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## BIBLE HYGIENE.

BY ELDER JAMES WHITE.

"HYGIENE, that department of medical science which treats of the preservation of health; a system of principles, or rules, designed for the promotion of health."—Webster.

We wish it distinctly understood at the very start, in giving a series of articles on Bible hygiene, that we do not regard the sacred writings in the light of a treatise on the subject. We freely admit that the Bible has said comparatively little on the best methods of living in order to secure health. Prophets and apostles were so thoroughly imbued with the grand theme of eternal redemption through Christ that this was the burden of their writings.

We do claim, however, that the Bible does contain many of the clearest and most emphatic statements in harmony with scientific expositions of the laws of life and health, and that no text can be found in that volume, from first to last, opposed to the restrictions of the hygienic system, as presented by Dr. Graham and well-balanced health reformers since he wrote. But the sacred writers have by no means been silent on the subject of health. Careful search will reveal the fact that there is much more of what we call Bible hygiene in the scriptures of the C.a and New Testaments than the casual reader supposes.

Health is happiness. It is with great pleasure that we view this important ques-

tion, in a measure, from a sacred standpoint. The Bible is to us the voice of infinite Wisdom. This good book contains a vast amount of testimony on the subject of health reform. Christian temperance is taught on almost every page of the New Testament.

With a large portion of the people, the Bible is the highest and safest authority in all matters of truth and duty. Prove to Christian men and women, who fear God and tremble at his word, that existing reformatory movements are in strict harmony with the teachings of the Sacred Scriptures, and they will no longer regard the subject as unworthy of their notice. But the very general impression that the restrictions of the hygienic practice are not sustained by the word of God, has placed many sincere Christians where it is difficult to reach them.

With some leading hygienists there has been a decided tendency to skepticism in years past. This has created prejudice with many conscientious Christians, and has closed their minds to the investigation of the subject. And this class, which is by no means a small one, suppose there are many statements in the Sacred Scriptures directly opposed to the restrictions of the hygienic system. Blind prejudice, cruel as the grave, controls many of these good people.

The eccentric Lorenzo Dow once said, "Prejudice is like a cork in a bottle that will let nothing in or out of it." Prejudice will blockade the mind, and not allow errors to pass out of it, nor the plainest truths to enter into it. And it is asking too

much when we say to men, "Give up your prejudices." But few could do this, should they try. In fact, they have a right to their prejudices if held subordinate to reason.

A sane condition is one in which prejudice and passion are controlled by reason. And just so far as reason is controlled by prejudice, passion, and appetite, just so far are men and women insane. There are but few perfectly sane persons in our day. We do not ask men to surrender their prejudices; but in the name of reason and religion, we do invite Christians to so far waive their prejudices as to be qualified to weigh evidence in the scales of reason and justice.

On the other hand, leading health reformers have clearly seen and deeply felt the importance of change from the common habits of life in order that the coming generation develop physical, mental, and moral strength. These really 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 of Christ, the veriest slaves of fashion and appetite. They have been pained to see ministers and people defiling body, mind, and conscience, by the habitual use of tobacco. They have pleaded 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 religion 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 vice of smoking; but I swear a little now and then." 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.

It is freely admitted on all hands that cheerfulness 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, illuminating 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 by money or friends no longer, that, hearing his sentence to be hung, he 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. 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, 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.

## CAUSES OF DYSPEPSIA.\*

BY THE EDITOR.

Two things are necessary to the healthy performance of the digestive function; viz., proper food, and a healthy condition of the organs directly and indirectly concerned in the process of digestion. Where these two requisites exist, the organs of digestion perform their work without in any way disturbing the other organs or functions. Indeed, normal digestion is performed unconsciously. An individual who is conscious of the working of his stomach, is suffering with a disordered state of that organ. The disorder may be of any degree, from that indicated by a slight feeling of weight or uneasiness occasioned by taking a small excess of food, to the most chronic case of indigestion, exhibiting all the most annoying symptoms of this formidable disease. We say formidable disease, not because it is often a fatal malady, but because of its obstinacy, which too often baffles for years the best efforts of those suffering from its debilitating effects. In most instances, unfortunately, the efforts of the patient and of his advisers, though earnest and persevering, are unavailing, because not well directed. With this, as with all other diseases, the first step toward recovery lies in the discovery and removal of the causes of the disease. Having considered the process of digestion as it occurs in health, and the conditions required, we shall now be better able to appreciate the influence which various violations of the laws of health relating to digestion may exert upon this function.

Before mentioning in detail the various causes which may be considered most active in occasioning disorders of digestion, it is important that we call attention to a general principle which applies to all cases of functional disease of the organs of digestion. It

<sup>\*&</sup>quot; Digestion and Dyspepsia: " Good Health Pub. Co.

will be recollected that in considering the physiology of digestion we found that the two essential things were secretion and muscular action. So we shall find, correspondingly, that the two primary morbid conditions are defective secretion and disordered muscular action. The defect in the digestive secretions may be either in quantity or in quality, or may be both combined. The disordered muscular action may be either increased or diminished muscular activity; in the great majority of cases it is the latter condition. The special causes which we are about to mention at length are more or less active as agents productive of dyspepsia, just in proportion as they disturb these two essential functions of digestion, secretion and muscular action.

Errors in Diet .- There is no room to doubt that errors in diet, in manner of eating, or in quantity and quality of food, are by ar the most active causes of indigestion in this country, as well as in most others. By asking a dyspeptic how he eats, what he eats, and when he eats, it is usually easy to discover the cause of his suffering; and by inducing him to form correct habits in these three particulars, a cure will be effected in nine cases out of ten. In many cases, however, and perhaps in most cases, to some extent, other adverse influences of various sorts serve to complicate the digestive disorder, and to intensify the effects arising directly from the causes named; hence, we shall not confine our investigation of the causes of indigestion to the class of causes mentioned, exclusively, but shall also notice those which more remotely operate in this direction, first, however, calling attention to dietetic errors as the most common and most powerful causes of the disease under consideration.

Hasty Eating.—That Americans are everywhere noted for the precipitate manner in which they bolt their meals, tumbling into their stomachs indiscriminately material that is digestible and indigestible, and spending only enough time to reduce the food to a sufficient degree of fineness to allow it to be swallowed without choking—often hardly enough for safety in that regard—is too well known to require special confirmation. The average American eats as he works, recreates,

and does everything else, in fact, on the high-pressure system. He treats his mouth like a corn-hopper and his stomach like a garbage-box.

The evils resulting from hasty eating may be enumerated as follows:—

- From deficient mastication, the food is not properly divided, so that the digestive juices cannot gain access to its various elements.
- 2. By being retained in the mouth too short a time, an insufficient amount of saliva is mingled with it, so that salivary digestion cannot be properly performed. As the saliva is also a stimulus to the secretion of gastric juice, stomach digestion must necessarily be imperfect.
- 3. Again, the food entering the stomach in a coarse, unmasticated state, may act as a mechanical irritant to the delicate lining of the stomach, and thus occasion congestion and gastric catarrh, one of the most common disorders of the stomach, and one which is often very obstinate in its nature.

Drinking at Meals .- In addition to the evils which it occasions directly, hasty eating induces an individual to drink largely of hot or cold liquids to wash the food into the stomach. Thus, two evils are associated. Liquid of any kind, in large quantity, is prejudicial to digestion because it delays the action of the gastric juice, weakens its digestive qualities, and overtaxes the absorbents. In case the fluid is hot, if in considerable quantity, it relaxes and weakens the stomach. If it is cold, it checks digestion by cooling the stomach's contents down to a degree at which digestion cannot proceed. Few people are aware how serious a disturbance even a small quantity of cold water, iced cream, or other cold substance, will create when taken into a stomach where food is undergoing digestion. This process cannot be carried on at a temperature less than that of the body, or about 100°. Dr. Beaumont observed that when Alexis St. Martin drank a glassful of water at the usual temperature of freshly drawn well water, the temperature of the food undergoing digestion fell immediately to 70°, and did not regain the proper temperature until after the lapse of more than half an

Of course, the eating of very cold food must have a similar effect, making digestion very tardy and slow. If any drink at all is taken, it should be a few minutes before eating, time being allowed for absorption before digestion begins, or an hour or two afterward. If the meal is mostly composed of dry foods, a few sips of warm or moderately hot water will be beneficial rather than otherwise, taken at the beginning of the meal or at its close. The habit of drinking during the meal should be discontinued wholly, and especially by those whose digestive powers are weak. If the diet is of proper quality, and the food is well masticated, there will be little inclination to eat too much. When the food is rendered fiery and irritating with spices and stimulating condiments, it is no wonder that there is an imperious demand for water or liquid of some kind to allay the irritation.

Eating too Frequently.-One of the most pernicious customs of modern society is that of frequent meals. This custom is seen in its extreme development in England more clearly than in this country, five meals a day, including lunches, being there thought none too many. The idea seems to prevail that the stomach must never be allowed to become empty under any circumstances. In this country, three meals is the general custom, though more are often taken. Healthy digestion requires at least five hours for its completion, and one hour for rest before another meal is taken. This makes six hours necessary for the disposal of each meal. If food is taken at shorter intervals than this, when ordinary food is eaten, the stomach must suffer disturbance sooner or later, since it will be allowed no time for rest.

Again, if a meal is taken before the preceding meal has been digested and has left the stomach, the portion remaining, from its long exposure to the influence of warmth and moisture which especially favor fermentation, is likely to undergo that change in spite of the preserving influence of the gastric juice, and thus the whole mass of food will be rendered less fit for the nutrition of the body, and the stomach will be liable to suffer injury from the acids developed.

Eating between Meals.—This is a gross

breach of the requirements of good digestion. The habit many have of eating fruit, confectionery, nuts, sweetmeats, etc., between meals, is a certain cause of dyspepsia. No stomach can endure such usage. Those who indulge in this manner usually complain of little appetite, and wonder why they have no relish for their food, strangely overlooking the real cause, and utterly disregarding one of the plainest laws of nature.

This evil practice is often begun in early childhood. Indeed, it is too often cultivated by mothers and the would-be friends of little ones, who seek to please and gratify them by presents of confectionery and other tidbits of various sorts. Under such a regimen, it is not singular that so many thousands of children annually fall victims to stomach and intestinal diseases of various forms. In great numbers of cases, early indiscretions of this sort are the real causes of fully developed dyspepsia in later years.

Irregularity of Meals .- Another cause (f this disease, which is closely related to the ones just mentioned, is irregularity respecting the time of meals. The human system seems to form habits, and to be in a great degree dependent upon the performance of its functions in accordance with the habits formed. In respect to digestion this is especially observable. If a meal is taken at a regular hour, the stomach becomes accustomed to receiving food at that hour and is prepared for it. If meals are taken irregularly, the stomach is taken by surprise, so to speak, and is never in that state of readiness in which it should be for the prompt and perfect performance of its work. The habit which many professional and business men have of allowing their business to intrude upon their meal hours, quite frequently either wholly depriving them of a meal or obliging them to take it an hour or two later than the usual time, invariably undermines the best digestion in time. Every individual ought to consider the hour for meals a sacred one, not to be intruded upon under any ordinary circumstances. Eating is a matter of too momentous importance to be interrupted, or delayed by ordinary matters of business or convenience. The habit of regularity in eating should be cultivated early in life. Chil-

dren should be taught to be regular at their meals and take nothing between meals. rule applies to infants as well as to older children. The practice of feeding the little one every time it cries is a most serious injury to its weak digestive organs. An infant's stomach, though it needs food at more frequent intervals—two to four hours according to its age-requires the same regularity which is essential to the maintenance of healthy digestion in older persons, irregularity usually practiced is undoubtedly one of the greatest causes of the fearful mortality of infants from disorders of the digestive organs, as appears in our mortuary reports.

The Proper Number of Meals. - How many meals should be taken by a person in The answer to this question depends somewhat upon the habits of the individual, his occupation, number of hours of labor, etc. There is good reason to believe that for a large share of those who now take three to five meals a day, two would be much According to Hippocrates, the ancient Greeks ate but two meals a day. This was the prevailing custom in olden times. Indeed, the modern frequency of meals is the outgrowth of a gradual losing sight of the true function of food and of eating, and making the gratification of the palate the chief object instead of the nourishment of the body. It is distinctly a modern custom. That the system can be well nourished upon two meals a day is beyond controversy, seeing that not only did our vigorous forefathers require but two meals a day, but hundreds of persons in modern times have adopted the same custom without injury, and with most decided benefit. Students, teachers, clergymen, lawyers, and other literary and professional men, will be especially benefited by this plan. We have employed it for about fifteen years, and with great benefit. The special advantages gained by it are, 1. The stomach is allowed a proper interval for rest; 2. Sleep is much more recuperative when the stomach is allowed to rest with the balance of the body; 3. Digestion cannot be well performed during

If six hours are allotted to each meal, and the proper length of time is allowed to elapse before going to sleep after the last meal, it will be found impossible to make any arrangement by which opportunity can be secured for the necessary eight hours' sleep at night. Not more than two meals can be taken when a person complies with all the laws of health.

