

The Health Reformer.

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

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The Causes of Physical Degeneracy.

WHETHER the human race is degenerating, and, if so, by what causes, are questions of much speculative interest to scientific thinkers, and of much practical interest to each father and mother in the community. The subject is complicated by many conditions. Physical health and vigor, and mental strength and power, are to a great degree a matter of hereditary transmission, over which the individual has no control. Yet, taking our natures as they are, we can renovate, reinvigorate, and advance them by attentive study of and conformity to the laws upon which health and vigor are based. I propose in the present article briefly to glance at the chief physical agencies—air, exercise, clothing, food, and rest—and at some of the mental and moral influences, by the bad or good employment of which the physical stock is deteriorated or improved.

Air.—Probably the inhabitants of the globe generally were never so thoroughly sheltered as at present. The house keeps off rain, dew, and the moistures from evaporation—certainly very desirable—but it also to a greater or less degree modifies the temperature and the quality of the air that we breathe.

Theoretically, air is admitted to be an agent conducive to life; practically, it is almost utterly disregarded. The necessity of breathing is recognized, and we have various formulated sayings implying that to stop breathing is to stop living. But, practically, the world is trying to see how little air can be actually used—and, with some, this is almost their only economy—and next, to see how poor a quality of air can sustain their life.

One-half of the civilized race—*i. e.*, all the women, and some men—so dress themselves that by no possibility can they take a full breath. As the lungs are never fully inflated,

their capability of expansion is gradually lessened. The result is, a contraction and diminution in the size of the chest, a want of roundness and fullness, and both men and women are “flat-chested,” round-shouldered, and “sunken-in.” The eye will recognize this, and measurement will add certainty to judgment.

Take the men of New York to-day, and not one in five hundred can make a difference in the dimensions of the chest, from a full inspiration to a complete expiration, of five inches, measured at the nipple. Nor will the majority show an expansive capacity of even three inches. With the women it is still less; probably never since extreme childhood—for romping days end early now—have they been capable of taking a full breath in the daytime, the nearest approach to it being effected, not by the expansion of the chest, but by the action of the abdominal muscles and the downward withdrawal of the diaphragm.

Nor is this stated as a matter of simple curiosity; it has a practical and most important bearing on the subject under consideration. Supposing that the blood is sufficiently aerated without the use of the full capacity of the lungs, say by an increased number or respirations—are not the necessities of nature thus adequately supplied, and consequently no injury done?

By no means, as every housewife's experience will abundantly illustrate. In the quiet and secluded angles and nooks, gather the lint and dust of the whole apartment. In the corners and recesses of a hospital-ward, gather the miasm and the pestilence. In the unused portions of machinery do we find the rust and tarnish, and the mildew blasts the quiet and the still parts of all nature. In the same way, in those portions of the lungs, every minute extremity and division of which is a reticulated net-work of fibers, and vessels, and tubes, through which, at every expiration and subsequent inspiration, there should be an unceasing ebb and flow, with new elements constantly adding, and effete material perpetually renovating, yet, by reason of mechanical impossibility, there gather the results of this stagnation, the crassness of the blood, and those discordant elements

which, had they not been allowed to accumulate in these undusted retreats, would have continued in the circuit of the blood, till they had arrived, in due course, at some of the great glandular strainers and purifying alembics of the system, where they would have been duly eliminated and discharged. These localities are the nuclei of disease, and here are deposited the tubercle and the germs of death.

This is the result of disuse—the farmer's neglected spot, the receptacle of odds and ends, never ploughed nor cared for, where weeds run riot, and whence every light-winged breeze wafts the myriad progeny of evil all over the adjoining fields.

How aggravated is this condition when the air, too, is deteriorated, full of miasm and pestilence! See the air of the swampy, undrained country, laden with agues and typhus, or the city atmosphere, shut in from sun and breeze, respired over and over again by the healthy and the sickly, by animals of every description, full of the dust of every production of the world, with the fumes of every volatile liquid and deleterious gas!

When we contrast this single vital element as it enters into the life of the modern man, compared with its free use by the men of the past, who are reported to have lived to a great age in health and comparative vigor, does there not seem to be almost reason enough for it in this fact alone?

