate and Guardian.*

NOTHING so wins upon strangers as true politeness. A little attention shown in a stage, or in the cars, or at a public table, costs us very little. But what an effect it has upon the persons to whom the attention is shown. The pleased look, the grateful smile, show us we have gained a friend.

GENERAL ARTICLES.

GOD AND MAN.

THE first physicians by debauch were made,
 Excess began and sloth sustains the trade;
 By chase our long-lived fathers earned their food;
 Toil strung the nerves and purified the blood;
 But we, their sons, a pampered race of men,
 Are dwindled down to three-score years and ten.
 Better to hunt in fields for health unbought,
 Than fee the doctor for a nauseous draught;
 The wise, for cure, on exercise depend:
 God never made his works for man to mend.

—Dryden.

Sanitary Science.

At a recent meeting of the American Public Health Association, Andrew D. White, president of Cornell University, delivered a very able and instructive address upon the subject of sanitary science as connected with public instruction. The truthfulness of his representation of the great lack of proper instruction in hygiene was recently most conclusively shown by the lecturer on *materia medica* in a well-known and justly celebrated medical college of this State. The lecturer began his course of instruction by classifying the various remedies reputed to be useful in the treatment of disease, very properly placing *hygienic* measures first, as being the most effective, fully recognizing their great importance. Thus far the prospect for Hygeia seemed very promising; but to the disgrace of a medical fraternity which can tolerate so gross an error, and, doubtless, to the greatly increased hazard of the lives of the unfortunate victims of disease who shall fall into the hands of the scores of students so soon to leave the institution as physicians, the lecturer in proceeding to describe the various classes of remedies enumerated totally ignored the subject of hygiene, saying that those interested in that branch of therapeutics would find it well described in works upon the preservation of health! The number of those who would take the trouble to thus investigate the subject can be easily estimated by any one acquainted with the common practice of drug physicians. The following are a few paragraphs from the lecture which we take from the *Popular Science Monthly* :—

“The proposition to which I shall speak especially is this: that provision should be made for instruction in Human Physiology, Hygiene, and Sanitary Science, in all departments of public instruction in our public schools, by providing fundamental instruction, especially

in the simple principles of physiology and hygiene; in colleges and universities, by presenting this general instruction in a more extended way, and by promoting investigation; in medical colleges, by giving more special instruction in matters relating to public and international hygiene; and that, in our departments of engineering and polytechnic and technological schools, especial provision should be made for instruction in sanitary engineering.

“In regard to the first of these provisions, that for popular instruction, few probably are aware of the need of them. Take, for example, the revelation made within the past year, at the outbreak of yellow fever in a Southern city. Two things in relation to that revealed very clearly the evils of which I speak: First, the cause assigned to the disease shows the utter want of sanitary knowledge in the people at large; and, secondly, the real cause, since revealed, shows the absolute blindness to the simplest principles of sanitary science on the part of those immediately concerned. When the yellow fever broke out at Shreveport, it was telegraphed all over the country that it was caused by the removal of the obstructions in the river above the city. That statement went all over the country unchallenged. So far as I know, no one thought of expressing doubt publicly as to the statement that the yellow fever was caused by a more plentiful supply of water at the wharves of that city—the fact being that this would conduce rather to the removal of the causes of the disease than to the prevention of them. At last came information as to the real cause, and it was found that in that hot climate men had been allowed to heap up the material in which disease-germs arise abundantly; that the simplest truths of sanitary science had been ignored, and that the consequence was perfectly simple and natural.

“But it is not merely in such outstanding parts of the nation that such ignorance exists. It is spread throughout our own country districts, even the most enlightened districts, and you will find prevailing in many of our country towns traditions and superstitions in regard to this matter that are most surprising. You will find some of these things which are known to be absolutely deadly, considered on the whole as healthful. Strange as it may seem, you may hear people who take the papers, who are supposed to be within reach of the great sources of information—you may hear such people, I say, maintaining that, after all, the emanations of the cesspool are rather conducive to health than to disease; that their fathers lived and thrived in such an atmosphere, and that, therefore, it has a healthful influence. I can point you to an exceedingly pleasant village which I have sometimes to visit, where, with a plentiful supply of water, there is an absolute want of any system of sewerage. Typhoid and typhus

go zigzag through that town every year or two, making victims, yet you cannot induce the people of that village to believe that their unsewered condition has anything to do with it.

"But it is not merely in this country districts that this state of things has existed. Up to a very recent period at least, the same ignorance was manifested in a very surprising degree in this metropolis. It is now about five years since, with two other members of our State Senate, I visited this city, and sat in the Commission for examining into certain branches of the city administration, and especially into the conduct of that branch which had the care of the public health. The state of things revealed was such as could only exist under a great and wide-spread ignorance on the part of citizens of the first principles of sanitary science. To give an idea of this ignorance, let me recall, as nearly as I can, a little episode in the investigation:—

"It happened that the late Judge Whiting, who had charge of the investigation on the part of the Citizens' Association, put on the stand a young physician, who testified that the health officers, or wardens, or inspectors, were men utterly ignorant of the first principles relating to the public health which they were appointed to preserve. In order to refute this, the head of the Health Department at the time brought on the stand, in perfect good faith, several of these health officers. Toward the close of the examination of the first (one) of these gentlemen, Judge Whiting asked this question: 'Did you have a case of small-pox in your ward?' and he answered, 'Yes, sir.' *Judge Whiting.* 'Did you visit the patient?' *Witness.* 'No, sir.' *Judge Whiting.* 'Why not?' *Witness.* 'For the same reason that you would not; that I was afraid of taking it myself.' *Judge Whiting.* 'Did the family have any care?' *Witness.* 'Yes, sir; they were "highjinnicks" (hygienics); they doctored themselves.' As the other witnesses came in, Judge Whiting used this as a sort of test question—as a sort of key to unlock the system, and show the utter ignorance that prevailed in every department of it. Every witness was asked: 'Well, have you any "highjinnicks" in your ward?' Some of the witnesses thought they had; some thought they had not; some thought they 'had them pretty badly;' some thought they had them in some parts of the ward, some thought they had them in other parts of the ward. At last the judge asked a witness, who had been answering his questions in this way: 'Do you know what the word "highjinnicks" means?' and he replied: 'Yes, sir, I do; it means a bad smell arising from dirty water.' Of course the exhibition was vastly amusing, but, after all the guffaw was over, a sad after-thought necessarily came to every thinking man as to the condition of the great metropolis which allowed all its dearest

material interests to be placed in such hands as this. It may be said that this was the result of a political system, but it was not. Had there been a tithe of the instruction which should have prevailed—of that simple knowledge that should have existed on this subject—such a thing would have been impossible, no matter what the political exigencies or arrangements were.

"So much for the need of popular enlightenment on this subject. Look, now, at a higher range. It is only a few years since the country was startled by the outbreak of a malignant type of fever in one of the leading boarding-schools in New England. The result was, that several ladies from the most respectable families in the country lost their lives. The school had always been considered an admirable one. It was under the charge of a principal and instructors in every way worthy of their calling; but an investigation by competent persons showed that causes of zymotic disease lurked in every corner of the edifice, and that the only wonder was that the disease had not come earlier and spread even wider.

"And, if any one objects that these studies are based upon physiology, which had led man into dangerous paths, that it is, in fact, an unsafe study, I would simply point to these words, uttered so long ago, and from which, certainly, these objectors will make no appeal: 'The fear of the Lord is the beginning of wisdom.' There is a great truth in these words. We all feel them. But what is that truth? What is that fear? Is it the mere selfish fear which the African native feels for the madness of his fetish? Is it the mere groveling fear which the Turkish slave feels for the tyranny of the satrap placed over him? Certainly not. The only wholesome fear is that fear based not on mystic dread of tyranny, but fear to violate those great laws by which the divine power which maintains and regulates this universe governs all. That is the fear which lies at the beginning of wisdom, and among those studies calculated to impress upon us the existence of laws, the violation of which is followed by penalties strictly imposed, stand foremost those to which this Association is now so worthily devoting its attention—studies sure to make the earth more beautiful; sure to make mankind more reverent and noble."

Hermit Crabs.

ONE of the many curious things living in the sea is the hermit crab. Its head and claws are covered with shell the same as other crabs, but its body and tail have no better protection than their covering of skin, except that at the tip of the tail there is a hard little instrument like pincers.