If more than two meals are required by any one, it is by those who are engaged for twelve or more hours per day in severe physical labor. Such persons are better prepared to digest a third meal than those whose occupation is mental or sedentary, and they may at least take it with less detriment, though we are still doubtful whether a third meal is needed, even for such.

## PHYSICAL EDUCATION OF GIRLS.

BY NATHAN ALLEN, M. D.

Fifty years ago or more, scarcely any attention was paid in education to the physical system; the body was not recognized as of any account in mental improvement. But as the principles of physiology became better understood in their practical applications, it was found that they sustained most intimate relations to education; and the more thoroughly this science is understood, the more profoundly is one convinced of the importance of observing the laws of the physical system in their connection with mental culture.

Great advances have been made in the physical sciences, and in the application of sanitary law to the prevention of disease, to the preservation of health, and to human welfare; but in every stage and department of education, the importance of physical development in its relation to mental culture is altogether underrated. When it becomes fully understood that education, in all its manifold parts and applications, is dependent upon the brain, and that the functions of this organ are very dependent upon the condition and development of the body, then it will be seen that there is a right and a wrong way in all attempts at mental improvement, and that, in order for the greater success, an observance of physical laws is indispensable.

In no part of female education is there so much need of reform as in that of physical culture. If the standard of scholarship is to be raised higher and higher in all our schools for girls, and no greater attention is to be paid to the laws of health and life, grave consequences may well be apprehended.

If this educational pressure was confined to a few individuals, there would not be the same danger, but when the great majority of our New England girls are thus crowded, its effects become widely extended and far-reaching into the future. The remark has been made, "Educate a woman and you educate a race." This saying is full of meaning, and capable of different interpretations. meaning or application must depend upon the term "educate," how and in what way it is done. This "educating" should have reference to the future, as well as to the present; to the body, as well as to the mind; for the highest developments of brain and nerve tissue alone, will never go far toward educating a race-in fact, it will inevitably run

God has established most intimate relations between one generation and another, by the laws of inheritance. As yet, these laws are very imperfectly understood, but enough is known to show that these laws depend upon certain conditions, which must be carefully studied and taken into account. These conditions and laws cannot always be ignored or set aside with impunity.

While it may require several generations for the full development of these laws, the first links in the chain seem the more important. If an education that breaks down and impairs the physical energies of the system tends to defeat the wise operations of those laws-if this supreme devotion to mental culture alone, combined with other influences in society, is calculated to establish generally a standard of living so high and expensive that the great majority of young people have neither the means nor the physical strength to adopt and carry it out-if such is the result of this state of things, that it must and does interfere directly with the duties of domestic life and the objects of the marriage institution, is it not time to pause and consider whither, as a people, we are drifting?

It may be said that education is not the cause of such a state of things or condition

of society, and the evils that threaten, but it constitutes the leading, if not the most powerful, agency in society. This education commences early with the girl, shapes her habits and character for life; and the influence of woman dictates the fashions of the day, and molds our domestic institutions.

This high pressure of educational influences does not extend much farther back than one generation, and, as a people, we are just entering upon the second, but we find already unmistakable signs of physical degeneracy. The registration and census reports are bringing to light startling facts in respect to decline in the birth-rate, to the diminution of marriages, to the permanence of the family institution, and changes in population, etc. Should the same causes continue and increase, as they may, corresponding results may follow, and the next generation will witness in those matters still greater changes.

Inasmuch as the primary cause of the evils that have been alluded to is, we believe, closely connected with the school system, we would earnestly call the attention of teachers and the friends of education, to consider if some reform cannot be effected, and especially to the case of girls. Said President Eliot a few days since, in addressing the Alumni of Harvard University: "Now everything depends, with us, and in the learned professions, upon vigor of body. The more I see of the future of young men that go out from these walls, the more it is brought home to me that professional success, and success in all the learned callings, depends largely upon the vigor of body, and that the men who win great professional distinction have that as the basis of their activity."

Now, if young men must depend for success in life upon the "vigor of the body," is it not equally important for young women, who are to be their competitors in the learned professions, and in various departments of business, but what is still more important, who are to be, in the broadest and fullest sense, the "educators of the race?"—Sel.

<sup>—</sup>Avoid colds by warm clothing and abundant ventilation of sleeping rooms.

## THE TOBACCO PLAGUE.

The following excellent article is one of a series written by a talented Scotch writer for the Christian Woman:—

Smoking is one of the feet upon which drunkenness rests; it is its prime feeder, the most powerful accessory to drinking, and the greatest lever to drag a reformed drunkard back to his cups. Of every hundred Good Templars who break their obligation, seventy-five per cent are smokers. Surely all this is something to us as temperance reformers. When I see a young man form the habit of smoking, I feel that he has taken the first step on the wrong road. Tobacco is not a safe thing; it should be called the bane of the young. Do not the victims of smoking themselves condemn the practice, and wish they had never become its slaves? The father who would train his children to smoking, would be considered a monster, and yet every parent who indulges in the pipe is guilty of the sin, let him preach as he may; his example speaks more loudly than his precept. Great is the responsibility of every man and women in regard to the rising generation. What the young see us do they naturally follow, and we are under the most solemn obligation as Christians, as philanthropists, as moral reformers, to set before them an example they can safely follow. It is the duty of religious teachers, and of every person who acknowledges the obligation of religion, to shun all practices which will weaken their influence for good, and bring reproach on their profession, and to avoid all examples which will lead the steps of the young into the paths of error and vice.

But my sisters may say we are not guilty in this matter. True, tobacco-smoking is generally a masculine vice,—fortunately for the race that it is so. If the daughters of our people were to weaken their vital forces by its use, we should find the children of the coming generation with an hereditary taste for poison, a diminished power of resisting disease, a race of unhealthy dyspeptics with exhausted frames which a merciful Providence would ere long blot out; and while I hold that it is equally the duty of the fathers of the coming generation to keep their bodies pure as it is that of the mothers, I cannot

hold ourselves guiltless, inasmuch as it is a truth that the vice that woman sets her face against must fall.

I am always sorry when I see a young woman in company with a young man who smokes; she thereby sets the seal of her approval to the filthy habit.

I am always sorry when a young man asks a lady if she objects to smoking, and she replies, "Oh, no." She is either afraid to speak the truth that it is disagreeable, or she has deadened her God-given instincts of purity, which are intended for the guardianship of the race. Young women, I declare truth when I say, Yours is the hand to stay this evil, you have a power in this cause excelled by none, whether you know it or not. Let every young woman say, "The lips that touch liquor or tobacco shall never touch mine," and, "No young man need enter my presence whose clothing smells of the weed," and you would set in motion myriad forces which would result in untold good.

A gentleman in America told me he was once a great smoker, and being in a railway car he saw another smoker on entering spit on the floor (a usual accompaniment to the habit); a beautiful young lady quickly gathered up her skirts to avoid the filthy saliva, with a look of such absolute loathing and scorn that it was an instant revelation to him; he said to himself, Is it possible that I also am guilty of practices that can compel the loathing of such a woman as that? May God forgive me; but from this time I will never smoke a cigar or pipe again; and he never did. He saw the lady many years afterward, and thanked her cordially for the reformation she had unconsciously wrought. "The hand that rocks the cradle rules the world."

At a convention of ministers where free entertainment was provided for the guests, one of the number came to the door of the house where he had been appointed to stay; the lady of he house came to the door, a little boy on either side of her; the gentleman said, "I have been told, madam, that I should find a home with you until our convention is over, I hope that is agreeable to you?"

"I am sorry," said the lady, "it is not."
The gentleman urged with no effect; he

then said, "But are you not afraid of disobeying the apostolic injunction, 'Be not forgetful to entertain strangers, for thereby some have entertained angels unawares'?"

"I am not afraid," said the lady, "angels never smell of tobacco, as I perceive you do, and, moreover, I have taught these, my boys, that smoking is wrong; excuse me, but I dare not have your influence in my home."

What a bitter reproach to a moral teacher! Brave, noble mother! would that all mothers felt that God expects them to guard the purity of their children. Man may boast that he molds the destiny of the race; but it is woman that molds the race itself. Let every mother so train her daughter that she shall refuse to sanction in her society the young man who will sap his vitality by taking a poison into his system, and we should soon have a different state of things. We are placed here, in our Father's garden; be it ours, one and all, as reformers and as Christians, to uproot the tares which spoil the golden sheaves; let us remember that to sully the body is also to soil in some measure the spirit, and both are his,-" bought with a price." Let us guard the purity within, and so make the world better.

## HUMAN WOODCHUCKS.

ARE your outside windows on? Is your storm-porch in place? Are your doors well supplied with weather-strips ? Is your furnace working well? In a word, have you taken all those precautions against the admission into your houses, between this time and next May, of a single breath of clear, cold, pure air that has n't been driven through a tunnel and then baked? Of course you have. Nobody neglects these things in these days of high civilization. Again : Have you arranged it so that during the six months to come your wives and daughters will not be compelled to go beyond the reach of the airbakery you have in your cellar or in each room, so that under no circumstances will any of them be subjected to contact with the crisp breath of winter again ? Of course, a man who has any business must of necessity go out of doors some. If he be thoroughly civilized he will go very little, scudding from his house to his shop or office in the least

time possible, and using every known device to keep fresh air from his lungs, and when he is under cover he will take his revenge for being compelled to go out at all by toasting himself brown in a heat so sultry and dry that no animal but a man would live in it a week. Still, as we have said, being a man he cannot escape living in the open air a few minutes each day; but his women folks are more favored. Nothing compels them to go out, and so they stay in, except possibly in the finest of weather; and from November until May, no wintry blast will kiss their pale cheeks, take liberties with their fragile forms, or find its way down their delicate throats. To all intents and purposes they are as much buried during the winter as any of the hibernating animals.

Now this is all very comfortable, but we guess it is n't the highest wisdom. Man, even in his most civilized state, is n't a bear or a woodchuck, nor yet a chipmunk, that he should flee to a den and spend the winter sucking his claws or munching chestnuts. Neither his body nor his mind was made for any such business. It is one of the laws of his being that he cannot live in a healthy condition without sunshine and pure air, and when he deprives himself of these, in summer or winter, his nerves go crazy, his heart becomes weak and his lungs torpid, aches and ails creep over and through him, and he becomes a most miserable apology for what a stalwart, healthy man ought to be. Not only this, but his head becomes stupid and heavy, and his brains are worth about as much as a calf's after they have been cooked, and no more.

It is a serious fact that Americans are steadily educating and civilizing themselves into a nation of invalids and weaklings. We are no longer able-bodied. Something ails all the men, and as for the women their bodies are little more than camping-grounds for whole colonies of aches and weaknesses of every name and nature. This is especially true of the residents of cities, where a thoroughly healthy woman is rare enough to be a curiosity.

In bringing us to this pass our habits during the winter season have had much to do. The shrinking dread of cold air, the ignoble love of well-warmed laziness, the cowardly notion that we are too delicate to bear any exposure, and the whole brood of similar fancies which keeps us hovering round a furnace register or a stove all winter, have made sad work for the great body of American men and women who live in cities; and, unless in this respect, and many others, we turn over a new leaf, we might as well make our wills bequeathing the country to some hardy race of foreigners, and be buried. The painful petering out of the Yankee race cannot be pleasant or profitable. But the cause suggests the cure, which is, in a word, outdoor exercise; not only in summer when it is uncomfortable staying in the house, not only for men and boys, but for women and children, in spring and fall and winter, at all times and at all seasons.

There will not be five days so cold, nor fifteen so stormy, that it will not do a woman, properly clad, more good than hurt to spend an hour or two out-of-doors, and if there was some law of church or state to turn every one not confined to her bed into the street for two hours every day, spring would find us with much fewer invalids on our hands than we shall have now.

Get out of doors. If you own a team, use it; if not, and you can afford it, buy one. If your purse is short, patronize the horse-cars, and if it is empty, go afoot. If you have friends, visit them; if you have not, go and make peace with your enemies. Go up street, down street, anywhere and everywhere. Do anything to get out of your dens.—Mirror and Farmer.