The Greeks, like all Eastern nations, lived in the open air. The patriarchs of the Bible lived in tents. Even those of later date, who lived in the small cities of former days, occupied no tightly-glazed, windowed apartments, but slept a great part of the time on the unbedewed roofs of their houses, covered only by the radiance of the gentle moon and the twinkling stars.

In those days the heat came from the vigor of the system, and exercise at some useful employment, while wide-mouthed, gaping chimneys, consuming huge logs of timber, carried away, on their upward draught (with most of the heat indeed), the air wasted by respiration.

Nor was pure air a royal prerogative; for, down to quite recent times, these immense chimneys were the gates to health to our own ancestors, and we ourselves learned somewhat of our early astronomy by gazing at the stars through these huge telescopes, thickly hung around with the fitches of bacon and fat hams quietly absorbing the pyroligneous acids from the consuming logs of oak and walnut burning below.

Contrast those long winter nights in rooms through whose open cracks the wintry blast

not unfrequently blew out the candle by whose dim light we groped our shivering way to bed; contrast them with the air we breathe, heated by the unceasing furnace, poisoned by ever-present tobacco-smoke, and at the best loaded with the impurities of a city, and passing on its course from house to house, constantly becoming more and more impure.

Exercise.—The Greeks made exercise a part of education, and the athlete, if not also a philosopher and poet, or a tragedian and orator, was at least esteemed as highly by the community. Exercise was a part of every one's life, a business, a pleasure, and a necessity.

Till quite recent days, there were no lazy people, no gentlemen, none inactive. War and its martial exercises, labor and its attendant fatigues of the body, the chase and its toils, housewifery, the fabrication by hand of all the necessities of life—these healthy exercises have been done away with by excessive wealth, the fashion of indolence, and steam appliances. Work being now denounced by fashion, and delegated to servants, the women of the country have no severer toil than playing the piano and dancing, with an occasional saunter in the street on a very fine day. Consequently, the languid blood flows through unstimulated veins, resembling the stagnant, slime-covered waters of an undisturbed canal.

The city man, if very vigorous, priding himself upon his powers, walks down to his business from 8 to 10 A. M., and occasionally back again, in a gentlemanly manner, which means not fast enough to be ungraceful, or to moisten his shirt-collar. During the interval between these periods, he sits or stands at a desk or behind a counter. If there is a box to be opened, a bale of goods to be sent aloft, or put into a cart, he calls the porter. Possibly he takes a half-hour turn with some Indian clubs or dumb-bells, in the house, and, of course, where fresh air is tabooed. If he has means, he gets a trotter in a motionless buggy, and over a level road he walks six miles, and then trots fast two miles in great excitement, using his arms and possibly his lungs with some vigor. This is the exercise of the modern athlete, philosopher, and business man.

Clothing.—It undoubtedly originated from the exigencies of climate; it was a shelter from the burning sun and a protection from cold and wet. By degrees, this original design became forgotten, and fashion, driving out both original necessity and created modesty, usurped the control of dress, and, like most conquerors, has endeavored to eradicate

every possible trace of its original design. Health, and comfort, and life are disregarded as much as possible. The young child is so dressed as to expose its dimpled arms and its sweet amplitude of neck, and sent to walk, no matter how chill and blustering the weather, with its plump legs unstockinged and bare.

Food.—If we look at the entire population of the inhabitable globe, in the different centuries, we can, with each succeeding age, note an alimentary improvement. We see now few famines bearing wide-spread destruction in their path. The intercourse of nations, the sympathy of a recognized common humanity, the spirit of trade and commerce, the rapid communication by telegraph, and the power of applied steam, have united to prevent the possibility of a great national famine in the future. The world now feeds the world, and a dearth in one locality is supplied by the affluence of another.

The continual opening of new territories of immense extent, and seemingly inexhaustible richness, and most of all the frequent discovery of new grains, roots, and fruits, and the development and improvement of the old, seem to insure the world for the future against local destitution and suffering of this nature. More than any one thing else, the discovery of the potato has effected this end; while the introduction of Indian corn and the utilization of the animal life that roam over the immense prairies of America, in both a wild and domesticated state, add a large quota to the alimentation of the world, and have raised the physical stamina of humanity.

But while it is acknowledged that the race down to its lowest strata of humanity is improved and improving, the same statement is not true respecting the higher classes. While the average stamina is greater, theirs is unquestionably deteriorated.