The poor little creature is in constant dan-

ger of being attacked in the rear, and in such a case is taken at a disadvantage. So he searches about until he finds an empty shell, and, if it is the right size, he thrusts himself into it all but his head and legs, and makes himself at home, traveling about with his shell on his back, the pincers at the end of his tail holding him firmly in the shell. If the first shell he finds does not fit, he travels about the beach looking for another until he comes across one which suits him. This he lives in till he outgrows it, when it is necessary that he should leave his house and find a larger. These crabs are called hermit because they live by themselves. If two chance to meet, there is sure to be a fight, until the weaker one gives way. Notwithstanding their quarrelsome disposition and solitary ways, these crabs sometimes make friends with the cloak anemones, a curious kind of fish which are frequently fastened to the shells the hermit crabs inhabit, feeding with them and seeming really to entertain an affection for them. When about changing his shell, the hermit crab has been seen anxiously moving his friend to a new shell, and even pressing him down with a claw to fasten him on. Another, having failed to move his friend after many efforts, rather than give him up, went back and remained in the old out-grown shell.

—Sel.

More About Pork.

WE do not consider pork a very choice theme of discourse, and would gladly refrain from speaking of it if our fellow-men would cease to use it as food. But there is no immediate prospect of a general reform in this direction. Men have a relish for pork, and this causes them to forget the filthiness of the swine, and the unhealthful and dangerous character of its flesh as an article of food. In speaking of the excellencies of the vegetarian system, and of the great advantages which had accrued to myself from adopting it, I did, not long since, awaken the serious displeasure of an elderly lady who happened to be in the room at the time. In a very irritated manner she burst forth in praise of pork as one of the most excellent articles of human food. She could not get along without it, and no one should ever induce her to make the attempt. I did not care to contend with such an antagonist, for I could do her no good, and was sure that I was not likely to be benefited. So I made peace with her by saying that there was no ground for war between us, for while she wanted all the pork she could get, I wanted none, and so was willing she should have it all.

But this lady is, after all, only a fair specimen of the human race. People are determined to eat pork. If they were not, the ex-

cessive filthiness of the swine would have some effect to abate their love for it. Or if this were not enough, then the fact that hogs are full of scrofula and all kinds of foul humors would hinder them from feeding eagerly upon pork. But no such trifling considerations as these can be allowed to restrain their appetite for pork. The old Romans, though they ate pork freely, well understood it to be the fruitful source of scrofula; for their word *scrofula*, which we translate scrofula, they derived from *scrofa*, a sow, showing the intimate connection which they believed to exist between the use of swine's flesh and the possession of scrofula.

But what are such considerations as these compared with the privilege of eating the flesh of the swine? They certainly do not weigh much with mankind, for the multitude will not change. What would their food be good for if it were not filled with scrofula in the form of lard? And what would life be worth if they could not plentifully supply their tables with fresh pork? For the honor of human nature I wish this were not so; but nothing seems capable of effecting any material change. There are plenty of warnings like the following which I cut from the semi-weekly *Tribune* of January 30:—

"It is reported that seven persons are lying at the point of death at Aurora, Ind., from having eaten fresh pork with trichinae in it. Two weeks ago, Mrs. Henry Threnart had two hogs killed for family use. A few days after eating of the meat, Mrs. Threnart and one of her children were attacked with what appeared to be typhoid fever. Mrs. Beuter, the wife of a German minister, visited her, and with two of her children partook of the meat. In a few days, all three were attacked with the same symptoms, which attracted the attention of physicians, and upon an examination of the pork, they found it literally alive with trichinae. Mrs. Threnart and three children and Mrs. Beuter and two children are not expected to live."

But what are hogs good for, if not fit to be eaten? Men are so fearful that the wisdom of God in creating swine will not be vindicated that they must show them to be useful by devouring them. When we consider that all pork is liable to be found full of worms like that above mentioned, and that none is fit to be eaten if any regard be had to the manner of life and actual condition of the neatest and most healthful swine, we might think pork-eaters very solicitous for the glory of God, did we not know that it is their appetite for this gross food that causes them to use it. Doubtless God made the swine to be scavengers. Their habits of life prove this. In warm countries they may fill a most useful place. Here we have little use for them. Small children put everything in their mouths, for they can think

of no other use for what they see. The Chinese, who are in some respects a nation of children, put every kind of dead creature into their stomachs, for they are sure that these were all made for some wise end, and this to them seems the design of Providence in the creation of all that moves. We do not imitate them in rats and puppies, but if we take the swine from wallowing in his filth and set his flesh upon our tables, do we stand far enough above the Chinaman to look down upon him as beneath ourselves?

J. N. A.

Tobacco.

SOMETHING WE CAN'T UNDERSTAND.

THE editor of "*Life Illustrated*" has been puzzling himself over a difficult subject, and finally gives it up as something he "can't understand." We have often found ourselves in the clouds on the same subject. The matter, as stated by the above-mentioned editor, we give below, and submit it without comment to our readers.

We notice occasionally a gentleman and lady walking arm-in-arm along the sidewalk, or riding *tete-a-tete* in a carriage through the streets, all of which seems to be very natural and proper. But the phenomena which we cannot comprehend, are these: The gentleman carries a piece of burning tobacco in his mouth, and talks through the smoke thereof, while the lady has nothing at all in her mouth except a set of nice, clean teeth, and a pretty little tongue.

What is the rationale? If the cigar is good for the one, why not for the other? If smoking in a close conversation is an elegant accomplishment, why should not ladies be as accomplished as gentlemen? Perhaps it gives his breath a sweet savor which renders his conversation particularly interesting, if not perfectly charming. We have sometimes noticed a sudden turning away of the lady's face, as an eloquent period rolled out enveloped in a cloud of smoke unusually blue and dense, the same as to say, "Too much of a good thing, Mr. Nicotiana." But if the thing be a breath-sweetener for the gentleman, why not sweeten the lady's breath in the same way?

Possibly he has some constitutional infirmity, as bad breath, rotten teeth, or a foul stomach, that requires to be kept out of smell, if not out of sight. There may be something about him that needs a stronger smudge to conceal. Then why should not she be as careful to keep her offensiveness at home? Or are females naturally sweet and clean, and males naturally otherwise?

Our eyes have never yet witnessed the spectacle of both parties smoking at the same time.

But why should not this be the fashion? We predict that it will; it must eventually become the fashion, unless the gentlemen abandon the habit. How beautiful! Only think of a young man calling on his sweetheart, and both sitting down to a sociable smoke! Imagine that, in the delirious ecstasy of love and tobacco, the adoring lover, firmly grasping his "fragrant Havana" in one corner of his mouth, opens the other corner, and "pops the question," and then the fascinated damsel, removing her *cigarette* from her mouth a moment, brushes off the ashes at the burning end, walks to the spit-box and back a few times in deep and anxious meditation, hawks and spits a few times, and then answers him, "Yes."

Do you say that no decent young man would ever marry, or even court in earnest, a young lady addicted to smoking cigars? Then why should any decent young lady ally herself to an indecent young man? Why will not the rule work both ways? Suppose, in the family circle, the good man, returning from his daily toils, sits down with the family at the evening meal, and then lights his cigar as usual, and puffs the suffocating smoke all through the house! All right, is it? Well, then, suppose the good woman does ditto! Horrid, is it? Why? Has not a woman the same right to be decent or filthy, as the case may be, the same right to enjoy herself or to defile herself; the same privilege to please or disgust others, that a man has? The subject is altogether too complicated. We can't get the hang of this "Woman's Rights" business at all. We give it up.—*Arthur's Home Magazine*.

Health Reform.

MARY H. HEALD, M. D.

"Know thyself" is an adage that has been handed down to us from olden time, and so important has the knowledge of ourselves been considered that thinking men of all ages have pressed it upon the attention of their disciples in numberless forms; but the great majority have made this mistake: they have sought the higher before they had found the lower; they have been trying to search out the immaterial while as yet they were in gross ignorance respecting the material man. In their eagerness to secure the object of their search, they have given all their attention to the spiritual, forgetful or ignorant of the fact that to understand and interpret the soul of man, we must be able to appreciate the body and the relations it sustains to his spiritual forces.

Men have sought for ages to reconcile the fact that we may possess fine spiritual insight, keen intellectual ability, and a prompt and faithful conscience, and yet at times become the slaves of our appetites and passions; but lat-

terly we are beginning to understand the same. We know that physical conditions give rise to these unhappy manifestations. We are learning, too, what a potent force is proper generation—that if human beings are conceived in love, when both parents are in sound health, their appetites and propensities will readily yield to control and discipline, and become the instruments of a harmonious, higher life. It is depravity of the blood, irritability of the stomach, or some other morbid condition of the body, that causes much of the censoriousness, fretfulness, and distrust, that so generally prevail among men. Many a man thinks ill of his neighbor, or indulges in mournful speculations upon the degeneracy of the world, because his own torpid liver cannot properly perform its part in eliminating from the blood those elements which are sources of irritation to the structures in which they are deposited. Many a mother finds herself unable to deal gently and justly with her children, because her body is subjected to such false relations that its functions are badly performed, and the blood furnished to her brain gives irritation and discomfort, provoking that ill-temper which destroys the happiness of others, and fills her own solitary hours with self-reproach and vain regret.