## THE SMOKING CHRISTIAN.

I could not find any account of him in that ancient work that says so much about Christians, and from which most accounts are taken. I turned over many leaves, and found much about patriarchs, prophets, and apostles, but failed to find anything about smoking Christians. I saw that things looked smoky about Sodom at the time Lot left it; and there was smoke in the valley of Achor, which Achan knew something about; and Dathan and Abiram knew something about smoke in the incense offered. And there must have been some smoke when the incen-

diary foxes did so much mischief in Samson's time. And there was smoke when the idolaters made their children pass through the fire in sacrifice to Moloch. And there must have been smoke when the fiery furnace was kindled in Babylon by the enemies of Daniel. And a plenty of smoke, too, when the converts at Ephesus burned those books worth "fifty thousand pieces of silver."

So the Scriptures are not silent in regard to smoke; but they do not apply the term to Christians. And I think if there was any particular beauty or fragrance in their being together, Paul would have known it, and would have put them together, accordingly, among some of the many things which he says about Christians. But, in my search, I drove through everything he ever said about them, and came out empty-handed. It cannot certainly, therefore, be essential to religion that one should be a smoking Christian, else Paul's catalogue of Christian virtues would not have been thus deficient.

Since I could not find any direct mention made of smoking Christians, I thought I would see if there could be anything which, fairly interpreted, would be likely to exert any quenchable influence upon the fire that such people carry about with them; and I had not been long at work before up came a passage which ought to smash every pipe in Christendom, and pitch every cigar into the sea, and send all the snuff-boxes to float away in their company. Without saying a word directly against smoking disciples, it utters a rebuke which ought to penetrate every cloud which these puffing people gather about them.

Just put your eye on the following: "Finally, my brethren, whatsoever things are true, . . . whatsoever things are lovely," etc. "think of these things." Here is a whole platoon firing at once. "Whatsoever things are lovely." Smoker, you are wounded by the apostolic archer!

Why, if a man is to put into his character and habits only such things as are lovely, can he partake of such an antagonism as tobacco?

Besides being unlovely per se, it is also relatively so; for the smoking disciple smokes everything about him,—his house, his clothes,

his Bible even—his wife, children, and friends,—the very atmosphere other people breathe. Now if there be anything lovely in all this, who but a desperate smoker can discern it? If there be anything lovely in the matter of smoking, why do we see the warning, "No Smoking Here," in the railway depot, the car, the hotel, etc.?

The smoking disciples had better hasten and take their last puff. Perhaps they would do better to stop this side of another world!

## A WORD TO MOTHERS.

In a "Lecture on Alcohol," Norman S. Kerr, an eminent English physician, remarks: "Through the poisoning of the blood, another and rampant evil is daily making sad havoc in the infant life of our community. Indulgence in porter, beer, and similar beverages by nurses and mothers is one of the most deadly and destructive causes of infanticidal disease and mortality. A week rarely passes without my seeing some fresh instances of a little child suffering from diarrhea, pain, restlessness, convulsions, and wasting, arising solely from the poison imbibed at its mother's breast. I have examined the bodies of many infants who have owed their premature death to this cause, and I have attended many cases in which the withdrawal of the alcohol has been just in time, and no more, to save the innocent and unconscious victim.

"Frequently am I told that no milk is forth-coming for the child unless stout, or beer, or something is taken; but the truth is that in every case in which oatmeal gruel, milk, soups, farinaceous food and mutton chops will not produce a sufficient supply of maternal milk, the child should be fed artificially, or otherwise, for alcohol never produces more milk; it only dilutes, adulterates, and poisons the previous scanty supply. This is a practice which, apart from any consideration of the temperance question, has no right to linger on in a civilized nation such as we profess to be. It is a practice fraught with great danger to the child, and is by no means safe either for the body or mind of the mother. To all medical men who prescribe, and to all nurses who recommend alcohol to nursing mothers, I would simply quote the words of Dr. W. B.

Carpenter, the distinguished physiologist: The regular administration of alcohol for the purpose of sustaining the strength under the demands occasioned by a copious flow of milk, is one of the grossest pieces of quackery that can be perpetrated by any practitioner, legal or illegal.' For the sake of the infants who are dependent on them for their existence, I would appeal to all mothers, whatever their habits may be at other periods, not, under any circumstances, to resort to the use of alcoholic beverages when nursing. Not only are the lives of the little darlings endangered, and their physical natures undermined from their earliest years, but the system is educated to look for and rely upon an artificial stimulus, and thus when they enter on the race of life they are handicapped and weighed down by the acquirement of a habit which is never absolutely safe to any one, and which is fatal, alas! how fatal, to such multitudes."-Safe-

A New Remedy for Sore Eyes.—" Can you cure my eyes?" said a man to Dr. Crown.

"Yes," said the doctor, "if you will follow my prescription."

"Oh, certainly, doctor," said the patient; "I will do anything to have my eyes cured. What is your remedy, doctor?"

"You must steal a horse," said the doctor very soberly.

"Steal a horse, doctor?" said the patient in amazement. "How will that cure my eyes?"

"You will be sent to State prison for five years, where you can not get whisky, and during your incarceration your eyes will get well," said the doctor.

—A peasant woman, preaching abstemiousness in living, the avoidance of wine, meat, and matrimony, has organized a new religous sect in Russia.

—The consumption of coffee throughout the world has increased from 190,000,000 lbs. to 850,000,000 lbs. in the last forty years.

—Dr. Munroe, an eminent Scotch physician, asserts in the *Edinburgh Medical Journal* that leprosy is contagious.



Devoted to Mental and Moral Culture, Social Science, Natural History, and other Interesting Topics.

#### A STERLING OLD POEM.

Who shall judge man from his manners?
Who shall know him by his dress?
Paupers may be fit for princes,
Princes fit for something less.
Crumpled shirt and dirty jacket
May clothe the glorious ore
Of the deepest thoughts and feelings—
Satin yest can do no more.

There are streams of crystal nectar
Ever flowing out of stone;
There are purple beds and golden,
Hidden, crushed, and overthrown.
God who counts by souls, not dresses,
Loves and prospers you and me,
While he values thrones the highest
But as pebbles in the sea.

Man upraised above his fellows,
Oft forgets his fellows then.
Masters, rulers, lords, remember
That your meanest hinds are men—
Men of labor, men of feeling,
Men of thought, and men of fame,
Claiming equal right to sunshine
In a man's ennobling name.

There are some embroidered oceans;
There are little wood-clad rills;
There are feeble inch-high saplings;
There are cedars on the hills.
God, who counts by souls, not stations,
Loves and prospers you and me;
For to him all vain distinctions
Are as pebbles in the sea.

Toiling hands alone are builders
Of a nation's wealth and fame,
Tilted laziness is pensioned,
Fed and fattened on the same,—
By the sweat of others' foreheads,
Living only to rejoice,
While the poor man's outraged feeling
Vainly lifts its feebled voice.

Truth and justice are eternal,
Born with loveliness and light;
Secret wrongs shall never prosper
While there is a sunny right.
God, whose world-wide voice is singing
Boundless love to you and me,
Links oppressions with its titles
But as pebbles in the sea.

-Selected.

## APPEAL TO MOTHERS.

BY MRS. E. G. WHITE.

"SUFFER little children, and forbid them not, to come unto me; for of such is the kingdom of Heaven."

In the days of Christ, mothers brought their children to him, that he might lay his hands upon them in blessing. By this act they showed their faith in Jesus, and the intense anxiety of their hearts for the present and future welfare of the little ones committed to their care. But the disciples could not see the need of interrupting the Master just for the sake of noticing the children, and as they were sending these mothers away Jesus rebuked the disciples, and commanded the crowd to make way for these faithful mothers with their little children. Said he, "Suffer little children, and forbid them not, to come unto me; for of such is the kingdom Heaven."

As the mothers passed along the dusty road, and drew near the Saviour, he saw the unbidden tear and the quivering lip, as they offered a silent prayer in behalf of the children. He heard the words of rebuke from the disciples, and promptly countermanded the order. His great heart of love was open to receive the children. One after another, he took them in his arms and blessed them, while one little child lay fast asleep, reclining against his bosom. Jesus spoke words of encouragement to the mothers in reference to their work, and oh, what a relief was thus brought to their minds. With what joy they dwelt upon the goodness and mercy of Jesus, as they looked back to that memorable occasion. His gracious words had removed the burden from their hearts and inspired them with fresh hope and courage. All sense of weariness was gone.

This is an encouraging lesson to mothers for all time. After they have done the best they can do for the good of their children, they may bring them to Jesus. Even the babes in the mother's arms are precious in his sight. And as the mother's heart yearns for the help she knows she cannot give, the grace she cannot bestow, and she casts herself and children into the merciful arms of Christ, he will receive and bless them, he will give peace, hope, and happiness to mother and children.

This is a precious privilege which Jesus has granted to all mothers. But to lead them to Jesus is not all that is required. God has given the mother a work to do. These children are to be educated and trained to become disciples of Christ, "that our sons may be as plants grown up in their youth, that our daughters may be as corner-stones polished after the similitude of a palace." This work of molding, refining, and polishing, is the mother's. The character of the child is to be developed. The mother must engrave upon the tablet of the heart lessons as enduring as eternity; and she will surely meet the displeasure of the Lord if she neglects this sacred work or allows anything to interfere with it. She must allow the everchanging and never-satisfying fashions to come and go, letting the hearts of the devotees of fashion be set on these if they will. But the Christian mother has her God-appointed work, which she will not neglect if she is closely connected with God and imbued with his Spirit.

The example of the parents, in word and deportment, should be without fault; for this is the copy which is given their little ones to imitate. If parents desire their children to be right and do right, they must be right themselves in theory and in practice. Courtesy, even in little things, should be manifested by the parents toward each other. Universal kindness should be the law of the No rude language should be indulged, no bitter words should be spoken. Parents should exercise self-control, patience, forbearance, gentleness, and love, in dealing with their children. They should remember that the example they give their children, they will see reproduced in them.

The parents should be models of truthfulness, for this is the daily lesson to be impressed upon the heart of the child. Undeviating principle should govern parents in all the affairs of life, especially in the education and training of their children. "Even a child is known by his doings, whether his work be pure, and whether it be right."

An eminent divine was once asked how old a child must be before there was reasonable hope of his being a Christian. "Age has nothing to do with it," was the answer. "Love to Jesus, trust, repose, confidence, are all qualities that agree with the child's nature. As soon as a child can love and trust his mother, then can he love and trust Jesus as the friend of his mother. Jesus will be his friend, loved and honored."

In view of the foregoing truthful statement, can parents be too careful in presenting precept and example before those watchful little eyes and sharp senses ? Our religion should be made practical. It is needed in our homes as much as in the house of worship. There should be nothing cold, stern, and forbidding in our demeanor; but we should show, by kindness and sympathy, that we possess warm, loving hearts. Jesus should be the honored guest in the family circle. We should talk with him, bring all our burdens to him, and converse of his love, his grace, and his perfection of character. What a lesson may be daily given by godly parents in taking all their troubles to Jesus, the burden-bearer, instead of fretting and scolding over cares and perplexities they cannot help. The minds of the little ones may be taught to turn to Jesus as the flower turns its opening petals to the sun.

The lessons given Joseph in his youth by Jacob in expressing his firm trust in God and relating to him again and again the precious evidences of his loving-kindness and unceasing care, were the very lessons he needed in his exile among an idolatrous people. In the testing time he put these lessons to a practical use. When under the severest trial he looked to his Heavenly Father, whom he had learned to trust. Had the precepts and example of the father of Joseph been of an opposite character, the pen of inspiration would never have traced upon the pages of sacred history the story of integrity and virtue that shines forth in the character of Joseph. The early impressions made upon his mind garrisoned his heart in the hour of fierce temptation, and led him to exclaim, "How can I do this great wickedness, and sin against God?"

Childhood is the season in which the most abiding impressions may be made. the child sees and hears is drawing deep lines upon the tender mind, which no after circumstances in life can entirely efface. The intellect is now taking shape, and the affections receiving direction and strength. Repeated acts in a given course become habits. may be modified by severe training, in after life, but are seldom changed. whole future course of thousands is determined by the education received from the parents in childhood. At an early age the path of virtue is entered upon, which leads to honor and eternal life; or the path of disobedience and vice, which leads to unhappiness, dishonor, and the ruin of the soul.