We have already shown the injurious results which wealth brings, in depriving the rich of exercise, by taking away its main-spring, in substituting fashion for necessity; it exerts a far more deleterious influence when it ministers to the appetites.

There is a wealth of wisdom in the remark of Abernethy to the rich dyspeptic, the extent of which he probably never dreamed of himself when he uttered it: "Live on a shilling a day, and *earn it*."

This sentence, translated into the language of the present, in New York, would be to each individual, "Earn a dollar a day and feed yourself with that alone." This would approximate to living healthily—as did our forefathers—though it is impossible for a

man of ordinary means to feed himself healthily in New York, because bread is a prime necessity. The greater part of the flour which comes to the market is but little different from pure starch, so thoroughly is it bolted by the miller, so thorough-bred (no play on the words) is the grain itself. The wheat itself has suffered in its nutritious qualities by the extreme care taken in its cultivation. The canary-bird fancier, in his zeal to raise high-colored birds by interbreeding, obtains his buttercup-yellow, but at the cost of a very scanty plumage. The stock-raiser gets his thorough-bred horse with his thin neck, small head, diminutive ears, greyhound legs, and peculiar barrel, but with them a high nervous organization and uncertain temper, that make the animal impracticable for the ordinary pursuits of life. The same state of things is seen in the wheat of the country, which, having first nearly exhausted the unfertilized soil, finishes by being itself exhausted of the nutritious phosphates and nitrogenous elements so necessary for the bone and nervous tissues of the human frame. This is very important, especially for the young, a great portion of whose alimentation comes from bread. Add to this deprivation of essential elements, the substitution of starchy substances capable of but imperfect assimilation by any stomach, especially that of a young child, and we have an important source of animal imperfection and debility.

We find like cause of degeneration if we look at another leading source of the life of children—*milk*. Dr. Nathan Allen, in his recent elaborate article ("Physical Degeneration," *Journal of Psychological Medicine*, October, 1870), says that American women are to a great extent incapable of nursing their children, and that they necessarily resort to the bottle and cows' milk. How bad is this substitute, very few have even surmised. We know there is no exaggeration of the ill results from the use of the so-called swill-milk, which, in greater or less quantities, furnishes the chief supply of all our large cities and towns. The present writer made the initial observations on swill-milk, in New York, and his report to the Academy of Medicine was the basis of the subsequent general interest in the subject. This milk is deleterious, because new principles are introduced into the milk, and the normal ones distorted and rendered almost nugatory.

But, setting this matter aside, let us look at the healthy milk of the whole country, and perhaps of the world. What is it?

When a woman, in the vigor of health, while nursing her own child at the breast,

becomes again pregnant, her first knowledge of and attention to this fact frequently arise from the effect of her milk upon her nursing babe. Sometimes the child grows meager, pallid, is evidently not thriving; occasionally has spasms from apparent indigestion; at others, it is often nauseated, and ejects the curdled milk, with or without accompanying diarrhoea. The child is withdrawn from the breast, proper food is substituted, and a manifest improvement commences immediately.

There is a similar cause for a depraved condition in all the milk of the country. No sooner is the calf taken from the dam—say, when six weeks old—than she is again impregnated. In the ordinary course of nature, her milk would “dry up” on the occurrence of this event; but she is regularly milked twice a day, and thus it happens that all the milk upon which our children are raised has been first deprived of its essential ingredients to nourish the next year’s calf.

If any one questions the effect of this double attempt at nutrition, let him compare the milk in ordinary use with that of a “far-row” cow. The latter is small in quantity, thick, redundant in cream, dark in color, of a very high flavor, so as to render it quite unpalatable. This is the milk destined to strengthen the bones and invigorate the energies of the young offspring. It is such milk as this, undrained of its essential elements, that the child demands from its mother. It asks for bread, and you give it starch. It asks for milk, and you give it—what?

In the lack of the natural maternal nutriment, as alleged by Nathan Allen and other eminent writers on this and kindred topics, does not the general use of this deteriorated cows’ milk for so many years, as a substitute or as a supplement to supply this general deficiency, point to one among the many causes of physical deterioration?