It is a truth but little understood that ill conditions of body and morbid manifestations of mind and heart are related to each other as cause and effect. The whole organization of man—body, as well as spirit—is subject to fixed laws. If we obey these laws, we have health, harmony, and happiness; if we disobey, we inevitably pay the penalty through disease, inharmony, and unhappiness. These may not follow immediately; it may not be evident to us that the transgression is inevitably followed by suffering, but that it is so is as fixed a fact as that the earth receives light and warmth from the sun. In whatever way we violate one of nature's laws, we pay the price of so doing either by direct suffering—near or remote—or by lessening our own power to do good, or to enjoy communion with pure and true spirits.

The Way we Sleep.

For nearly thirty years of my life I can remember my sufferings during the cold winter nights before I embraced the health reform. Feather beds were considered indispensable, and during the most severe weather we did not think we could have too many clothes over us unless their weight was burdensome. The fresh air was excluded during the night, supposing that if it was admitted we should surely take cold. In spite of all our care, a cold I was sure to have, and a distressing cough the greater part of every winter, and some years the summer came before I was free from it.

For eight years past we have not used feather beds, and have habituated ourselves to sleeping with our windows raised high in winter as well as in summer. No dampness nor frost gathers on the bed-clothes or on anything else, as it passes off in the air which circulates freely through our sleeping rooms. We do not consider it necessary to have them warmed by a fire unless it is in very stormy weather, and we never go to bed and shiver as we used to and think our beds as cold as ice.

They are made up with two ticks, one filled with straw and the other with husks, and a small quilt spread over the latter, which is uppermost. Some would think that more bed-clothes would be required to keep warm in such an airy room, and without a feather bed; but this is not the case. The pure air imparts vitality to the system, so we are warm and comfortable, requiring considerably less bed-clothes than we formerly used. With warm blankets for our feet we retire at eight o'clock in the evening, and are ready for duty at five in the morning, refreshed by sweet and dreamless sleep. It is now very seldom that one of us has a cough or even a cold. C. M. S.

Gloomy Prospect for Coffee-Drinkers.

If the following statements, from a recent issue of the *Boston Globe*, be correct—and we have no reason to doubt them—coffee-drinkers, like much of the coffee they swallow, are likely to become considerably muddled. We will simply add that, under the circumstances, now is an excellent time to abandon the use of coffee entirely. It is a useless "luxury," and really *no* luxury, after all, nor is any other beverage or article of consumption which injures the health of the users. This is what the *Globe* says:—

"Coffee-drinkers will soon have grounds for complaint. The high price of coffee and the continued appreciation of values, from week to week, is attracting the attention of dealers. Prices are now the highest ever known to the trade, and there is no immediate prospect of a decline. Coffee will soon be an expensive luxury. During the past month, a great demand having been made for ground coffees, many customers being unable to pay the high prices demanded for the pure article, the trade in that department has increased, with one leading house, fully five hundred per cent. The stock of Brazil coffee in the United States on last Thursday was 35,000 bags less than a year ago this time; and foreign advices state that the Java crop will also be short. At the next sale of the Dutch Trading Company, which holds a much larger stock than at this time last year, liberal purchases are expected for the United States, as the natural result of the high prices here. R. E. H.

Trichinæ.

A FEW years ago much was said in the newspapers about the danger of eating pork, owing to its liability to be infected with a loathsome and dangerous, though microscopic, parasite—known as *trichinæ*. For a year or two, however, little has been said upon the subject, and people seem to have lapsed into a condition of apparent indifference with regard to it. Occasionally, however, facts of so startling a nature are brought to light that even the most careless must be compelled to pause for a moment and consider the propriety of exposing himself and very probably his friends to the possibility, at least, and perhaps probability, of a death the most horrible to be imagined.

The recent case of trichinæ poisoning at Aurora, Ind., is another very forcible admonition to pork-eaters, and it is to be hoped that some, at least, of those who are conversant with the details of the sad affair will realize its full significance, and wisely renounce forever the use, as food, of that scrofulous scavenger—the hog. The following is a brief abstract of a detailed account of the whole affair which recently appeared in the *Cincinnati Commercial*:—

Mrs. Thenard, a widow lady living in Aurora, Ind., with her three children, was recently taken suddenly and violently sick after eating of the flesh of two hogs which she had raised and had made into sausages. The disease was at first supposed to be typhoid fever, and the neighbors kindly offered their assistance, caring for the sufferers and unsuspectingly eating of the same infectious, though savory, sausages. As the result, six more persons were very quickly seized with the same violent symptoms of vomiting, diarrhea, pain, and contraction of the muscles. Trichinosis was now suspected, and upon examination of the flesh of the hogs, that of one of them was found to contain thousands of living worms, although at the time it was killed it appeared to be quite as healthy as the other. The effect of this disclosure upon the pork consumers of Aurora is well described by the *Commercial* reporter as follows:—

“Aurora is largely populated with Germans, with whom pork in its various forms is a staple article of food, and it can therefore be readily supposed that the discovery that such meat was poisoned, created something of a commotion. The houses of the sick were visited by hundreds of sympathizing people, on whose faces a deep concern was plainly written. If their

friends were poisoned by eating pork, or a home-made article of sausage, the inference was plain that such a fate might overtake themselves. The savory morsels of the last meal might at the critical moment of reflection be silently, but effectively, performing the work of death in their own bodies. The very thought was dreadful and unendurable. Several took the alarm and flung their stores of pork away, as if the mere touch was infectious.

“Many of the people of Aurora crowded the physician’s office with pieces of pig-meat, which they wished examined, already determined not to taste of the food again until assured by scientific test that it was not infected by the poisonous little devils which evade the acutest unaided vision. Indeed, the whole community was more or less alarmed on Saturday, and the news that people were poisoned by simply partaking of the most savory, common, and even popular dish, was spreading throughout the country and reaching the neighboring towns, villages, and cities along the railroads and the Ohio river.

“The facts developed are enough in themselves to cause the most serious alarm, for they are so intimately connected with the commonest concerns of every-day life that one may justly pause in the routine and question the very morsel of food going into his mouth.”

It is thought that three of the sufferers may possibly recover; but no hope is entertained for the remaining seven. They are dying as did Herod of old, literally devoured by loathsome worms.

The *Commercial* also gives a brief history of trichinæ since their first appearance, from which we extract the following paragraphs:—

“It may not be uninteresting to the general reader to know that the trichinæ are more frequently found in the muscles of the human body than has generally been supposed. They were first observed by Fiedemann in 1822, but first fully described by Prof. Owen in 1835, who supposed that they were a harmless parasite; and for a long time they were considered simply as a dissecting-room curiosity. But in 1860, a young girl died in the Dresden hospital from the effects of trichinæ, as was afterwards fully proved by Prof. Zenker. The history of this first case is briefly as follows: The girl was about twenty years of age, and was a servant in a farm house, and was taken sick soon after the killing of two pigs and an ox, about Christmas, 1859; her symptoms were almost precisely the same as those of Mrs. Beutler, and the other persons named, who are now suffering with the disease in Aurora. Her flesh was found after death to be full of trichinæ. ‘They were alive, some coiled up, and others lying straight; and they seemed to be in all stages of

development, and in every part of the body, not even excepting the heart itself.' At the same time, Prof. Zenker learned that soon after the girl had been taken ill, the housekeeper became unwell with similar symptoms; and all the servants were taken sick about the same time. The butcher who killed the pigs was also found to be ill. 'He had been three weeks in bed, suffering from rheumatic pains in the limbs, and had been as if paralyzed over his body—unable to move his arms, legs, or neck. He had always been a strong man. He thought he had taken cold the day he killed the pigs; but when it is known to be a habit of German butchers to taste the meat they kill, in the raw condition, the history of these cases to Prof. Zenker became a history of trichinacious disease.' The experiments made with the flesh of the girl who died of this disease were very numerous, and fully demonstrated the dangers and horrors of eating pork without knowing that it was positively sound and good.

"Some of the girl's flesh was fed to a rabbit, and it died within a month, with symptoms of the disease, and its muscles and flesh were found to be filled with the trichinæ. Other rabbits were fed with the flesh of this first rabbit, and they died with similar symptoms, and their flesh was found to contain myriads of trichinæ. These experiments were repeated with similar results in Edinburgh in 1860, and again in 1864 in Cambridge, England, by Dr. Thurdichum. Prof. Langdenbeck, of Berlin, relates the following: 'In 1845 there was a "church visitation," in which eight persons took part, and seven sat down to a breakfast consisting of ham, sausages, cheese, roast veal, and white wine. In the course of three or four days every one of the seven persons was seized with diarrhea, pains in the neck, swelling of the face and extremities. Of the seven, four died, and the three who survived remained ill for a long time.'