The mother's work is given her of God, to bring up her children in the nurture and admonition of the Lord. The love and fear of God should ever be kept before their tender minds. When corrected, they should be taught to feel that they are admonished of God, that he is displeased with deception, untruthfulness, and wrong-doing. Thus the minds of little ones may be so connected with God that all they do and say will be in reference to his glory; and in after years they will not be like the reed in the wind, continually wavering between inclination and duty.

If in their tender years, the minds of children are filled with pleasant images of truth, of purity and goodness, a taste will be formed for that which is pure and elevated, and their imagination will not become easily corrupted or defiled. While if the opposite course is pursued, if the minds of the parents are continually dwelling upon low scenes; if their conversation lingers over objectionable features of character; if they form a habit of speaking complainingly of the course others have pursued, the little ones will take lessons from the words and expressions of contempt, and will follow the pernicious example. The evil impress, like the taint of the leprosy, will cleave to them in after life.

The seeds sown in infancy by the careful, God-fearing mother will become trees of

righteousness, which will blossom and bear fruit; and the lessons given by a God-fearing father by precept and example, will, as in the case of Joseph, yield an abundant harvest by-and-by. Will parents review their work in the educating and training of their children, and consider whether they have done their whole duty in hope and faith that these children may be a crown of rejoicing in the day of the Lord Jesus! Have they so labored for the welfare of their children that Jesus can look down from Heaven and by the gift of his Spirit sanctify their efforts? Parents, it may be yours to prepare your children for the highest usefulness in this life, and to share at last the glory of that which is to come.

## THE FAMILY LIQUOR STORE.

LATELY passing through the busy street of a great city, my careless glance fell upon these words: "Family Liquor Store."

They were painted in conspicuous letters across the front of a building, while the figure of an outstretched hand pointed to a disreputable-looking entrance, from whence came the sounds of oaths and drunken altercation.

An involuntary feeling of indignation and protest arose in my mind, that the word family, united as it is with all pure and homelike associations, and upon whose relations God has placed the seal of his approval, making it the corner-stone upon which all true social happiness and progress is built, should be profaned by its appropriation to such a use, or even found in conjunction with the title "Liquor Store," which with equal force calls up the wretched scenes and recollections that are inevitably connected with a drunkard's life.

I passed on, revolving in thought the debasing influences that every day's observation shows is exerted in a most marked degree upon the *family* by these multiplied and law-abiding birthplaces of crime.

I was on my way to the house of a friend, and on arriving was informed by her daughter, an intelligent, graceful girl of twenty, that her mother was absent, deeply engaged in a fair, the proceeds of which were to be devoted to the temperance cause. After a little chat in regard to the importance of the subject, I was invited to luncheon, and a cordial invitation was given to taste one of "Mamma's mince-pies, just made and just splendid!"

I was about to be helped when my young hostess drew back with a look of dismay, exclaiming, "Oh, I forgot! you will not want to eat any of those, for there is brandy in them!"

I looked at the untasted pastry and said slowly, "No, I could not, just for consistency's sake, touch it, even though my conscience did not protest." With a tone of apology in her voice, my friend said, "Mamma only uses liquor because they keep so much better," to which I answered half jestingly, "It works well in this case; this pie will certainly keep better, for I must not touch it."

But my heart was pained at such self-contradiction in one whom I respect and esteem, but who, while earnestly working in one direction to aid in the reformation of the drunkard, in another, by the free and common use of alcoholic poison, thus gives countenance and assistance to his bitterest foes, the liquor dealers.

As I passed out through the ivy-hung vestibule and over the marble steps, I involuntarily glanced upward, and it almost seemed as though I could see above the broad portal, written in characters of darkness, the same words that had looked at me from the low haunt of vice that I had passed so short a time before: "Family Liquor Store!"—Christian Woman.

## A THANKSGIVING DINNER.

[The following sketch of a Thanksgiving dinner by the famous author of "Widow Bedott Papers" has so good a moral that we think it well worthy the perusal of our readers. It is too late for Thanksgiving, but the principle is equally good for Christmas and New Year's dinners.—ED.]

"Elder Sniffles, let me give you another piece o' the turkey."

"I'm obliged to you, Mr. Maguire; you probably recollect that I remarked in my discourse this morning that individuals were too prone to indulge in an excessive indulgence in creature comforts on thanksgiving

occasions. In view of the lamentable fact that the sin of gormandizing is carried to a sinful excess on this day, I, as a preacher of the gospel, deem it my duty to be unusually abstemious on such occasions; nevertheless, considering the peculiar circumstances under which I am placed this day, I think I will waive objections and take another small portion of the turkey."

"That's right, Elder—what part will you take now ?"

"Well, I'm not particular; a small quantity of the breast, with a part of a leg and some of the stuffing, will be quite sufficient."

"Pass the cranberries to Elder Sniffles. Jeff—Elder, help yourself; wife, give the Elder some more o' the turnip sass and potater."

"Thank you, Mrs. Maguire. I am an advocate for a vegetable diet—and have always maintained that it is more congenial to individuals of sedentary habits and intellectual pursuits, like myself, than animal food."

"Jeff, my son, pass the bread. Sister Bedott, send your plate for some more o' the turkey."

"No, I'm obleeged to ye—I've had sufficient."

"Jeff, cut the chicken pie."

"Sure enough—I almost forgot that I was to carve the pie. Aunt Silly, you'll take a piece of it, won't you!"

"Well, I do n't care if I dew take a leetle mite on 't. I'm a great favoryte o' chicken pie—always thought 't was a delightful beverage—do n't you, Elder Sniffles?"

"A very just remark, Mrs. Bedott—very indeed; chicken pie is truly a very desirable article of food."

"Allow me to help you to some of it.

"Thank you, my young friend; as I before remarked, I am entirely opposed to an immoderate indulgence of the appetite at all times, but particularly on thanksgiving occasions—and am myself always somewhat abstemious. However, I consider it my duty at the present time to depart, to some extent, from the usual simplicity of my diet. I will, therefore, comply with your request and partake of the chicken pie."

"Take some more o' the cramberry sass, Elder; cramberries is hulsome."

"A very just remark, Mrs. Maguire—they are so; nevertheless, I maintain that we should not indulge too freely in even the most wholesome of creature comforts; however, since you desire it, I will take a small portion more of the cranberries."

"Husband, dew pass that pickled tongue—it hain't been touched—take some on't, Elder Sniffles."

"I'm obliged to you, Mrs. Maguire—but I confess I am somewhat fearful of taking articles of that description upon my stomach, as they create a degree of acidity which is incompatible with digestion. Is it not so, my young friend? You are undoubtedly prepared to decide, as you are, I believe, pursuing the study of the medical science."

"I think you are altogether mistaken, Elder Sniffles. We should always take a due proportion of acid with our food, in order to preserve the equilibrium of the internal economy, and produce that degree of effervescence which is neccessary to a healthy secretion."

"Exactly. Your view of the subject is one which never struck me before; it seems a very just one. I will partake of the pickled tongue in consideration of your remarks."

"Take a slice on 't, Sister Bedott. You seem to need some tongue to-day—your oncommon still."

"What a musical man you be, brother Magwire! but it strikes me when an indiwiddiwal has an opportunity o' hearin' intellectible conversation they'd better keep still and improve it. Ain't it so, Elder Snilles?"

"A very just remark, Mrs. Bedott; and one which has often occurred to my own mind."

"Take some more of the chicken pie, Elder Sniffles."

"Excuse me, my young friend; I will take nothing more."

"What! you don't mean to give it up yet, I hope, Elder."

"Indeed, Mr. Maguire, I assure you I would rather not take anything more, for as I before remarked, I am decidedly opposed to excessive eating upon this day."

"Well, then, we'll have the pies and puddin's. Jeff, my son, fly round and help your mar change the plates. I'll take the puddin', Melissy—you may tend to the pies. Jeff, set on the cider. So here's a plum-puddin'—it looks nice—I guess you've had good-luck to-day, wife. Sister Bedott, you'll have some on 't?"

"No; I'm oblegged to ye. I've got ruther of a headache to-day, and plum puddin's rich. I guess I'll take a small piece o' the punkin' pie."

"Elder Sniffles, you'll be helped to some on't, of course?"

"Indeed, Mr. Maguire, the practice of indulging in articles of this description after eating meat is esteemed highly pernicious, and I inwardly protest against it; furthermore, as Mrs. Bedott has very justly remarked, plum pudding is rich—however, considering the peculiar circumstances of the occasion, I will for once overstep the boundaries which I have prescribed for myself."

"Am I to understand that you'll have some, or not?"

"I will partake, in consideration of the time and place."

"Jimmeni! wife, this is good puddin' as I ever eat."

"Elder Sniffles, will you take some o' the pie—here is a mince-pie and punkin pie."

"I will take a portion of the pumpkin pie if you please, Mrs. Maguire, as I consider it highly nutritious; but, as regards the mincepie, it is an article of food which I deem excessively deleterious to the constitution, inasmuch as it is composed of so great a variety of ingredients. I esteem it exceedingly difficult of digestion. Is it not so, my young friend?"

"By no means, Elder; quite the contrary—and the reason is obvious. Observe, Elder, it is cut into the most minute particles; hence it naturally follows, that being, as it were, completely calcined before it enters the system, it leaves, so to speak, no labor to be performed by the digestive organs, and it is disposed of without the slightest difficulty."

"Ah, indeed! your reasoning is quite new to me, yet I confess it to be most satisfactory and lucid. In consideration of its facility of digestion I will partake also of the mince-pie."

"Wife, fill the Elder a glass o' cider."

"Desist! Mrs. Maguire, desist, I entreat you! I invariably set my face like a flint against the use of all intoxicating liquors as a beverage."

"Jimmeni! you don't mean to call new cider an intoxicatin' liquor, I hope. Why, man alive, it's jest made—hain't begun to work."

"Nevertheless, I believe it to be exceedingly insalubrious, and detrimental to the system. Is not that its nature, my young friend?"

"Far from it, Elder—far from it. Reflect a moment and you will readily perceive, that, being the pure juice of the apple—wholly free from all alcoholic mixture—it possesses all the nutritive properties of the fruit, with the advantage of being in a more condensed form, which at once renders it much more agreeable, and facilitates assimilation."

"Very reasonable—very reasonable, indeed. Mrs. Maguire, you may fill my glass."

"Take another slice o' the puddin', Elder Sniffles."

"No more, I'm obliged to you, Mr. Maguire."

"Well, won't you be helped to some more o' the pie?"

"No more, I thank you, Mr. Maguire."

"But you'll take another glass o' cider, won't you?"

"In consideration of the nutritious properties of new cider, which your son has abundantly shown to exist, I will permit you to replenish my glass."

"So you won't take nothin' more, Elder ?"

"Nothing more, my friends—nothing more whatsoever—for, as I have several times remarked during the repast, I am an individual of exceedingly abstemious habits—endeavoring to enforce by example that which I so strenuously enjoin by precept from the pulpit, to wit—temperance in all things."

—A country doctor announces that he has changed his residence to the vicinity of the church-yard, which he hopes may prove a convenience to his numerous patrons.

### QUACKS.

The ancient highwayman was a considerate person. His demands might sometimes seem urgent, but they kept within certain bounds. He gave you a choice of evils. If you would surrender your money you might keep your life, and doubtless he often praised himself for easing you of that which might have proved to you a snare, while he granted you the most precious of earthly blessings.

The modern quack doctor is a much more blood-thirsty character. He has no such scruples as the highwayman, and no such moderation in his demands. With him there is no alternative. He wants your money and your life. When he has got your money he goes on to deprive you of your life. He makes you pay him heavily for putting you to death.

Precisely how large is the addition made by these blood-suckers to our bills of mortality will never be known until the Judgment And it would be difficult, no doubt, to estimate the amount of money that they annually extort from their victims. Those who have some means of knowing the condition and habits of the humbler classes are aware that the amount is very large. It is a pity that the facts cannot be brought to light. Will not General Walker try to include this item in the tables of the next census? If it were only known how much these people are doing to impoverish and destroy human beings, a society with a longer name than that of Bergh's would soon arise for their suppression. - Good Company.