If any evidence is wanted to show the imperfect nutrition of the better classes, it may be found in the frequency of dyspepsia, scrofulous diseases, and deaths from diseases of exhaustion and debility, as contrasted with the general vigor, capacity for prolonged exertion, digestion of immense dinners, excessive drinking, and general deaths from inflammations, plethora, apoplexies, congestions, gout, and the like, which were the main causes of the death of our forefathers.

If it is also noticeable that the mean of life is now shorter than formerly—as we think it is—then it is deducible that, among other causes, imperfect nutrition holds a prominent place.

Now, when we compare the diet of the

past with the present, we find to-day evidences of a delicate and finical appetite, and an enfeebled digestion. The name of the “roast-beef of old England” lives almost but in name; for the degenerate Britons and allies seek for the kickshaws, spiced *entremets*, and flavorous nothings, of still more degenerate nationalities. The vigorous appetites are wanting, and, possibly, the debile gastric juice, arising from a lack of physical exertion and an excess of mental stimulus, may be the active cause of the general physical deterioration so markedly present throughout the civilized world.

Rest.—Perhaps it may be true that all nature requires rest. This is remarkably evident in most, if not all, forms of vegetable and animal life. Plants have their alternate periods of growth and apparent rest. Animals have their periods of activity and repose. The muscle cannot keep up its continued contraction; and the body, wearied by persistent toil or action, however light or pleasing, sooner or later demands rest, and the entire muscular system gives itself up to repose, with the exception of the continuous breathing and the persistent beating of the heart. So far as we can judge, the action of the brain must also have its period of quiescence, with complete abnegation of its wondrous voluntary and involuntary activities.

The laboring-man, fatigued by the wearisome hod, takes his nooning in any sequestered spot; but his inactive brain requires not sleep to refresh it, for no task has been imposed upon it, and he needs but to rest his limbs in the pleasant shade. A too prolonged exertion is followed by muscular irregularities, cramps, exhaustion, and rheumatic incapacities, effects disagreeable enough, but generally of temporary duration, and with little or no permanent effect on the general constitution or on succeeding generations.—A. K. Gardner, M. D.

Foreign Incrustations on the Teeth—Tartar.

D. C. HAWKHURST.

THOUGH the face be beautiful beyond the telling, all may be spoiled by a bad set of teeth. We turn in disgust from the sweetest face, if the lips unveil a dental arch broken by decay, discolored, incrustated with tartar, or emitting foul odors. We can endure large teeth, small teeth, prominent teeth, or irregular teeth, if only they are bright and clean and sweet. Among all the causes that render teeth offensive, there is none that is more potent than the incrustations known as stone

tartar. I purpose, therefore, in this essay to answer some of the most common inquiries concerning this prevalent enemy to a sweet and healthy mouth.

Is not tartar on the necks of the teeth perfectly harmless? No; through it much injury may come to the mouth and to the general system. Tartarous accumulations on the teeth lead a whole train of evils which insidiously destroy the tissues of the mouth and loosen the teeth.

Tartar does not cause as severe pain as the toothache, or as much soreness as a dental abscess; perhaps it does not taint the breath with so rank a disgust as that which arises from a decaying cavity; and yet the annoyance from its several kinds of irritation is greater than that from either of the above-mentioned causes taken separately.

Does tartar decay the teeth? No. Almost daily observation for years has convinced me that tartar does not directly injure the teeth. Those parts on which the deposit takes place are not affected unfavorably by it. Tartar is an inert substance and could have no chemical influence to decompose a body so dense as the enamel or dentine, or indeed any substance whatever. All writers on the subject say that tartar cannot injure the substance of the tooth.

If tartar does not injure the teeth, what harm does it do? It destroys the soft and hard parts that hold the teeth in place. If there is a coating of tartar on the necks of the teeth, the gums gradually become red at their edges, puffed up with stagnant blood, and swollen from inflammation. This inflammation results in their destruction. They recede, and the teeth gradually lose their connection with the parts that nourish and support them.

Between the first deposit of tartar and the final accomplishment of this result, many years may elapse. But if nothing be done to check the progress of morbid action, great harm must surely come to the sockets of the teeth and to the gums. And the end of this will be the loss of the teeth without their destruction.

Depositing on the neck of the tooth and using this as its basis of support, the tartarous incrustation creeps by slow degrees under the gums, and insidiously works its way toward the deeper portions of the root, until, in extreme cases, the sound tooth becomes loose and may even be lifted from its socket by the fingers. The tartar has cut it loose from the jaw.