"Another instance of the outbreak of this disease is related by Aitken: 'In October, 1863, there was a festival held in Heltstadt, in Prussia, on which occasion one hundred and three persons ate of sausage, called by the Germans *roostewurst*. On the day after the dinner, several persons were attacked with great irritation of the bowels, great prostration and fever. Within a month, more than twenty persons died, and more than eighty persons were then suffering from the fearful disease under consideration. Case after case died a slow and lingering death. Active inquiry into all the circumstances of the dinner was instituted, and the sausages, being examined with the microscope, were found to be literally swarming with trichinæ.'

"Since the disease has been known, a great many cases have been observed in Germany and other parts in Europe, and in the United

States also. Aitken remarks that numerous cases of fever and epidemics of inscrutable peculiarity are now claimed by medical writers, with much show of reason, as outbreaks of the flesh-worm disease. The disease has again and again murdered its victims in different parts of the United States. Dr. Munford, of Princeton, Gibson County, Ind., reported last year to Dr. Stutton of Aurora, that 'three deaths from trichinæ spiralis have occurred in one family, and two other members of the family I think will die from the same disease.'

"In Cleveland, in our own State, Chicago, St. Louis, New York, New Orleans, and in many other places, the trichinæ disease has been met with. A few years ago, when a number of persons were reported to have died in Chicago from the effects of the trichinæ, it was generally regarded as a hoax, although the facts were fully attested to by Dr. Flora and other eminent physicians of that city. How many deaths have occurred in Cincinnati from the use of pork thus poisoned? Have we no need of a meat inspector?

"The vitality of the trichinæ is truly wonderful; it is not destroyed unless the meat in which they are found located be subjected to the temperature of boiling for such a length of time as to insure that every particle has been acted upon by that degree of heat. And who would then be willing to partake of such meat? The usual mode of salting and smoking meat is not sufficient to destroy trichinæ if present in it." K.

What a Spider Eats per Diem.

IN order to test what a spider can do in the way of eating, we arose about daybreak in the morning to supply his fine web with a fly. At first, however, the spider did not come from its retreat, so we peeped among the leaves, and there discovered that an earwig had been caught, and was now being feasted on. The spider left the earwig, rolled up the fly, and at once returned to his "first course." This was at 5½ A. M. in September. At 7 A. M. the earwig had been demolished, and the spider, after resting awhile, and probably enjoying a nap, came down for the fly, which he had finished at 9 A. M. A little after nine we supplied him with a daddy-long-legs, which he ate by noon. At 1 o'clock a blow-fly was greedily seized, and then immediately with an appetite apparently no worse for his previous indulgence, he commenced on the blow-fly.

During the day and towards evening a great many small green flies, or what are popularly termed midges, had been caught in the web; of these we counted one hundred and twenty all dead and fast prisoners in the spider's net. Soon after dark, provided with a lantern, we

went to examine whether the spider was suffering from indigestion, or in any other way from his previous meals; instead, however, of being thus affected, he was employed in rolling up together the various little green midges, when he took them to his retreat and tea. This process he repeated, carrying up the lots in little detachments, until the web was eaten, for the web and its contents were bundled up together. A slight rest of about an hour was followed by the most industrious web-making process, and before daybreak, another web was ready to be used in the same way. Taking the relative size of the spider, and of the creatures it ate, and applying this to man, it would be somewhat as follows:—At daybreak, a small alligator; at 7 A. M., a lamb; at 9 A. M., a young cameleopard; at 10 o'clock, a sheep; and during the night one hundred and twenty larks. This, we believe, would be a very fair allowance for a man during twenty-four hours, and could we find one gifted with such an appetite and digestion, we can readily comprehend how he might spin five miles of web without killing himself, provided he possessed the necessary machinery.—*Sel.*

Doctors in the Judgment.

THE practice of medicine is fraught with the gravest responsibilities. The most faithful and conscientious physicians are liable to make mistakes, and that, too, when a mistake may cost a life; and a careless, or intemperate, or incompetent physician may spread death and havoc through an entire community.

Sometimes the counsel of such men, when followed, leads not only to death, but to perdition; and there is hardly a vice or a habit which debases and destroys mankind but that some "doctor says it is good," and often under direct medical advice, the victim enters the downward road.

Sometimes the physician comprehends the importance of his position. The *Medical and Surgical Reporter* states that long before the temperance reform became prominent in America, a missionary from the West Indies sought medical advice from the famous Dr. Rush, and when a very unpalatable medicine was prescribed, the patient asked if he could not take a little "good old Jamaica" with it.

"No, sir," the doctor decidedly replied.

"Why, sir, what harm will it do?" demanded the West Indian.

"What harm will it do?" continued Dr. Rush; "I am determined no man shall rise on the day of Judgment and say, 'Dr. Rush made me a drunkard!'"

If Dr. Rush feared to meet a throng of liquor-drinking patients in the day of Judgment, what will be the condition of those doctors who

prescribe spirituous liquors for almost every disease, or those nostrum makers who sell thousands of barrels of ardent spirits under the form of patent medicines; or of those *religious editors* whose papers advertise these mixtures far and wide, and thus lure thousands of the unwary to intemperance and perdition? —H. L. H., in *The Christian*.

Tea.

An exchange says:—

"The following is Zoller's analysis of tea. Drinkers of this favorite beverage will be pleased to see that phosphoric acid, that most important article of brain food, constitutes more than one-seventh of the whole. It will also be seen that it must be exceedingly rich as a dressing to plants:—

Potash,	39.22
Soda,	0.65
Magnesia,	6.47
Lime,	4.24
Oxide of Iron,	4.38
Protoxide of Manganese,	1.03
Phosphoric acid,	14.55
Sulphuric acid,	trace
Chlorine,	0.81
Silica,	4.35
Carbonic acid,	24.30

100.00."

And we may add that drinkers of this favorite beverage will be perfectly delighted to learn from the above table that while there is in tea a considerable amount of phosphoric acid, that "important article of brain food," there is almost three times as much "potash," that splendid article for the teeth, bones, stomach, and the whole internal economy of the human system! This delicious ingredient of our food constitutes 39.22 per cent, or almost one-half of the whole.

And it may add still further to the delight of the tea-drinkers to learn that the "carbonic acid," another elegant life preservative, is almost twice as much as the phosphoric acid. Verily this writer was altogether restricted in his remarks. He did not tell us half the good things in tea.

But probably the great majority of those who read the paragraph quoted at the head of these lines will be able to see nothing in it but that very desirable "phosphoric acid," and remember nothing of it afterward except that tea contains a very "important article of brain food," and so will pour down a greater quantity of tea, taking three parts of potash and two of carbonic acid to one of phosphorus, even if the analysis is as favorable as there presented and even if phosphoric acid is such an important article of brain food.

But when is it that tea is such a rich dressing for plants? Is it after the "potash," &c., has been taken out, and appropriated by some human system, or before? If before, is it not a pity to spoil so rich a dressing for plants, for the sake of the benefit we may receive from the potash?

U. S.

Ventilation.—No 1.

MUCH is being said and written at the present day on this most important subject, but as we enter the churches, schools, and private houses throughout the country, we see but little is being done. The necessity for ventilation, it seems, should be apparent to every one. But in looking over a book entitled, "American Women's Home," by Catherine E. Beecher and Harriet Beecher Stowe, I found such an admirable treatise on the indications for ventilation that I will give a resume of it. It will be necessary to condense, but I will give it in as nearly the words of the author as space will allow.

Beginning with chapter three under the title of "A Healthful Home," we read: "When the wise woman buildeth her house, the first consideration will be the health of the inmates. The first and most indispensable requisite for health is pure air, both by day and night.

"If the parents of a family should daily withhold from their children a large portion of food needful to growth and health, and every night should administer to each a small dose of poison, it would be called murder of the most hideous character. But it is probable that one half of this nation are doing that very thing. The murderous operation is perpetrated daily and nightly in our parlors, our bed-rooms, our kitchens, our school-rooms; and even our churches are no asylum from the barbarity. Nor, can we escape by our railroads, for even there the same dreadful work is going on.

"The lungs occupy the upper portion of the body from the collar-bone to the lower ribs, and between their two lobes is placed the heart.

"The lungs, are made up of exceedingly minute air-cells into which the air we breathe enters at each inspiration, and is expelled at each expiration. The lining membrane of each air-cell is covered by a network of minute blood-vessels called *capillaries*. Every air-cell has a blood-vessel that brings blood from one side of the heart, which meanders through its capillaries till it reaches another blood-vessel that carries it back to the other side of the heart, to be thrown to every part of the body. In this passage of the blood through the lungs, the air in the air-cells imparts a portion of its oxygen to the blood, and receives, in exchange, carbonic-acid gas and watery vapor. These

latter are expired at every breath into the atmosphere.

"As before stated, the lungs consist chiefly of air-cells which are surrounded by a network of minute blood-vessels; and we know that in every man these air-cells number *eighteen millions*.