### LEANING TOWER OF PISA.

Or leaning towers, perhaps the most remarkable, certainly the most widely known, is the celebrated one at Pisa, in Italy. It is one hundred and eighty-seven feet in height, being ascended by three hundred and fifty-five steps, and is inclined from the perpendicular rather more than fourteen feet. Erected about 1174, this beautiful structure is built of marble and granite, having eight stories, each formed of arches supported by columns, the several stories being divided by ornamental cornices. Being unconnected with the neighboring buildings, it was probably intended to be used as a belfry. Notwith-

standing its inclination, and the fact that seven hundred years have elapsed since the erection of the structure, it has withstood the ravages of time with more than ordinary success, exhibiting at the present time hardly any perceptible sign of decay. It would seem that the tower has not always presented the peculiar appearance which it has now assumed, for in the Campo Santa, a neighboring burial ground, the cloisters of which are ornamented with curious paintings on stucco, there exists a representation of the tower in an upright position. These paintings are supposed to have been executed about 1300, more than one hundred years after the tower was built; so that it may be considered pretty certain that the inclination was caused by the gradual sinking of the earth, as is the case with those at Bologna, in the same country. - Harper's Weekly.

### CHINESE PECULIARITIES.

Few of the houses in China have more than one story, except in towns where they are generally two stories high.

The people express the utmost astonishment at pictures of European houses built floor above floor, and it is said that one of the late emperors inquired whether this was done on account of the smallness of the "western barbarians' territory."

The Chinese are, perhaps, the only Asiatic people who use chairs. Their other chief pieces of furniture are the kang, a kind of sofa-bed, and a few mats.

The dress of the Chinese in summer is made of the lightest silk, gauze, grass-cloth, or cotton, while cotton-wadded or fur-lined garments protect their persons from the severity of cold weather. The Chinaman builds no fire in his house at the approach of winter, but puts on additional clothing until the desired temperature is obtained.

The Chinese idea of beauty demands that a man be obese, or corpulent, while a woman should be extremely slender in appearance. Both men and women of rank wear their finger nails long, as a sign of exemption from labor, and they are allowed to grow to such an extent that cases of ivory, silver, and even gold ornamented with precious gems, are used to preserve them from being accidentally broken.

The small feet of the Chinese are the result of one of their ideas of beauty, but only the ladies of ton adopt this method of improving upon nature, which is considered as exceedingly genteel, probably from the idea of its being associated with exemption from labor, as those who are thus deformed are incapable of walking without support.

A man is thought to be an innovator if he begins wearing a moustache before he is forty, or a beard before he is sixty years of

The "pigtail," now so universally a part of a Chinaman's costume, was originally a a mark of subjection forced upon the Chinese by their Mantchou conquerors. Says Robert Brown, "It is now adopted by every one, and, if scanty, is eked out by silk or false hair. There is no greater mark of disgrace than to lack this coronal appendage. The sailor ties his hat on with his pigtail; the school-master uses it in place of a cane; while if life becomes troublesome to a Chinaman, he will contrive to suspend himself by making his pigtail serve the purpose of a rope."

The hair of the women is skillfully dressed into something the shape of an old-fashioned tea-pot, with bright colored flowers fastened in it.

A Sure Cure.—An elderly gentleman accustomed to "indulge," entered the travelers' room of a tavern where sat a grave Friend by the fire. Shifting a pair of green spectacles upon his forehead, rubbing his inflamed eyes and calling for brandy and water, he complained to the Friend that "his eyes were getting weaker, and that even spectacles didn't seem to do them any good." "I'll tell thee, friend," replied the Quaker, "what I think. If thou wouldst wear thy spectacles over thy mouth for a few months, thine eyes would get well again."

—It is not things, but men's opinion of things that disturbs them. Remember, it is not he that reviles or assaults you, that injures you, but your thinking that he has injured you. No man can hurt you, unless you permit him; then only are you hurt when you think yourself so.—Mason.

## POPULAR SCIENCE.

—Paper was made from rags, in Italy, A. D. 1314.

—It is asserted that left-handed persons hear best with the left ear.

—A new silk-worm has been discovered which feeds on the leaves of the oak. Its product is of a fast brown color.

—Wicks for oil lamps are being successfully manufactured in Germany from spun glass. Asbestos wicks have been made in the United States for a number of years past.

—Wheat will stand an immense amount of cold without injury. Some kernels left in the polar regions in 1871 by Captain Hall of the Polaris, and found in 1876 by Captain Nares, germinated and produced healthy plants when sown under glass on ship-board.

Fecundity of Grain.—It has been calculated that if a single grain of wheat produces fifty grains in one year's growth, and these and succeeding crops be planted and yield proportionately, the product of the twelfth year would suffice to supply all the inhabitants of the earth for a lifetime; in twelve years the single grain will have multiplied itself 244,140,625,000,000.

Talking at Two Thousand Miles.—It is stated that Mr. Robert A. Parker, superintendent of the Pennsylvania Railroad, while in Nebraska a short time since, conversed for two hours with his wife and friends at Sayre, Pa., through the medium of the telephone. One of Edison's telephones was connected with the different telegraph wires along the route from Sayre to North Bend, Neb., where Mr. Parker was, and although the distance was about two thousand miles, every whisper was audible.

Science and Salt.—Dumas tells a story of some Italian noblemen, members of a learned society in olden time, who met together for the purpose of discussing scientific questions. Once upon a time the question under consideration was the causes of the

saltness of the sea. After numerous speculations had been offered, a gentleman who claimed to have made a discovery arose and asked to be heard on the subject. Attention being given, he proceeded to explain that salt herring came from the sea; and as the herring is a widely distributed fish, there could be no doubt but that the saltness of the sea is due to salt herring.

The story is well worthy of its facetious author, and though it may not be true in fact, it not inaptly illustrates how some people reason, even some scientists, especially that class of geological chronologists who are ever attempting to figure out the age of the globe from the thickness of a stalactite, the depth of a river valley, or the rate of motion with which the continents are being submerged.

The Electric Eel.—One of the greatest curiosities in nature is the electric eel. Little has been known of this most interesting creature until very recently. A living specimen is now being studied by a French scientist who has made many very surprising discoveries respecting its wonderful powers. A large eel can produce a current of electricity equal to that from a powerful battery. An eel six feet in length can paralyze a horse or a large ox by the electrical shock which it can produce even at a considerable distance.

"The animal, owing to its length and suppleness of its body, can produce different electrical effects, according as it is a straight line, convex, or concave, as regards its prey. Its general mode of procedure is to form a semicircle and place the fish it is intent on in the diameter of the circuit. When the discharge is delivered, the prey, as if struck by a thunderbolt, is rendered powerless; the gymnotus swims around it, as if to be assured of the efficacy of the shock, and then swallows its victim. These are not the only fish which possess the singular power of launching electrical discharges on their prev or on their enemies. Many others are known, but far inferior in force to the terrible gymnotus. Among them are the torpedo fish and some species of skate which inhabit the coasts of Great Britain and France, and some other species which are found in the Nile and Senegal."



J. H. KELLOGG, M. D., EDITOR.

TERMS, \$1.00 A YEAR.

### HOW TO VENTILATE.

AT this season of the year one of the most important sanitary problems is how to secure proper ventilation of dwellings, halls, churches, offices, manufacturing establishments, and all other structures in which human beings live or congregate. Upon the proper solution of this problem depends, in a degree that is rarely appreciated, the health of thousands of human beings who spend much of their lives in-doors. There are many persons who scarcely venture to put their heads out of doors after November winds appear until the genial warmth of spring loosens the fetters of winter and brings back the birds and flowers which fled upon the first intimation of the thermometer that cold weather was approaching. For such persons it is especially important that the most thorough means of ventilation should be secured, as in no other way can they possibly escape the inevitable results of confinement in impure, dried, stagnant, air. Without attempting to point out the many evils resulting from imperfect ventilation, we shall endeavor in this article to set forth as clearly as possible the principles of correct ventila-

The great source of contamination of air in dwellings and other structures occupied by human beings is respiration. Air which has been breathed is not only unfit for use again, but is a means of rendering unfit to breathe other air with which it may be mingled. Careful scientific researches have shown that each breath contaminates three cubic feet of air, rendering that amount of air unfit to breathe again. As each person breathes more than a thousand times an hour, it is evident that at least three thousand cubic feet of air are rendered unfit to breathe

each hour by every adult man or woman. It is also evident that in order that health shall be preserved it is essential that three thousand feet of pure air shall be supplied to take the place of that which is contaminated. In this way only can health be preserved; and the failure to observe this rule is the principal cause of the great majority of diseases of the lungs.

Fig. 1.

the most deadly maladies to which the human family is subject, is the direct result of breathing air which has been contaminated by having been breathed before.

How to secure this

Consumption, one of

three thousand cubic feet, or more than two hundred hogsheads of pure air each hour, day and night, at all seasons of the year, is the problem which we wish especially to consider. The principles of correct ventilation are very simple, and yet they are so little understood that we have had made the accompanying diagrams, so that by illustration we may make the subject so clear that it can be

easily comprehended by all.

Fig. 1 represents a tall, glass jar. A short piece of a lighted candle was lowered into it

by means of a wire with a shallow cup at the end. When the candle was first lowered it burned very brightly, but in a few seconds it began to grow dim, and in less than a minute

it ceased to burn, sending up smoke, as is seen in the figure, like a candle which has been blown out.

The cause of the extinguishment of the candle is the accumulation in the bottom of the jar of carbonic acid, the poisonous gas which is exhaled from the lungs, which is also produced by all kinds of combustion. A single pair of human lungs sends out not less than four barrels of this poisonous gas every twenty-four hours. An ordinary candle produces nearly the same amount of the gas, and a single gas jet ten or fifteen times as As this gas is much. incapable of supporting combustion, as well as respiration, the candle is put out by the poison gen-

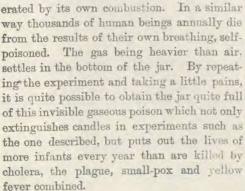
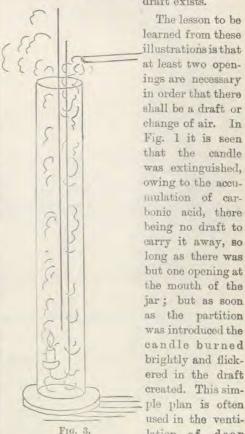


Fig. 2 shows the candle burning brightly in the glass jar. If watched closely, it will be seen that it flickers as though it were being blown with considerable violence, which evidently indicates that there is a strong draft, even in the bottom of the tall jar.

What makes the difference? The change in the behavior of the candle is wholly due to the fact that we have passed down into the jar, to within a few inches of the candle, a strip of card-board the width of which is nearly equal to the diameter of the jar. By this means two openings are made, one of which allows the heated and impure air to pass up on one side of the card-board, while pure air passes down on the other side. Thus a circulation is made. This is still more clearly seen in Fig. 3, in which a smoking taper is held at the mouth of the jar. It will be observed that the smoke, instead of rising, as it usually does, is drawn down into the tube upon one side of the card-board septum or partition, being drawn up on the other, showing to the eye that quite a strong draft exists.



mines, a tight partition being built in the middle of the descending shaft. It has happened that the partition in such mines has been destroyed by accident or fire, when the

lation of deep

workmen in the mine have either suffered death from suffocation or barely escaped with their lives. A person shut up in a room with but one opening, as from a single window lowered or raised a few inches, is exactly in the condition, so far as his supply of fresh air is concerned, of the candle in the bottom of the jar, or the miner at the bottom of a shaft without a partition. Instead of smothering at once, however, he will suffocate by degrees. The length of time required to complete the homicide will depend upon the tightness of the room and the toughness of the individual; but a human life is sacrificed, nevertheless.

Next month we shall point out more specific methods for securing efficient ventilation.

## THE REAL CAUSE.

THE principal reason why thousands of invalids do not recover, notwithstanding the most persevering efforts of skillful physicians, is that the real cause of disease is not reached and removed. In the majority of cases this real cause exists in the habits of the individual. The use of tea and coffee, tobacco, liquor, opium, and a large list of stimulating condiments and other bad articles of diet, together with many injurious practices regarding diet, exercise, clothing, and other habits of life, constitute the chief causes of ill health. Under these circumstances it is no wonder that dosing and drugging, guzzling mineral waters, bitters, koumiss, and all sorts of vitalizing liquids so-called, does not effect a cure. This fact is well illustrated by the story of a wealthy invalid who had been long ill and one day sent for his physician, and after detaining him a long time with a tedious description of his aches and pains, said,-

"Now, Doctor, you have humbugged me long enough with your good-for-nothing pills and worthless draughts; they do n't touch the real difficulty. I wish you to strike at the real cause of my ailments, if it be in your power."

"It shall be done," replied the doctor, and at the same moment he lifted his cane and demolished a decanter of gin that stood on the table.

"Now, then," continued the honest physician, "I have struck at the real cause of your

ailments; banish the 'bottle,' and you will far less need my pills and draughts."

If all physicians would deal as honestly with their patients, there would be a vast amount of bottle-smashing in the houses of both poor and rich all over the land.