How long will tartar remain on the teeth before it loosens them? Sometimes but a few years! Sometimes half a lifetime! It is

common for people to have this incrustation removed in flakes and scales, at intervals of one or two years. This retards progress toward the final result. Daily cleansing, so thoroughly performed that no tartar can accumulate, would be better. Thus the slight film of tartar which is every day deposited would be carried off by the brush before it had assumed its flinty condition.

Is it possible to prevent the deposit of tartar? No. This substance may, however, be entirely removed by cleansing agents before it has become hardened by age. All tartar is soft and cheesy when it is first deposited. At this time, it should disappear beneath the searching friction of tooth-brush and powder. Many people brush their teeth regularly and thoroughly, and yet, as months and years pass on, new accumulations of tartar appear. In all such cases it will be found that the exact point of deposit has been defended in some way from the action of the brush. Perhaps the gum was prominent and the brush only pressed the soft deposit under it a little, without removing it and polishing the surface of the enamel as it should do. Through much careful scrutiny of the teeth and patient labor with brush and powder and polishing materials, silk, and whatever else is required, the teeth may be kept free from tartar.

Do general or constitutional conditions of the system modify the production of tartar? Yes. In certain kinds of dyspepsia, tartar is formed very rapidly on the necks of the teeth. Other morbid states, favorable to the formation of tartar, might be mentioned.

In general, the most perfect health and the most correct habits of life will furnish such safeguards against it as are possible. Among other precautions, the use of soft water is recommended. It is said that cutting off the supply of crude mineral salts lessens the amount of their accumulation on the teeth. The formation of flakes of mineral matter on a tea-kettle bottom and the accumulation of tartar on the teeth have much in them that is analagous. In both cases the first deposit is soft and may be brushed or washed away. If sufficient attention were given, the dentist would seldom be called upon for the removal of tartar.

Very well do I know how rash, how unbelievable, such a statement may seem to one who has made lavish expenditure of time and effort without success—to one who finds the tartar coming in spite of brushes, silk, and the toothpick. In such cases, it will be found that the precise point at which tartar makes its appearance has not been polished clean every day.

And now let me urge you not to be afraid of powder. Thorough friction with powder and brush cannot injure or wear the teeth as much in half a century as uncleanness may in one year. Try now and forever to have a clean mouth and a sweet breath.

Thoughts Concerning Wine.

BY ELD. J. N. ANDREWS.

I HAVE never valued the HEALTH REFORMER at any time as since coming to this country. It is certainly filled with excellent matter, as it has been wont ever to be, but I am impressed with the importance of its teaching, here as never elsewhere. My hands are more than full of other duties that imperatively demand immediate attention, and this has seemed to make it impossible to write for the HEALTH REFORMER; but I think some of these things must be put off a little. I hope the friends of this noble reform in America will not become indifferent to it. There is everything in America to make it possible, and even convenient, to observe the principles of this reform. In this country this is far from being the case. I cannot better illustrate the state of feeling upon this subject than by the words of a heathen to a missionary. The missionary had spoken at length concerning the character of the true God, and urged his hearers to accept him in the place of the false gods which they worshiped. When he paused, one of them replied in substance, thus: "Very likely your God is the best one for your country; but our gods are the best for us." So people feel in this country with respect to health reform.

My food is bread, fruit, and vegetables, and very little else. Were it possible to have graham bread, I should be thankful, but in a long time I have seen none of it. The universal bread of this country is baker's bread, which I think has at least the merit of being free from saleratus, as it is almost always a little sour. I still highly approve and strictly follow the two-meal system, though custom here more than doubles this number. I hope in time to see some changes in the matter of food, ventilation, &c.; but I confess that the strong regard of the people for their wine, and the free use which they make of it, gives me very great pain, and I can hardly wait to see a change.