"By the powerful little organ, the heart, no less than twenty-eight pounds of blood, in a common-sized man, is sent through the lungs every twenty minutes, giving out carbonic-acid gas and watery vapor, and receiving the life-inspiring oxygen.

"Whether all this blood shall convey the invigorating oxygen to every part of the body, or return unrelieved of carbonic-acid gas, depends entirely on the purity of the atmosphere that is breathed.

"Every time we think or feel, this mental action dissolves some particles of the brain and nerves. In like manner, whenever we move any muscle, some of its particles decay and pass away. It is in the capillaries which are distributed all over the body that this change takes place. The blood-vessels that convey the pure blood from the heart divide into myriads of little branches that terminate in capillary vessels like those lining the air-cells of the lungs."

And right here is where we see all the necessity for oxygen, for it meets those little particles of broken-down tissue and by a chemical union with them forms carbonic-acid gas, which, being thrown into the mass of the blood, is sent to the lungs to be exchanged for pure oxygen from the air.

"During this process in the capillaries, the bright red blood of the arteries changes to the purple blood of the veins.

"Now this carbonic-acid gas, if breathed into the lungs, undiluted by sufficient air, is a fatal poison, causing certain death. When mixed with air, it is a slow poison which imperceptibly undermines the constitution.

"We now can understand how it is that all who live in houses where the breathing of inmates has deprived the air of oxygen and loaded it with carbonic-acid gas, may truly be said to be poisoned."

As a striking illustration of the foregoing we would refer to the "Black Hole of Calcutta." Here one hundred and forty-six men were imprisoned in a room eighteen feet square lighted by two small windows. They were confined here but one night, but in the morning, one hundred and twenty-three lay dead upon the floor. Twenty-three recovered to drag out a life of weakness and suffering. Here is a fearful example of what is being done by slow degrees all over the land. In this instance, the life-giving oxygen was soon exhausted, and death was the inevitable result. In our churches, schools, and private houses to-

day the same work is going on, only more slowly. If carbonic-acid gas was only rendered perceptible to the eye, a stir would be made.

The reason why we are so insensible to the bad effects of vitiated air is because "breathing bad air tends so to reduce all the processes of the body that less oxygen is demanded and less carbonic-acid gas sent out. This, of course, lessens the vitality and weakens the constitution." But let a person come fresh from the invigorating air of heaven, and see if he can endure it. Take for example our forefathers who were inured to hardship and accustomed to the free, fresh air of heaven. Their houses were not so tight as to prevent the cold, fresh, invigorating air from coming shrieking in from almost every corner. Instead of stoves, was the generous, open-mouthed, roaring fireplace, which formed the best ventilator ever known, and prevented the accumulation of noxious gases. At night, the sleeping apartments were not so close as to prevent the snow in winter from sifting on the bed so that the name of the occupant could be written on it with the finger. Transplant such a person to a life in one of our close, ill-ventilated, stove-scorched, gas-poisoned rooms and the probability is, he would have a severe attack of pneumonia in less than a week.

J. E. W.

The Health Reformer.

NOTWITHSTANDING the seeming difficulties which have stood in the way, the REFORMER becomes more and more interesting from month to month; and as we from time to time peruse this excellent monthly, it seems to ally itself more and more closely to our affections and interests.

Not only is it a pleasure to peruse and re-peruse its contents, but it is a profitable outlay of time and money. Only one dollar per annum, and we are freed from almost all experience in sickness and disease. Here, in our lowly home, we have almost constant health; and never, since we have had this paper, has sickness entered our dwelling but we could trace it to some breach of the principles therein advocated.

For about eight years, this monthly visitant has regularly made its appearance on our table; and during that time, a friend of ours has paid about three hundred dollars in "doctor bills" and had any amount of contingent expenses and loss of time, while we have hardly lost our places at the table for a meal. This we say to the praise of God, not as a boast.

Very few stop to consider the exquisite machinery of the human frame, and the importance of correct habits and principles of diet, and other matters, in keeping this machinery in healthy action. They are versed in mechanics and gen-

eral science, but this science of hygiene is too groveling for them. Until health has eluded their grasp, they undervalue its blessings; and the mass of mankind live and die under the great mistake of our times, that the appetite may have its way and its will, and the materia medica will afford remedies for consequent sickness and disease.

JOS. CLARKE.

Dio Lewis at a Ministerial Meeting.

THE Methodist ministers in Boston and vicinity meet every Monday forenoon for mutual improvement. They have among them tobacco-users, who find the weed essential to their success as profound thinkers upon sacred topics. But the majority believe tobacco-using to be foolish, hurtful, and wicked, and that all who claim to be temperate and decent should abstain from its use. The association had the good sense to invite Dio Lewis to speak before it on the subject of tobacco-using and kindred topics. Dr. Lewis is not a professor of religion, but has some sense of the fitness of things, as his remarks on tobacco-using by ministers will show. We give the substance of his remarks as reported in a recent number of the *Boston Herald*.

J. N. A.

MINISTERIAL TOBACCO.

A week ago, at the regular meeting of Methodist ministers, an invitation was extended to Dr. Dio Lewis to speak before them on ministerial health, more especially on the use of tobacco. In compliance with the invitation, the doctor spoke at the meeting to-day before a crowded audience. In beginning, he said that tobacco in its common form is

THE MOST POWERFUL POISON,

Far greater than any to be found in a druggist's shop. As proving his assertion, he said that he would take a healthy boy, ten years old, and give him a piece of plug tobacco no larger than a pea, telling him to chew it thoroughly, but not to swallow the smallest quantity of the juice. After the boy had pressed all the juice out of the tobacco and had ejected every atom of it into a spittoon, he would be found lying upon the floor, having lost the contents of his stomach, his brow covered with a cold, clammy sweat, and for an hour he would have almost a lifeless appearance. The speaker declared there was not another substance that would have such an effect by simply chewing it and ejecting every particle of juice. Dr. Lewis then proceeded to speak of

THE VARIOUS METHODS OF USING TOBACCO,

First specifying "chewing;" then smoking, describing a cigar as "a small roll of tobacco with a little fire at one end and a fool at the other;" next snuffing, which he thought was the fun-

niest way of using tobacco that could be imagined, and giving a humorous description of a dignified judge going through the operation of taking snuff; then snuff rubbing, as practiced by the young ladies at the South; next "plugging," as it is termed in Norway, where men plug up their noses with small pieces of tobacco; and finally the "smoke-swallowing" of Russia, where one pipe of tobacco is enough for a score of men, each of whom in turn fills his mouth with smoke and then gradually swallows it.

THE INFLUENCE OF TOBACCO

As differently used was then noted by the speaker, who said that chewing makes the whole mouth red and affects the vocal cords so that some people declare they can tell by the sound of one's voice whether he chews; smoking spoils the teeth and poisons the lungs; snuffing spoils the voice and operates directly upon the stomach. No matter how tobacco is used, it lowers the tone of the nervous system, and every person who uses it loses his buoyant spirit and becomes moody and peevish. But its worse effect is on the moral nature. A saturation of the system with tobacco juice lowers the moral and religious nature of man, until he takes pleasure in stories that would make a mule blush.

The speaker acknowledged that tobacco sometimes soothes for the time being, but he declared that the necessity for its soothing influence was caused by abuse, and that eventually the person had to pay the penalty. One of the saddest effects is its influence upon one's children. In reply to a question, if sometimes smoking would not tend to rouse one's energies when a feeling of lethargy was experienced as the minister sat down to write a sermon, Dr. Lewis said it was a horrible thought for a man to

SIT DOWN TO WRITE ABOUT JESUS AND LIGHT HIS PIPE FOR INSPIRATION.

He thought it would be far better for him to go without his supper. The speaker then glided into a discussion of the general rules of health, especially touching upon the subject of eating. Most clergymen, he said, eat too much, and he urged that they should eat a hearty breakfast, . . . a light dinner of oat-meal porridge, and go without their supper, as he had done for two years. He spoke of the importance of a daily bath, telling how it should be taken. He poked fun at the metallic coffin that is considered necessary for a bath tub, and said the best way was to take mittens made of old towels, wet them, rub on plenty of soap, and then rub one's self down thoroughly. He said that four spoonfuls of water is sufficient for a bath, and urged his hearers not to be afraid of soap. He then spoke of walking, declaring that it is the best gymnastics; and in telling how to walk, he showed how men would wiggle if they carried

their hands in muffs as women do. The whole secret of walking properly, he said, lies in these four words, "chin close to neck." . . . A man with good teeth ought not to drink when eating. . . .

The address of the doctor was listened to with great interest, and a large number of questions were propounded by the ministers.

Grapes as Food.