### BLOOD-DRINKING.

A California correspondent writes us that in the vicinity of Oakland, Cal., the practice of blood-drinking is considerably in vogue, and wishes us to tell the readers of Good Health "what wonderful efficacy as a medicine there is in this nauseous draught."

If we are correctly informed, the practice of blood-drinking originated in Germany. It was recommended by some under the supposition that the strength might be sustained and the vital powers strengthened by its use more readily than in any other way. Some may have entertained the idea that the warm blood of slaughtered animals might be absorbed by the stomach, thus imparting strength and vitality by directly replenishing the blood. This is wholly an error, however, since the blood of different animals is so different that the vital fluid of one cannot be made to substitute that of the other, except in a small degree and for a short time. It is further noticeable that blood cannot be absorbed from the stomach until it has been digested, so that in this respect it has no preference over other food.

We have been acquainted with persons who had practiced blood-drinking for months, but without benefit; and we have yet to know of an authentic case of cure by this barbarous practice. Most persons find the practice so repugnant to their tastes and feelings that it cannot be endured long, though now and then one will acquire a real appetite for blood, and will quaff off the glass of life-blood which he catches as it gurgles from the cut throat of the animal with as much relish as a Patagonian Indian sips from his hand the red fluid of the antelope which he has captured in the chase.

We believe the remedy is going out of vogue, and hope we shall soon cease to hear of it. Such practices are horribly demoralizing to the tastes and feelings.

### SLAVERY TO TOBACCO.

Probably there is no habit which more completely enthralls a man than that of tobaccousing, with, perhaps, the possible exception of opium-eating. Many a tobacco slave longs to be free, but has not the mental force or moral energy to disentangle himself from the toils of this tyrannical habit. We believe that the long-continued use of tobacco produces a distinct disease, as do alcohol, opium, and other narcotics, when largely used. Nothing but tobacco will relieve the symptoms of this malady; and it is this fact which makes the habit so difficult for its victims to overcome.

We believe that the tobacco habit is one of the most stupendous social evils of the present day; and it gives us great pleasure to see that the fact is being recognized and asserted by men of influence in every part of the world.

The following excellent paragraphs on this subject are from a letter by Hon. Neal Dow to the New York Witness:—

"The tobacco habit is the most extraordinary slavery to which men subject themselves. To all persons at the first it is offensive and loathsome in the highest degree, except to those who from childhood have been accustomed to an atmosphere filled with tobacco smoke, in which case their system does not so much revolt at it. The habit is usually acquired by boys at school and at college, or at their apprenticeship, because they think it smart and manly and fast to smoke or chew, or both. They do not understand, because they have not been taught, that they are in the way of acquiring an expensive, loathsome, disgusting habit, from which no possible advantage or good can come, but from which many evils are inevitable. I do not think there is any smoker or chewer of tobacco of forty years of age who does not repent bitterly that he has acquired the habit.

"Entering a gentleman's office one day I found him smoking.

"'Ah! Mr. Blank,' I said, 'what would you give to be free from your tobacco habit?'

"He paused a moment, and then answered:
"I would give every dollar I have in the world."

". Then why do you not abandon it ?'

"'I cannot do it; the habit has so enslaved me that I cannot throw it off without more suffering than I am able to bear.'

"A schoolmate of mine from a distant city has been recently at my house for a week, and one day he told me that for fifteen years he had been a miserable bond-slave to the tobacco habit. Many times he had attempted to emancipate himself from its thralldom, but the agony he endured from the want of the cigar was so great that he could not persist. He was fully sensible of the folly of his way of life, of the degradation to which he subjected himself, and of the bad example he was setting before the young, and he longed to be free; but he could not endure the suffering which, for a time, would come from a reform. At last, he said he resolved that with divine help, which he earnestly invoked, he would be free, let come what might. He said the suffering he endured was indescribable; but he persisted, and came out conqueror. He said that once, in a paroxysm of agony, his hands were clasped together spasmodically, and there came out blood from their backs under the finger nails which penetrated the skin. He said, after the struggle was over and he had succeeded in emancipating himself, his joy at his deliverance was very great. There was not money enough, he said, in the Bank of England, which, if offered to him, would induce him to go back again to his former way of life."

Hair Bleaching .- A few years ago the use of hair dye had become so general that it was recognized by intelligent medical men everywhere as a serious cause of disease. Since light hair has become the rage in fashionable circles bleaching the hair has become almost as common as dyeing was formerly. A lady who has had every opportunity to gain positive knowledge on the subject, informs us that in fashionable circles this pernicious practice is exceedingly prevalent. An experienced physician of extensive practice and acquaintance asserts that the chemicals employed in this bleaching process are not only very destructive to the hair but ruinous to the health. In our opinion, nothing is much more ridiculous and foolish than these attempts to improve upon Nature. The color of a person's hair is always in keeping with the complexion and the temperament. Nature gives to a blonde light hair, and to a brunette hair of a darker shade, because there is a fitness in such an arrangement of colors; any attempt to disturb or subvert the order of nature is not only foolish but must result disastrously.

Sensible Legislation .- In Germany and Switzerland measures are being arranged which will effectually repress the sale and use of secret and patent remedies of all sorts. If such measures are needed in the countries named, they are certainly necessary in the United States. This country seems to be the native home of the quack. Here he flourishes in all his glory, preying upon the lives of his fellow-citizens, yet often, by means of his pecuniary talent and liberal expenditures on election days, rising to high and responsible political positions. Of the many and varied causes which endanger the health and lives of American citizens, we regard the quack with his filthy nostrums as one of the most dangerous. We sincerely hope that the good example set by Germany and Switzerland will be followed by this and other countries.

Effect of Tobacco on Fowls .- A popular English journal tells a queer story of a gentleman living at Clamart, France, who has conceived the notion that tobacco smoke is good for fowls, its inhalation having the effect to whiten the flesh and render it very tender. In testing his theory he "shut up a chicken in his fowl-house, and set fire to a store of 'carporal,' which he left burning in the place. The young fowl, so far from being averse to the odor of the narcotic, was inclined to try its taste as well as its smell, and had in a few days' time consumed so much carporal' that its flesh was not only whitened but absolutely 'nicotinized' with poison. To it as it stood-probably in a rather stupid state-upon its perch, entered one night an adventurer named Carrouge, who, after belonging to a confraternity of professional chicken-stealers, had started a business of his own at Clamart.

"The precious bird was carried off, plucked, cooked, and eaten, and a short time after

breakfast the thief was seized with violent and intolerable pains. He rushed to the doctor, heedless of the necessity which would arise of disclosing his nocturnal escapade. He was found to have been poisoned by the nicotine contained in the flesh of the fowl, and was with some difficulty saved from death. He will now be tried for thieving, while the owner of the stolen bird runs some chance of being prosecuted by the society for the protection of animals. This latter gentleman may, however, on the whole, congratulate himself on the ill success of his intended experiment. Had he been allowed to carry it to its conclusion, he might have eaten the fowl when it had been still more completely 'nicotinized,' and when no doctor could have saved him from the effects of his imprudent meal."

Alcohol Decreases Temperature.-Dr. B. W. Richardson of England, who undertook, a few years ago, at the request of the British Association for the Advancement of Science. an elaborate series of experiments on the action of alcohol, found to his surprise that the opinion previously held respecting this drug, that it had the power to maintain animal heat, was wholly without foundation, the exact contrary being true. Referring to this discovery of his, Dr. Richardson recently remarked as follows at a meeting of the British Medical Temperance Association: "I look back with horror to my former belief, a doctrine I was taught by able and learned teachers, that I ought to give alcohol in the collapse of cholera to bring back the animal temperature."

The researches of Dr. Richardson have since been confirmed by those of Edward Smith, and more recently by French experimenters.

Coal Smoke.—No one who has ever visited a manufacturing city or traveled by railroad has escaped annoyance if not great inconvenience from coal smoke; but it is not generally known that this may be a source of great injury to health. The Metal-Worker, a scientific journal, has recently called attention to the fact that iron roofs are often destroyed in a few years by the sulphurous fumes which escape in smoke from railroad

engines and large chimneys of large manufacturing establishments. If the ingredients of coal smoke will destroy an iron roof, it must certainly be a source of injury to delicate lungs. Persons living in large cities should take great care to avoid the vicinity of establishments consuming large quantities of coal. As we have often watched from a distance of many miles, when approaching by railroad, the dense cloud of smoke hanging over some of our large western cities where large quantities of soft coal are used, we have marveled that the mortality from lung diseases in those cities is not even greater than it is.

Hygiene of Printing.—It does not seem to occur to our book-makers and printers that the color of paper or ink used in printing has any relation to the production of disease of the eye; but undoubtedly the hygiene of printing is a subject of such importance as makes it impossible that it should be ignored without injury to one of the most important of all the organs of special sense.

Careful investigation of the subject has shown that paper of a light buff color printed with densely black ink is the most grateful to the eye and the most healthful for that organ. Glazed paper and paper and ink of fancy colors are to be avoided. It is to be hoped the publishers of periodicals and especially those who publish educational books, will consider this matter and by so doing economize the eyesight of thousands who are annually becoming the victims of various maladies which seriously impair and often ultimately destroy sight.

Why he Didn't Complain.—A rather humorous illustration of one of the obstacles to sanitary reform is given by the Detroit Free Press. It seems that a member of the sanitary police was making a tour of inspection through the back alleys of a portion of the city the other day when he found two very serious nuisances in the same yard. The family upon one side had thrown a great heap of garbage over the fence, and the other had dumped over an old mattress and two or three dead cats. The citizen living between the two heaps came out to the fence holding his nose, and the officer asked:—

- "How long have these nuisances existed ?"
- "Oh, about a month," was the reply.
- "And you have n't lodged a complaint at the City Hall ?"
  - " No."
- "Why, this horrible stench must float right into your house?"
- "Yes, so it does; but I was n't fixed to say anything. This man over here lends me his lawn-mower twice a week, and my wife borrows most of our tea and coffee of the other one. I kinder figgered on it, and concluded not to raise a row unless the mower got too dull or the brand of coffee run down."

Prof. Proctor on Perihelion Pestilence.—
The eminent English astronomer, Prof. Proctor, asserts that there is no necessity for alarm respecting the approaching conjunction of the large planets in perihelion. In this the professor agrees with some of the most eminent of our American astronomers. No astronomer of note has espoused the cause of the sensationalists who have been trying to get up a scare over this question. It is absurd to suppose that people can be frightened into either moral or physical rectitude. The effect of such attempts is always the reverse of what is intended by those who make them.

The Way to Health.—Hygiene, once in disrepute, is becoming popular. Almost every journal of any consequence now gives at least a modicum of attention to the question of health. The following excellent paragraph from the Scientific American expresses several excellent truths:—

"The only true way to health is that which common sense dictates to man. Live within the bounds of reason. Eat moderately, drink temperately, sleep regularly, avoid excess in anything, and preserve a conscience "void of offense." Some men eat themselves to death, some drink themselves to death, some wear out their lives by indelence, and some by over exertion, others are killed by the doctors, while not a few sink into the grave under the effects of vicious and beastly practices. All the medicines in creation are not worth a farthing to a man who is constantly and habitually violating the laws of his own nature. All the medical science in the world

cannot save him from a premature grave. With a suicidal course of conduct, he is planting the seeds of decay in his own constitution, and accelerating the destruction of his own life.

A Large Tax-Payer.—It is stated that a tobacco manufacturer in North Carolina pays a larger annual tax than any other man in the world. His taxes amount to \$1,428 a day, or \$520,000 a year. This is an immense tax, yet the users of the filthy weed pay a still larger tax, not only in money, but in health, in comfort, and in the deterioration of moral strength. The government receives a large

revenue from the tax upon tobacco, but there can be no doubt that the great amount of poverty, intemperance, and even crime, which arise from the use of the weed occasions the expenditure on the part of the government of ten dollars for every one which it receives from this source.

A Teetotal General.—It will be interesting to the friends of temperance to know that the great English general, Sir Garnet Wolseley, is a total abstainer. During the Ashantee expedition he forbade absolutely the use of all intoxicating drinks by the army, himself setting an example of abstinence.



\*\*\*ONLY questions of general interest will be considered in this department. Other questions will be answered by letter. All who desire to do so are at liberty to ask questions, and all queries will receive prompt attention.