MEN can live and work on grapes and bread. The peasantry of France, Spain, and Italy make many a satisfying meal in this way; and of the wholesomeness of the diet there can be no doubt. Medical men constantly recommend the use of grapes for their patients. Scarcely any plant can equal the vine as regards the beauty of its leaves and fruit. As a covering for bare walls and for affording shelter, it is a climber of the first rank. To sit under one's own vine has in all ages been considered the acme of rural happiness—an emblem of peace, a symbol of plenty, and a picture of contentment. That pleasure, though perhaps not in all its fullness, may become the heritage of thousands in these temperate climes. Neither our latitude, longitude, nor leaden skies, nor erratic climate, forbid the growth of the grapevine throughout the larger portion of the kingdom.

Ripe grapes are universally esteemed. No one tires of them. If any declined to eat their own grapes, or grew more than were needed for home consumption, there is a ready market in most neighborhoods for them. Thus cottages might make or save the rent many times over. I know many cottage-gardens in which the vine or vines are not only their chief ornaments, but the main source of profit. These might be multiplied up and down the country to infinity. As a means of increasing their number, I would suggest that prizes be offered by all cottage-garden societies for the best trained and most fruitful grape-vines on cottages. I have known this done to such excellent effect that the vines became models of both; and such a spirit of emulation was stirred up that one laborer had paid another two days of his wages to do up his vine for him. There need be no fear of an excessive supply; neither are ripe grapes so perishable as most fruits. Cut with a piece of wood attached, and placed in bottles of water, or vases suspended in a dry room, the ripe fruit will keep good for months, and even improve by keeping.—*London Garden.*

It is not the amount of power, influence, or position that secures happiness, but how you enjoy them.

THE GOLDEN SIDE.

There is many a rest in the road of life,
 If we would only stop to take it;
 And many a tone from the better land,
 If the querulous heart would make it;
 To the sunny soul that is full of hope,
 And whose beautiful trust ne'er faileth,
 The grass is green and the flowers are bright,
 Though the wintry storm prevaileth.

Better to hope, though the clouds hang low,
 And keep the eyes still lifted;
 For the sweet blue sky will soon peep through,
 When the ominous clouds are rifted.
 There was never a night without a day,
 Or an evening without a morning;
 And the darkest hour, as the proverb goes,
 Is the hour before the dawning.

There is many a gem in the path of life,
 Which we pass in our idle pleasure,
 That is richer far than the jeweled crown,
 Or the miser's hoarded treasure;
 It may be the love of a little child,
 Or a mother's prayer to Heaven,
 Or only a beggar's grateful thanks
 For a cup of water given.

Better to weave in the web of life
 A bright and golden filling,
 And to do God's will with a ready heart,
 And hands that are swift and willing,
 Than to snap the minute, delicate threads
 Of our curious lives asunder,
 And then blame Heaven for the tangled ends,
 And sit and grieve and wonder.

Peculiar Charity.

"I MUST be cruel only to be kind," says Hamlet. In a different sense the kindness of some people is pretty sure to be cruel, their very charity ferocious. There is a story of an old maiden lady whose affection was centered in an ugly little cur, which one morning bound into her room with a biscuit in his chops. "Here Jane," cries the good lady, twisting the titbit out of his mouth and giving it to her maid, "throw away the bread—it may be poisoned; or, stop, put it in your pocket, and give it to the first poor little beggar you find in the street!" The story is hardly overdrawn, for if "all mankind's concern is charity," as Pope says, yet at least some of mankind's methods of exhibiting generosity are questionable.

An English paper recounts that a Croydon pork-butcher was lately arrested for selling diseased pork, and the man from whom he bought the pig, being summoned as a witness, admitted that the animal had been killed "because it was not very well"—that he was just about to bury the carcass when the butcher opportunely came and bought it; but the strange point is that, in a burst of munificence, "the head had already been given to a poor woman who lived near." Evidently, the worthy pair thought this to be the sort of charity that

covers a multitude of sins; and to a question whether their intents as a whole were wicked or charitable, they might properly have answered, "Both." The "charities that soothe and heal and bless" are not the only ones that pass current under the general form of almsgiving.—*Sel.*

Death in the Sirup Jug.

A FEW months ago, we called attention to some of the villainous adulterations practiced by manufacturers of sirup. It will be seen by the following paragraph from the *Western Rural* that the public is becoming somewhat aroused upon this subject. As previously stated, a convenient test for the spurious article is to pour a little into a cup of tea, which will become black. Here is the article which appears under the heading given above.

J. H. K.

"Probably there are very few articles of daily consumption which are not adulterated in a more or less vile manner. One of the most scoundrelly impositions that unscrupulous rascals practice upon a long-suffering public is the scandalous compound sold as sugar sirup. It is asserted that nearly fifty per cent of the article sold under the seductive names of golden sirup, silver drips, etc., is a rank poison, formed by the action of sulphuric acid upon some of the substances containing the essential material of wood fiber. The quantity of sulphuric acid used to form sugar by this process is so great that it cannot be thoroughly extracted from the product. It leaves enough to be dangerous even to the stomachs of robust men—excessively so to the more delicate organizations of children, who use far more of the article than grown persons.

"Since public attention has been called to this rascality, many instances have come to light of mysterious sicknesses which disappeared on the use of this breakfast dainty being discontinued. Severe burning pains at the stomach and racking headaches are among the lighter symptoms of sirup-poisoning. A case is mentioned where the cork in a keg of sirup sent for the use of a lumberman's camp was found to be nearly eaten away. Fancy a vile drug which will corrode cork, gnawing away at the coats of one's stomach. The *Western Rural* will in future worry down its buckwheat cakes without the adventitious aid of sweetening, unless sufficient guarantees of the character of the article be furnished with it.

"Fortunately, the detection of the pernicious stuff is easy. A small quantity of muriate or nitrate of baryta, mixed with water, makes a clear solution. If to this be added a small quantity of sulphuric acid, a white precipitate

is formed, which is insoluble in water. Tannin also gives a black precipitate, unless the acid has been neutralized by albumen.

"If any of our readers have reason for looking upon their matutinal sirup with suspicion, let them at once take a sample to a chemist and have it analyzed. If found to be dangerous, let the makers and retailers be prosecuted with the same vigor that wholesale murderers would meet with."

How a Surgical Discovery Was Accidentally Made.

THE *Aertzliche Hausfreund* is responsible for the following account of the cruel misdeeds of a brutal woman leading to the discovery of an important method of performing painless surgical operations. A wicked step-mother placed a net upon the head of her eleven-year-old step-daughter, and compelled her to wear it for two weeks continuously. On the 5th of March, 1872, the girl, suffering with headache, was brought to the clinic of Prof. Dr. Dittel. Dr. Dittel made a careful examination of the head, and found a deep furrow plowed into the head, at the bottom of which was the elastic cord of the net, covered with little carbuncles. The poor girl died of inflammation of the cerebral membrane, and upon dissection it was found that not only the pericranium but also even the skull bones were cut through as if with a sharp saw. This proved what force is exerted by elastic cords, and since then Dr. Dittel has employed them for cutting off tissues and removing swellings and tumors. By this gentle means, the patient does not lose a drop of blood, suffers scarcely any pain, has no fever, and soon gets well. This method seems to have a great future in store for it. Many patients are so horrified by the sight of the dreadful knife that the date of their recovery is postponed by it, even if they do not faint quite away.—*Scientific American*.

A Clearer Vision.

OUR eyes get clearer and stronger as we grow older—not our bodily eyes, for they become dimmed and feebler in the waning autumn of life, but the eyes of the mind. The glittering surface of things no longer dazzles, as of old, the vision, nor is any cloud that spreads its curtains over the sky dark enough to conceal the sun of divine love that shines on forever, giving light and warmth to the evil and the good.

You do not admit the proposition! You cannot see things in any clearer light now than you saw them twenty, thirty, or forty years ago! "Life is a riddle," you say; "a dark mys-

tery; a series of mocking hopes and wretched disappointments! As it was in the beginning, so it is now!"

And is this indeed so? Have you lived forty, fifty, or sixty years, and not gained a clearer vision? Can you not look down, as from an eminence, and see all things in new and more orderly relations? Can you not look upward, and see the crystal atmospheres opening, with glimpses of heaven beyond? Alas! for you, if this be not so! Your life has not been, we fear, to good purpose. You have been more a lover of yourself and the world than of your fellow-man. You have been a mere seeker after earthly and perishing things, and not a seeker after things that endure forever.

It is only to those who live, in some degree, the true life of self-abnegation for others' good, that the inward vision grows clearer. They see, as the years advance, how wisely and lovingly the divine Providence guarded all their steps, and ever out of seeming evil brought real good. How they were led by a way which they knew not through the tangled mazes of life, their paths ever widening, by scarcely perceived spirals, upwards and upwards. Even the afflictions and misfortunes that for years shadowed their lives, they now acknowledge as Heaven-sent blessings, and lift a heart of thankfulness for these and other mercies.