### What is the Kind of Under-clothing for Winter?

The question is often asked us by patients, What kind of clothing is best to wear next the body, -woolen & cotton flannel & linen & or silk? Undoubtedly, for most persons, flannel under-garments are much the best for winter Woolen possesses much greater hygroscopic properties than either linen or cotton fabrics; that is, it will absorb more moisture without being sensibly wet than will the other fabrics mentioned. Hence, in case a person perspires slightly in consequence of exposure to a warm atmosphere, as in a close room or a crowded hall or railway car, or as the result of exercise, there is much less liability of taking cold with woolen undergarments than with those made of any other substance.

Woolen is also a better non-conductor of heat than are either of the other fabrics, and so favors the retention of animal heat in the winter.

#### What is the Best Color for Clothing?

There is a popular notion that certain colors are more advantageous for clothing than others, as being more healthful or comfortable. For warmth, red is the favorite color; and many people will not wear winter underclothing of any other color. A careful examination of this question, however, has led to the discovery that there are not substantial grounds for the popular theory. It has been demonstrated by scientific investigation that the best color for warmth is white. Although it may seem paradoxical, it may be also mentioned that white is the best color for coolness, and hence is best adapted to summer wear. The explanation is very simple. In the winter we depend chiefly on animal heat developed in our own bodies and hence need to employ a good non-conductor to retain the heat within the body. Garments of a white color are the most effective for this purpose, since white is a very poor radiator of heat. Its utility in summer is due to the fact that it is also a good reflector, by which property it protects the body from injury from external heat.

## How is the Best Way to Avoid Taking Cold?

Taking cold is generally considered to be a trivial matter; but from quite extended observation of the matter we have become convinced that a cold is a very serious malady; it is really a disease though hardly regarded as such by most people. Being itself a febrile disease—the bodily temperature is always increased when a person is suffering from a cold—it is very likely to give rise to some other and perhaps more serious febrile disorder. We have many times seen

typhoid fever, bilious fever, ague, pneumonia, pluerisy, erysipelas, acute rheumatism, and other diseases characterized by a marked rise of temperature, induced by a cold. Nasal and pharyngeal catarrh, laryngitis, chronic bronchitis, and even consumption, often begin with a cold. In fact, we have arrived at the conclusion that a cold is a malady of so serious a nature that a large share of those who suffer from severe colds never fully recover from the effects of it. The cold may seem to be cured, but there will be left in nearly all instances an increased susceptibility to colds, a slight hoarseness or thickness of the voice, or a tickling in the throat if not actual irritation; and these seemingly insignificant maladies may give rise to those of the most serious character.

In view of these facts it is worth taking no inconsiderable amount of pains to avoid taking cold and by so doing entailing the risk of so much injury.

To prevent a cold is a much easier matter than to cure it after it has been taken, but requires not a little forethought and caretaking. There are two plans, either one of which may be made efficient. One is to avoid exposure, and the other to so fortify the system that it will not be affected by any ordinary exposure. The first plan, to be effective, requires the most complete protection and seclusion in-doors at all seasons of the year when the weather is changeable, and the maintenance of a uniform temperature within doors. It will prevent colds, but at the same time involves all the ill consequences of imprisonment within the walls of a house, and loss of the invigorating influences which nature bestows so bountifully out of doors. The second plan is by all means the better, as it enables a person to be in a great degree independent of the weather, and gives him liberty to go where and when duty may call him. This plan may be concisely stated thus :-

1. Keep all of the excreting organs of the body, especially the skin, in a vigorous condition. This is to be done by plain hygienic living and the frequent use of the cool or tepid bath. Hot bathing should be

avoided, except when indicated as a remedy for disease.

- 2. Keep the circulation well balanced by a sufficient amount of daily physical exercise, preferably in the open air. Moderate exercise is best, such as will not excite perspiration or induce great fatigue. For ladies and sedentary people, calisthenics and the health-lift are valuable means of securing a large amount of exercise in a very short space of time.
- 3. Avoid confinement in close, highly heated rooms, and especially in an impure atmosphere. The remedy for these bad conditions is thorough ventilation. Special attention should be paid to sleeping rooms.
- 4. Avoid drafts. Let in an abundance of pure air at all times, but do not allow it to come in strong currents, as it will be almost certain to chill some part of the body. So long as there is equal exposure of all portions of the body there is little or no danger. People do not take severe colds when riding in an open sleigh, even in the coldest weather, since the whole body is bathed in the fresh, invigorating air; but getting the feet cold while sitting in a room, receiving a current of cool air from a window upon the head or the back of the neck, will almost certainly induce a cold.
- Clothe the body warmly and equably.Give especial attention to the extremities.
- Avoid large scarfs or comforters about the neck, except as a protection for the ears in the very coldest weather when long exposed.
- Daily cold bathing of the throat and neck is a most excellent means of fortifying these exposed and sensitive parts.
- 8. Wear flannel next the skin, and change the under-garments and stockings every other day. Two sets a week will answer very well, being worn alternately and allowed to air twenty-four hours after being taken off before being again worn.

By pursuing the plan marked out, a cold will be rarely taken, and need never be contracted if sufficient vigilance was exercised in avoiding the causes. Never take any risks. Always be on the safe side. The possible injury is greater than any one can afford to suffer.



Devoted to Brief Hints for the Management of the Farm and Household.

- —Dark stables are injurious to the eyes of horses.
- —A good sized piece of charcoal placed in the pot with boiling cabbage removes the odor.
- —Wash your wash-boilers, when a little rusty, with sweet skim-milk.
- —Common lye of wood ashes will soften hard putty in a few minutes.
- —Tortoise-shell and horn combs last much longer for having oil rubbed on them frequently.
- —When baking, if you touch your finger against the oven-door or a hot pan, the instant application of a little mucilage will alleviate the pain and heal the blister.
- —Small pieces of sassafras bark mixed among dried fruit is a preventive of worms. The amount of bark to be used need not be more than a handful to the bushel.
- —Frosted plants should be thoroughly drenched in cold water and removed to a cool, dark room until restored. On no account suffer the sun to shine on them, nor take them into a warm room. Clip off all such parts as are blackened.
- To Preserve Clothes-Pins.—Clothes-pins will be much more flexible and durable if boiled a few minutes and quickly dried once or twice a month. Clothes-lines will last much longer and keep in better order for use if occasionally treated in the same way.

The Keeping of Fruit—Requires a uniform, low temperature, just above freezing point. Fruit should not be stored in the house cellar if it can be avoided, for the carbonic acid gas given off by fruit in ripening is deleterious. When there is no other place for the fruit the ventilation of the cellar should be carefully attended to, and the cellar windows kept open whenever the outside

temperature will allow. An opening made from the cellar into the chimney is an excellent means of securing good ventilation.

Recipe for Silvering.—To silver small articles, proceed as follows: Dip into a strong solution of common salt, then rub with a mixture consisting of one part chloride of silver, two parts potassa alum, eight parts common salt, and the same quantity of cream of tartar. Wash and dry with a soft cloth.

To Take the Woody Taste out of Wooden Pails.—Fill the pail with boiling hot water; let it stand until cold, then empty it and wash the inside of the pail thoroughly with a solution made by dissolving a tablespoonful of soda in tepid water, to which add a little lime. After washing, scald well, and rinse in clean water.

## FEEDING HORSES.

A GREAT diversity of opinions prevails as to the best method of feeding horses, and mistakes are frequently made by neglecting to give suitable attention to the matter. We have known farmers who were accustomed to throw a lock of hay to their horses several times during the day when they are not at work, thus allowing them to be eating nearly the whole day, and so consuming much more food than they would require when at work. This practice cannot fail to injure a horse seriously if continued any length of time. A horse should no more have all the hay he can eat than a child should have all the bread or fruit he can eat.

Regularity and moderation are as important in the one case as the other. Cut straw and meal, even without hay, or with very little, is good food for horses. Some claim that six or eight quarts of meal per day, with fifteen to twenty pounds of good hay, is enough for almost any horse and better than more. Of course a horse that works all the time needs more food than one that has little exercise. Some horses consume and seem to need more food than others doing the same work. The hay should be cut, or mostly so, and fed with meal, wet. Cracked corn to be fed with oats a part of the time is recommended by some. Smoky hay is especially liable to induce a cough, and should be carefully avoided. If herses are fed mostly on hay it should be of a good quality, well cured, and fed in moderate quantities three times a day. But it is the opinion of those best acquainted with horses that they can be kept in a good condition cheaper by feeding some grain than by giving them hay alone; and if horses are in constant use, grain, in some form, is a necessity.-Record and Farmer.

## CONCERNING RAG CARPETS.

Among the many olden arts being gradually forgotten is the making of rag carpets. The increased facilities and lower rates of manufacture in these later years have made it cheaper for the busy housewife, with her manifold family cares, to furnish her rooms with the manufactured goods, rather than to engage in the tedious task of cutting and sewing carpet-rags. Nevertheless there are many who still continue this economical method of using up cast-off clothing, and spend the long winter evenings in preparing a new carpet for the spring house-cleaning; to such, the following hints may be apropos.

With care in the preparation, a rag carpet may be made as tasty and pretty as an ingrain. The colors should not be thrown together confusedly, but blended as carefully as an artist would mingle the varied hues of a landscape. Allow no harsh contrasts, use but few primary colors, choosing such as will shade nicely with each other. Much will also depend upon the fineness of the rags and warp. All woolen rags should be cut much finer than cotton, and must not be cut back and forth for a smooth carpet. Cotton rags may be torn, but should have the loose threads picked off.

Of the prepared warps, the finest thread of the red ball is an excellent quality. Of all warps, allow five knots for each yard of carpet one yard wide and woven in the usual

size (4 and 20) reed. A finer reed requires more.

The statement on the labels of the warp, as to the number of yards each package will make is only true when used in a very coarse reed. Enough warp for an extra yard in every ten should be allowed for shrinkage in weaving. The amount of rags required per yard depends entirely upon the fineness of their cutting and the width of the carpet; yet weavers generally consider one and one-fourth pounds per yard an abundance.

For dyeing, the following recipes are reliable for both woolen and cotton:—

BLUE.—For five pounds of goods; dissolve 4 oz. of copperas in water sufficient to well cover the goods, and boil them in it fifteen minutes, stirring and dipping them well, that all parts be equally well saturated. Then make a dye of 1 oz. of prussiate of potash and two tablespoonfuls of oil of vitrol. (The oil of vitrol should be put into a quart of cold water and turned very gradually into the dye. Care should also be taken not to get it on the hands or clothing, as it is a powerful caustic.) Boil the goods a half hour, then rinse in clear, cold water, and dry.

Yellow.—For five pounds of goods; Dissolve  $1\frac{1}{2}$  lbs. sugar of lead in hot water. In another vessel prepare a solution of  $\frac{3}{4}$  lb. bichromate of potash in water (cold will dissolve it), and dip the goods alternately in the solutions till the required color is obtained. Rinse in clear, cold water. Use water sufficient to cover the goods.

GREEN.—If green is desired, color the goods first blue and then dip in the yellow dyes till the required shade is obtained, being careful to rinse thoroughly in clean water.

Brown.—For ten pounds of goods; Dissolve 2 lbs. of catechu in sufficient water, and add to it 4 oz. of blue vitrol. Let the goods simmer in this solution an hour or two. Then dip in a solution of 6 oz. of bichromate of potash dissolved in water. Rinse in cold water.

Drab.—For three pounds of goods; A very pretty drab may be obtained by boiling the goods in a dye made of an ounce of nutgall and an ounce of copperas.

## NEWS AND MISCELLANY.

- -Envelopes were invented in 1820.
- -Printing was invented 400 years ago.
- -Alfred the Great lived one thousand years ago.
- —Kansas is as large as England and Scotland together.
- -The British museum contains 25 miles of bookshelves.
- —There are now 10,882 oil-producing wells in Penusylvania.
- -Mr. Spurgeon recently preached his fifteen hundredth sermon.
- —A movement to erect a monument to Adam is on foot at Elmira, N. Y.
- —Over 60,000 acres in the State of California are covered with vineyards.
- —Over 20,000 silver mines have been located in Arizona up to the present time.
- —The deepest spot in the Hudson River is opposite West Point, where the water is 216 feet deep.
- -An entire Baptist church of three hundred persons is among the colored refugees to Kansas.
- —There are 7,551 miles of railroad now in operation in India, of which 806 have double track.
- —The Choctaw nation, which numbers about 17,-000 people, has forty schools and two academies.
- —The legislature of Texas has nearly stopped horse-racing, in that State, by fixing a tax upon it.
- —On November 12, 1879, the business in the New York Stock Exchange was the largest ever reached.
- —A large number of Mormons have been indicted for polygamy by the U. S. grand jury at Salt Lake City.
- —An Arab has discovered a marble statue fifteen feet high which is supposed to be one of the gods of the Philistines.
- —There was recently shipped from this country to England a cargo of 45,000 house-doors and as many window-sashes.
- —The organ, now under construction, for the cathedral at Garden City, Long Island, is to be the largest in the world.
- —There are one and one-half millions of money orders and drafts of money value received annually at the dead letter office.
- —The war in Afghanistan still continues. The The English troops are uniformly victorious, but the natives will not disperse.
- —The royal family of Austria observed September 30, 1879, as the six hundredth anniversary of the foundation of their house.
- —An International Exposition of flouring-mill machinery and products is to be held at Cincinnati, commencing may 31, 1880.
- —The laying of the sixth telegraphic cable connecting the United States with Europe was completed Nov. 17, 1879. It extends from Brest, France, to St. Pierre, New Foundland, thence to North Eastham, Cape Cod, Mass., where connection is made with the American Union Telegraph lines.