Reader, if your vision does not grow clearer as you grow older, you have cause for deep concern. You are not living to right purpose. There is an error in your calculations, and the final result will show that life has proved, instead of a successful experiment, a miserable failure.—*Arthur's Home Magazine*.

WOMAN'S SPHERE.—"Woman's sphere is home," if she has one that gives her support and useful work; if not, it is anywhere she can find the two combined. It may be on the battle-field, in the hospital, or by the sick in her own city or town; it may be as an artist, clerk, or copyist, or as cook, seamstress, or laundress in some other home than her own. Woman's right to labor gives her the privilege of doing whatever needs to be done, provided she can do it well.

As the study of Latin is a good start for a good scholarship, so a good home-training in housework is the best preparation for success in any other occupation. Why, then, this dislike for domestic duty—this prejudice against labor? Whatever our Heavenly Father has made necessary to be done, there is dignity in doing, if we do it well. Who, then, should be ashamed to wash, bake, or sweep, when the cleanliness and comfort of this life which God has given us demand that it be well done and daily done?—*Sel*.

Answers to Correspondents.

M. C. B., Ind., asks: Is sea moss farina a good article of food? 2. Please state the objections to fermented bread. 3. Should fruit and vegetables be used at the same meal? 4. If a person uses meat, is it proper to use fruit at the same meal?

Ans. 1. Sea moss farina, sago, tapioca, arrow root, and corn starch, contain but a very minute quantity of actual nutriment. In fact, a person would starve to death almost as soon while eating these articles as though he should eat nothing at all. Still they may not be wholly unwholesome when used with other articles of diet.

2. Fermented bread is very likely to contain more or less of the products of decay, and always contains the dried remains of the yeast plant, and quite a considerable amount of pure alcohol. Bakers' bread is often adulterated with ammonia, gypsum, alum, and various other abominations.

3. Fruits and vegetables when eaten together are more apt to sour in the stomach, if digestion is retarded by any derangement of that organ, than when eaten separately. But a person with vigorous, active digestive organs need have no fear of injury from eating the two articles at the same meal.

4. Certainly; and the more fruit and the less meat the better.

C. P. P. wishes to know if the excessive flow of urine during nervous headache is a recuperative process.

Ans. We think not. This is a phenomenon which often attends nervous disorders and sudden or excessive excitement of the emotions.

K. E. asks: 1. How would you treat a urine disease? 2. Would you give any medicine?

Ans. 1. According to the nature of the disease.

2. Certainly not, when hygieo-therapy affords infinitely more potent remedies than can be produced from the drug-shop.

S. T., of Ind., states that he has pain in the small of his back, reaching down to the right hip, with which he has been troubled, more or less, for seven years. The drug doctors have been treating him for lung disease.

Ans. From your description, we see no evidence of lung disease. Very likely the medicines given you had something to do with your present difficulty. Your description is too meager to enable us to determine precisely with regard to the nature of the disease; but you will very probably find relief by adopting the following plan of treatment, while carefully observing perfect regularity and conformity to the laws of hygiene in your general habits: Monday, take sitz-bath at about 90° for twelve

minutes, 80° for three minute, the spine being vigorously rubbed by the hand alternately with hot and cool water, during the bath. Wednesday, hot fomentations over the small of the back, for fifteen minutes, ending with cool compress. Friday, half-pack for thirty minutes.

N. R. J., Minn., states that he has been afflicted for a few days with what he had supposed to be the piles. The symptoms are, free flow of pure blood from the bowels after evacuation—uneasiness, with some pain, in the rectum—no swelling, and no hard knots—evacuations not painful—bowels not costive.

Ans. Your difficulty seems to be from congestion of the hemorrhoidal blood-vessels, which may be ruptured, either from distention or ulceration. Your condition is somewhat similar to that known as bleeding piles. Although you have not been costive, this condition may have been occasioned by sedentary occupation, sitting in improper positions, or may be from general relaxed condition of the system.

FOOD.—D. D. S., Philadelphia, asks, "How many articles of food can a hygienist safely eat at any one meal?"

Ans. No definite rule can be made for all. In general, the simpler the diet the better. Dyspeptics must use especial care on this point, and ought not to eat more than two or three kinds at once. It is well for such persons to avoid fruits and vegetables at the same meal.

DYSPEPSIA.—W. A. H., Minn., complains of constant pain, "goneness," and irritation of the stomach. Asks for prescription.

Ans. You can only find relief by careful and continued attention to all the laws of health, combined with general, constitutional treatment. Food must be carefully selected. You will find no benefit from simply treating your symptoms. You can hardly expect much help unless you can spend a few weeks or months at some good health institution.

A. S., Vt., complains of soreness of the muscles of the neck, resulting from a fall about two years ago. He will probably find relief by applying hot fomentations, alternating with cold compress. Follow by vigorous friction with the hand dipped in cold water. Treatment may be applied two or three times a day. The hot fomentation just before retiring will probably give comfort.

ABSCESS.—O. P., Wis., writes of a boy who has had difficulty in his hip for some years. An abscess once formed and discharged for several months, when a partial recovery took place. Now threatens to break out again.

Ans. We suspect that the lad's difficulty is hip disease. You should have him examined by a competent surgeon, and if such is found to be the case, absolute rest of the joint must

be secured. Probably the application of a starch bandage or plaster of Paris splint will be found necessary. Attend well to the general health. General treatment and careful diet must be mainly relied upon to remove the cause of the disease. Hot and cold cloths applied alternately every other day will remove soreness and pain.

ALKALI IN THE BLOOD.—M. E. B., Wis., asks what a person can do who has too much alkali and not enough acid in his blood, and is already living hygienically.

Ans. A person who lives hygienically will not have too much alkali in his blood. The only remedy is to live hygienically.

CATARRH.—C. H. D., R. I., has suffered for several years of catarrh in a very aggravated form. Taken many kinds of medicine, but has lost faith in drugs.

Ans. The "many kinds of medicine" have made your case worse, but you can doubtless be cured by persevering attention to all your habits. Be careful to avoid taking cold. Diet must be strictly hygienic. Take dripping-sheet at 85° one week and wet-sheet pack the next at 90°, followed by cool douche and vigorous hand rub. Occasional fomentations over the region of the liver and frequent dry-hand rubbing will be found beneficial. The nasal douche would also be found useful. Be sure to keep the feet warmly clad at all times. Send for our Family Physician, price \$1.00.

HEART DISEASE, DUMB CHILLS, NIGHT SWEATS, COLD FEET, COD LIVER OIL.—F. M. B., Leavenworth, asks what is best to do for 1. Enlarged heart; 2. Dumb chills; 3. Night sweats; 4. Cold feet; 5. Do you believe that cod liver oil is beneficial to any one who does not understand using water?

Ans. 1. Attend to the general health. 2. Take dripping-sheet and fomentation over the liver on Monday, with pack on Thursday of each week. Give careful attention to diet. Take no water treatment at the time of the chill unless it be a hot foot-bath. 3. Take a tepid dripping-sheet bath just before retiring. 4. Frequent friction with cool water, and alternate hot and cold foot-bath, concluding with cold. 5. Cod liver oil is of no benefit to any person whether he understands using water or not.

W. H. B., Mass., wishes to know 1. How a pregnant mother should live—what she should eat; 2. How to manage a tape worm; 3. What to do for catarrh; 4. What to do for dimness of sight.

Ans. 1. She may eat almost any kind of wholesome food. Should eat but two meals a day. To prevent vomiting in the morning, it will be found beneficial to allow the patient to

drink a glass of cool water, or take a little light gruel just before rising in the morning. A sitz-bath two or three times a week is also very beneficial. The bath should be taken at 95° for ten minutes, cooling down to 85° for five minutes. 2. Worms in the alimentary canal are evidences that there are excrementitious substances there, which should be removed. Hence, one measure of cure is to cleanse the system from such impurities as much as possible by the use of proper food. A person troubled with tape worm should avoid the use of what is termed "slop" food. A vermifuge may be employed if the intruder cannot be induced to leave without. 3. See answer to C. H. D., in this number. 4. Apply to a skillful oculist.

WEAK BACK.—C. L. P., Pa., complains of weak back, pain in the sides and hips.

Treatment. Alternate hot and cold application to the affected parts, with vigorous friction with the wet hand, will be found beneficial. May be applied every other day. Should take a full bath once a week. Must adopt a strictly hygienic diet.

SKIN ERUPTION.—J. A. P., Wis., says his little boy of three years of age has been troubled since birth with a cutaneous eruption which is very red and burning.

Treatment. From description we cannot speak certainly with reference to the name of the disease, but it is no doubt of a scrofulous nature. You should clothe the child warmly, and give him plenty of out-door exercise. Give general warm bath twice a week. Diet should be of proper quality and moderate quantity.

STITCH IN THE BACK AND GRAHAM BREAD.—C. G., Iowa, asks: 1. What should we do for stitch in the back? 2. Graham bread, especially gems, relaxes our little children too much; how shall we obviate the difficulty?

Ans. 1. Apply hot fomentations alternating with cool compress over the affected part. Always end with cool compress. 2. Sift out the coarsest of the bran from your flour, and feed your children more largely on harder kinds of bread, as crackers or dry toast.

PHYSICIANS, HEALTH INSTITUTE.

HINTS FOR LIFE.—It is almost as difficult to make a man unlearn his errors as his knowledge. Mal-information is more hopeless than non-information; for error is always more busy than ignorance. Ignorance is a blank sheet on which we may write; but error is a scribbled one, from which we must first erase. Ignorance is contented to stand still with her back on the truth; but error is more presumptuous, and proceeds in the same direction.

SCIENTIFIC.

A New Use for Matches.

FOR some time it has been well known that ozone is one of the most active and efficient agents in maintaining the atmosphere in a state of sufficient purity to be compatible with health. Ozone is produced in quite large quantities in many ways. Perhaps the most prolific source is the action of electricity upon the oxygen of the air. Hence it is abundant in thunder storms. Various plants also serve as ozone producers. In the laboratory, the chemist usually manufactures it by the slow oxydation of ether or phosphorous. In preparing ozone from the latter substance, a small piece of phosphorous is placed in a vessel with a small quantity of water, just sufficient to keep it moistened. Slow oxydation is thus promoted, by which means the ozone is produced. Mr. Beers, of New York, recently found himself in a basement room in which the atmosphere was very foul; and wishing to manufacture ozone for the purpose of purifying it—other disinfectants having proved unavailing—he set out in search of some phosphorous for that purpose, but was unable to obtain any from the drug stores in the neighborhood. The thought occurred to him that perhaps ordinary phosphorous matches might be utilized for the purpose, and he accordingly soaked a few bunches in warm water, and suspended them in the room. In a short time, he found the tainted air wholly purified, much to his satisfaction. If any of our readers should feel disposed to try this novel disinfectant, they can of course regulate the number of matches to suit the size of the room and the greater or less amount of impurity in the air contained in it. It is certainly an experiment well worth trying, since the materials are inexpensive and always at hand, and no expensive apparatus is required.

Rapidity of Nervous Impulses.

How long does it take a person to recognize pain when he puts a pin into his great toe? Until modern times, it was supposed that nervous impulses, together with light and electricity, were instantaneous in their transmission from one point to another. Modern ingenuity, however, has, within a few years, devised means by which the velocity of these subtle agents can be accurately determined; and it is now found that, while electricity could compass the earth on a copper wire more than eleven times in a second, and light is capable of almost as rapid progress, nervous energy moves at an almost incomparably slower pace, barely traversing one hundred feet in a second of time. Of course, this is little different from instantaneous movement so far as the body is concerned, as it requires only about one-twentieth of a second for an impulse to reach the brain from the most remote part of the body.

In a recent lecture on "The Sun," Prof. Proctor very finely illustrated the difference between the respective velocities of light and nervous impulse. He told his audience that if a child should be born with an arm long enough to reach the sun, and should, in his curiosity, place his hand upon it, he would very probably burn it severely, but would quite likely die before he knew it, as he would need to live until he was one hundred and thirty-five years old before he felt any pain from the accident.

PLANT GROWTH.—A writer in the *Gardener's Chronicle*, of London, has taken the pains to carefully estimate the amount of growth of a small shrub, two feet six inches in height, during the past season. He finds that 585 new shoots have been put out, having a maximum length of about one hundred feet. The number of leaves on these shoots he found to be about 40,000, each of which was about half an inch in length. As may easily be determined, this would make the aggregate length of growth during one season 3600 feet, or more than two-thirds of a mile.

The Sun and the Earth.

IF the recent corrections of the sun's distance are ultimately established by the transit observations of 1874, this will really indicate that the sun itself is a spheroid 850,000 miles across, and that in mere matter of bulk it is so vast that a million and a quarter of earths would barely suffice to make up its volume. A much more satisfactory and philosophic conception of "the home rule" of the universe is secured, if a start is made in idea from this grand center stand-point, rather than, in accordance with more usual practice, from the earth. The source of activity and power is an orb nearly one million of miles across; and the pigmy earth, which is dependent upon that source for light, warmth, life, and all change and movement of whatever kind, is suspended in space one hundred and eight diameters of that central orb away, and is of one million and a quarter times smaller dimension than the sphere from which it receives these endowments. There is certainly more for the human intellect to seize when the fact is stated in this way than there is when the sun is spoken of as a sphere ninety-two millions of miles from the earth, and as large again as the moon's orbit. It is a suggestive and noteworthy feature in the economy of nature that in the one instance which comes within the personal experience of man, the great central fountain and source of impulse, energy, and power, is six hundred times larger than the entire cluster of subordinate worlds that are lit, warmed, and organized from that source. Such in the marvelous scheme is the ratio of power to result, of active, determining cause to passive accomplishment—six hundred-fold to one. Fire-eddies, thousands of miles across, and flame-tongues one hundred thousand miles high, whirl and leap in the sun in order that soft winds may breathe, gentle rains fall, verdant plants grow; and endless generations of animals succeed each other and run through the appointed round of sentient being, on the islet worlds that have been scattered through space, each at the appropriate span of remoteness that fits it to the end secured. —*The Edinburgh Review.*

Items for the Month.

A BLUE CROSS by this paragraph signifies that the subscription has expired, and that this number is the last that will be sent till the subscription is renewed. A renewal is earnestly solicited.

Articles have been received from several contributors a little too late for publication this month, but will appear in the April number.

We are happy to report more than twelve hundred names of new subscribers received during the past twenty-five days.

Canvassers Wanted.

AGENTS are wanted to obtain subscribers for the HEALTH REFORMER, sell "The Family Physician," and other health publications, and also to sell the beautiful and instructive picture entitled, "The Way of Life."

Men and women desiring pleasant and remunerative employment will do well to correspond with us at once. Address, HEALTH REFORMER, Battle Creek, Mich.

The Family Physician.

THIS book is what the title indicates, and is well received by the public generally. We receive many flattering testimonials from agents, and others who have examined the work. One agent writes, "It takes everywhere;" another, "It is a valuable work, and sure to meet with a ready sale;" and a third, "No family can afford to do without it."

Those of our readers who have not already done so should obtain a copy at once. A single visit from a physician would cost you the price of the book. We will send a copy of "The Family Physician," post-paid, to any address, upon receipt of one dollar.

Address, HEALTH REFORMER,
Battle Creek, Mich.

The Vibrator.

THIS most invaluable auxiliary to other appliances for hygienic treatment has recently been added to the apparatus already in use at the Health Institute, at an expense of several hundred dollars. It is a very ingeniously arranged mechanism by means of which patients too feeble to take active exercise can be given passive exercise of a very great variety of kinds in a most pleasant and agreeable manner. By means of it many diseases of a chronic nature can be very successfully treated when it is used in connection with other hygienic measures.

The Health Institute.

THIS prosperous institution is yearly growing in favor with the public, and rapidly extending its sphere of usefulness, notwithstanding the fact that its merits are not paraded about the country by flaming posters. In fact, little printed advertising of any kind has been done. The secret of this success lies in the fact that each week this institution sends out from its doors to various parts of the United States hearty, healthy men and women, who entered them but a few weeks or months previous, suffering, perhaps dying, invalids. Of course all these persons are standing advertisements in the neighborhoods to which they return, and advertisements, too, which admit of no suspicion of humbug or quackery.

Although the buildings of the institution already comprise a large main building and seven good-sized cottages, preparations are being made for still further building as soon as the state of the weather will permit, by which means the managers hope to be able to accommodate the rapidly increasing number of patients which each season brings.

INCREDIBLE CARELESSNESS.—The Post Office authorities announce that nearly 3,000,000 letters went to the Dead Letter Office last year, of which 58,000 had no county or State direction; over 400,000 were not properly stamped, and 3,000 were not stamped at all. In these letters were found \$92,000 in cash, and over \$3,000,000 in drafts or checks, or an average of a dollar in every misdirected letter.

Our Exchanges.

The Sanitarian is one of the most valuable of our exchanges. As its name aptly suggests, its mission is the dissemination of knowledge which relates to proper sanitary measures and the prevention of disease. Proper methods of disinfection of sewers, etc., in our large cities, ventilation and construction of hospitals, school and other public buildings, with other kindred topics, are fully and ably discussed.

A. S. Barnes & Co., New York, publishers.

The Western Rural is a weekly agricultural, horticultural, and family journal, published at Chicago, Ill. We are happy to see the decided stand it takes in favor of some of the most necessary reforms at the present time. It is always on the alert to expose fraud and humbugs, and justly merits the large degree of confidence and prosperity which it enjoys.

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