- —The new Queen of Spain is to receive as a present from an eccentric inhabitant of Madrid, a pair of stockings made of onion peel.
- —Over eighty per cent of the provisions exported form the U. S. during 1879, was produced in the western and northwestern States.
- —Queen Victoria has outlived every judge and bishop in England, Scotland, and Ireland, who was in office when she ascended the throne.
- —The celebrated railway tunnel of La Cima, in Peru, which is being bored through the peak of the mountain, is located 600 feet above the line of perpetual snow.
- —At the opening of the present century the inhabitants of the cities numbered only one twenty-fifth of the population of the United States; now they comprise one-fifth.
- —Reports from Paris show that the Bonapartists are coming into favor again with that fickle people. We shall expect to hear of the restoration of the empire at no distant day.
- —There were 219 disasters on portions of the ocean and inland lakes guarded by the life-saving service, in 1879. Of the 2,107 lives endangered by these shipwrecks, 2,049 were saved.
- —The Ghetto, that part of the city of Rome where the Jews were so long subjected to such cruel treatment, is to be demolished, and upon its ruins is to rise the new Palace of Justice.
- —Thanksgiving day for 1879 was more generally observed abroad than ever before. Services were held in English, French, and German cities, by the American residents and their friends.
- —The highest inhabited house in this country is a miner's house on Mt. Lincoln, Colorado, which is on an elevation of 14,157 feet. A railway village, in Peru, called Galera, is 15,645 feet high.
- —The Director of the U. S. Mint estimates the total production of precious metals in the country for the fiscal year 1879, at \$79,712,000, of which \$38,900,000 was gold, and \$40,812,000 silver.
- —During the present year the drouth has been so severe in some parts of the West that watertrains have been run daily both East and West from the Mississippi River to a distance of seventy-five miles.
- —The total product from gold and silver mines in this country since mining began in California, is estimated at \$1,617,000,000. The value of staple agricultural products harvested in 1879 alone is \$100,000,000 greater.
- —A ship recently left New York with a carge of negro emigrants for the Republic of Liberia. In that country the negro is dominant, and the old order of things in this country is reversed, the white man not being allowed civil rights.
- —The Peru-Chilian War still continues. In a recent engagement the usual order was reversed, the Peruvians obtaining a victory over the insurgents, in which 2,500 Chilians were routed, 1,000 killed, and several heavy guns captured.
- —At the present time the United States are manufacturing more than one-third of all the paper made in the world. The product is about 1,830 tons daily, or 640,500 tons annually. There are now 927 paper mills, employing in all 22,000 persons.

# WITERARY NOTICES.

AMERICAN HEALTH PRIMERS. No. V. THE THROAT AND THE VOICE. Philadelphia; Lindsay and Blakiston.

This is a valuable little work upon the subjects treated, written by J. Solis Cohen, M. D., lecturer on diseases of the throat in Jefferson Medical College. The first division treats of the general anatomy of the throat, and offers many hints concerning its care in health, and its treatment in disease. The second part is devoted to the care, exercise, and culture of the voice. The work is worthy the consideration of every one.

AMERICAN HEALTH PRIMERS. No. VI. THE WIN-TER AND ITS DANGERS. Philadelphia: Lindsay and Blakiston.

This is another of the same series as the foregoing, written by Hamilton Osgood, M. D., of Boston, the object of which is to direct attention to some of the dangers to which people are most liable at this season, and to present such knowledge and advice as will enable them to be avoided. It is an excellent little book especially apropos just now, and we have no doubt the perusal of its pages would be the means of preventing much sickness and saving many valuable lives.

SUNDAY-SCHOOL LESSON-LEAF FOR DECEMBER.

A large number of Sunday-schools all over the country have devoted the last Sunday in each quarter to the study of temperance lessons specially prepared for the day. The National Temperance Society have published several, and have for the last Sunday in this quarter—the Quarterly Review, December 28—a new lesson-leaf, prepared by Miss Julia Colman, entitled "Temperance a Part of Christianity," founded on the second chapter of Titus, with Golden Text, "Abstain from fleshly lusts, which war against the soul." It is on the plan of the regular International Series, giving questions, illustrations, etc. Price 50 cents per hundred. Send for samples. Address, Julia Colman, 298, 8th St., Brooklyn, N. Y.

OPHTHALMOLOGY IN THE LAST QUARTER CENTURY, By Prof. H. D. Noyes, M. D., New York.

This pamphlet consists of an address delivered by Prof. Noyes before the Medical Society of the State of New York. It is a most admirable epitome of the advancements which have been made in the science of ophthalmology during the last twenty-five years. Prof. Noyes stands in the foremost rank of modern ophthalmic surgeons; and his wide experience as surgeon to the New York Eye and Ear Infirmary, and in an extensive private practice, makes him an authority on all subjects pertaining to his specialty. We are glad to note that the author recognizes, though incidentally in this treatise, the fact that tobacco and liquor are common causes of diseases of the eye.

HISTORY OF THE DISCOVERY OF ANÆSTHESIA. Py J. Marion Sims, M. D., L. L. D., New York, 1879.

Probably there has been no great discovery in medical science concerning which there has been such an amount of bitter controversy by claimants for honors as in regard to anæsthesia. While it has been generally acknowledged that to Sir Humphrey Davy, the great English physicist of the last century, is due the honor of first suggesting the use of nitrous oxide gas to produce insensibility during the performance of surgical operation, there have for many years been three different individuals, all Americans, who have claimed the honor of being the first to make a practical use of a chemical compound for this purpose. The names of Wells, Morton, and Jackson, are all familiar in connection with this controversy. Dr. Sims has now brought forward another claimant, Dr. Long, of Athens, Georgia, who employed ether as an aniesthetic in 1842. Dr. Wilhite, a student with Dr. Long at the time, claims to have produced profound anæsthesia in a negro at an ether frolic in 1839, five years previous to the use of nitrous oxide gas by Wells, and seven years before the use of ether for anæsthesia surgery by Morton. At that time it was common for the young people to meet together and inhale ether for its exhilarating effects, such gatherings being termed ether frolics. casion a negro was compelled to inhale the ether until complete insensibility was produced. was, undoubtedly, the first case of profound ansesthesia. If Dr. Sims has been correctly informed respecting the facts which he presents, this vexed question is now settled.

An Address from the Auxiliary Sanitary Association of New Orleans.

During the last season one of the most successful agencies at work in the control of the terrible yellow fever epidemic which last year nearly depopulated the city of New Orleans and other Southern cities, has been the Auxiliary Sanitary Association of New Orleans. The plan of organization, as explained in the pamphlet before us, is in many respects similar to that of the Newport Association. Since its organization similar associations have been formed in a number of other cities, and we hope the good example set by the sanitarians of New Orleans, and the splendid results which have followed their noble efforts during the past season, will lead to the extension of this kind of sanitary organization until every city and town of any importance in the country shall possess a sanitary association of some sort.

If the figures presented in the address can be relied upon, and we believe that they can be, attention to sanitary laws will make an actual money saving to every man, woman, and child, in the country, of not less than five dollars a year. For the 40,000,000 persons in the United States this would amount to not less than \$200,000,000 actually saved every year. This allows for a necessary death rate of 20 per 1000; but it has been clearly shown that good sanitation will reduce the rate of death to one-half that amount, in which case the saving would be \$600,000,000 annually.

## Publishers' Page.

GOOD HEALTH for the next three months. A good commission given in premiums or cash. Here is work for everybody. See inducements offered in the advertising pages.

Quite a number of the students of Battle Creek College will spend their vacation canvassing for Good Health. We would like to employ five hundred intelligent young men and women in the same work.

offered to subscribers to Good Health for clubbing with other journals. Old as well as new subscribers may avail themselves of this offer, and by so doing supply themselves with valuable reading matter at much less than regular subscription rates.

We take pleasure in calling the special attention of our readers to the excellent articles in this number from the pens of Elder and Mrs. White, with whose writings most of our readers are familiar. We are also glad to be able to promise an article from each for every number of the present volume.

Every person who is a full member of the American Health and Temperance Association is entitled to receive an extra department of eight pages which is devoted to the special interests of the Association. This department is added to the numbers of the journal sent to mem'ers of the Association, so far as their names and addresses have been received at this Office. Those who are entitled to receive it, but have not, should send in their names at once. To all such the extra pages will be sent with the February number.

We are glad to see that our old subscribers manifest an evident intention to stay by us during 1880 by promptly sending in their subscriptions. Scores of names are being received daily. We apprehend that a large edition of the calendar will be called for. Those who had the calendar for 1879 were well satisfied, but those we have in preparation for 1880 are very much superior, being of an entirely new design, and beautifully finished. Every body wants one, and every subscriber can have one for nothing by simply sending in his subscription to GOOD HEALTH for 1880 before Jan. 15.

A new departure in sanitary work will be attempted by the Mich. State Board of Health, in the shape of a Sanitary Convention and Exposition, at Detroit the 8th of January. The committee of arrangements have prepared an interesting programme, and there is every prospect of a brilliant success. Not the least interesting feature of the convention will be made in connection with the convention. All manufacturers of sanitary appliances of all sorts are granted space for exhibition free of charge. All letters of inquiry should be addressed to C. H. Leonard, M. D., Sec., 50 Lafayette Ave., W. Detroit, Mich.

A New Year's Present.—A neat thing for a New Year's present to a business friend or to any one who can appreciate a useful work of art, is the Good Health Calendar for 1880. Sent, post-paid for 10 cents.

Time Extended.—In order to give time for those of our subscribers who are at a great distance from the Office of publication to avail themselves of the offer of a beautiful illuminated calendar for 1880, the publishers have decided to extend the time to Jan. 15. Here is another chance for those who have forgotten to renew before.

Good Health on Trial. - Good Health is not on trial for its character, as there is no more firmly established journal in the land; but in order to give all the friends of hygienic reform a chance to enlighten their friends, and to bring the journal before many thousands of persons who have never seen it, the publishers have decided to offer the journal on trial for four months for the small sum of twenty cents. Who has not a dollar or two to spend in this way? If each of our readers would send a single copy of the journal to a friend, or to some one who ought to see it and might be induced to subscribe, we should have not less than 20,000 new readers. Let all those who are interested in reform and in the dissemination of the health-and-life saving truths of hygiene, take a lively interest in this enterprise, and we shall have a grand success. Send in names, friends, and get your neighbors to do so.

Good Health for 1880.—This is the initial number of the fifteenth annual volume of this journal. Making a small beginning, the journal has continually increased in value and influence, until it is generally recognized as the leading popular health journal of the land. During the last five years of its existence, its circulation has been about equal to that of all other similar journals in this country. While other journals, almost without exception, were by the hard times compelled either to suspend publication altogether, or to cut down their size and otherwise economize, this journal has been continually making new improvements, and increasing in influence. We enter upon the year 1880 with better prospects than ever before. We have more friends, a larger sphere of usefulness, and hence a better opportunity for doing good.

During this year, we hope to make the journal excel all previous volumes, and to this end shall spare no pains. We shall make a special endeavor during the year to fill its pages with matter of practical interest to every man, woman, and child. We hope we shall have the hearty co-operation of the numerous friends of reform in putting it into the hands of the thousands who need instruction on the subjects

to which our journal is devoted.

400 Pages for 20 Cents.—By the liberal offer made to send Good Health four months for twenty cents, a person may obtain an amount of the best reading matter equal to nearly 400 pages of ordinary reading matter. This is at the rate of 20 pages for a cent, sent, post-paid. At least 5,000 persons ought to improve this splendid opportunity to circulate among their friends a kind of literature which will not fail to elevate and improve mentally, morally, and physically, every person who reads with attention and appreciation.