When I see how many times a day people here take food, I can believe that the condition of their stomachs may make them think that, like Timothy, they need "a little wine." But when they are invited to relieve their

stomachs by omitting one or two of these daily meals, they think this quite impossible. They can barely get along now with all these meals, and with the free use of wine, and what would they do with a less number and no wine? To them a change seems impossible, and they cannot entertain the thought of it. I fear, however, that the strong appetite for wine has more to do with the case than they have ever thought it to have. But if it has become a necessity for these middle-aged and old people, it certainly is not such for their children. And yet it is freely given to those that are but a few months old. And all this when the parents see many drunkards in the streets who were trained up to their degradation by those who gave them the cup in their early childhood. When I have seen a boy so drunk that he could only cross and recross the street in his vain effort to advance, sometimes gaining three or four feet in a tack, and sometimes losing as much, and barely able to keep his feet, it has seemed to me that if the most earnest appeals would not cause parents to take alarm, at least for their children, so sad a spectacle surely would move them. But I do not find that these sights cause any special anxiety.

I did not come to Europe with any prejudice against what is called pure wine. I had so often read of its beneficial effects, and of the freedom from drunkenness which exists in those countries where pure wine is freely drunk, that I thought perhaps the moderate use of it might not be evil. As it was kindly offered me, I drank a little nearly every day for a week or more. In the meantime I was surprised to find many drunkards, especially parties of drunken young men in the streets. When I heard their drunken songs late at night, I asked what that meant, and was told that they were only some drunken men. But what have they been drinking? Oh, they have taken too much wine. But will this pure wine make men drunk in that manner? Yes, if you take too much. Very well, then a little is too much for me.

I do not yet understand all that the Bible says upon the subject of wine. In America, I never found it necessary to thoroughly study the subject, and here it seems to be impossible to find the time. But whenever I can spare a few moments from other duties, I read and ponder the things recorded in the Scriptures concerning wine. Perhaps I will hereafter say something concerning my conclusions.

The only blot in Noah's history is that once he was intoxicated, or, in plain English, "he got drunk." The record shows him to have been a man of integrity, piety, and virtue, in

the most eminent sense, and certainly a man of very great force of character, and of remarkable talents. But this most excellent man played the fool once; and it was through wine that he erred. "Let him that thinketh he standeth take heed lest he fall." We cannot be the equals of Noah in piety, nor in natural talents. If the use of pure wine was dangerous even in the hands of such a man, is it a safe thing to be freely and carelessly handled by us? The use of wine by Noah is the first thing on record concerning it. But certainly the ninth chapter of Genesis should warn mankind respecting this dangerous mocker.

It is remarkable that Lot, who, like Noah, was spared when all others were destroyed, and who is spoken of in the New Testament as a "just man," fell into the same sin as Noah. To his shame it must be said that he too drank wine until he was intoxicated and in this state left to still greater evil. If Noah, the man who "was perfect in his generations," and Lot, "that just man," had not tasted the first draught of wine, their lives would have been preserved from a blot which has attached itself to their names even till this day. What was not safe for them, is certainly not safe for us.

There may be some kinds of wine that are harmless. Certainly that which Noah and Lot drank was not of that kind. Pharaoh's butler speaks of pressing the grapes into the cup and giving this to the king. Gen. 40:11. The use of such wine cannot injure men. But the wise man speaks of a different kind when he says: "Look not thou upon the wine when it is red, when it giveth his color in the cup, when it moveth itself aright. At the last, it biteth like a serpent, and stingeth like an adder." Prov. 23:31, 32. In the verses which next precede these, he says: "Who hath woe? who hath sorrow? who hath contentions? who hath babbling? who hath wounds without cause? who hath redness of eyes? They that tarry long at the wine; they that go to seek mixed wine." Verses 29, 30. Here Solomon speaks of wine that has power to intoxicate. His reference to the wretchedness of the drunkard is most expressive. Now what is his instruction to us? Does he say, "Here you see the evil of excess"? Does he caution us to drink with moderation, and to leave off before we have lost our reason? Does he say, "A little does a man good, and it is only the excess that injures"? He is as far from speaking thus as it was possible that he could be. It was not enough for him to forbid even the first taste of the wine; he knew that the danger began earlier than this, even with the sight of the

eyes. So he says, "Look not thou upon the wine when it is red," etc. This is emphasizing total abstinence in the strongest manner. The man who heeds this warning will never be bitten by the serpent in the cup. If it be asked whether these words can apply to wine from the grape, I answer, When fermentation has turned a portion of it to alcohol, then the serpent is in it. Noah found that to be the case to his cost, and so did Lot. We shall not find it if we heed Solomon's instruction.

*La Coudre, Neuchatel, Switzerland,
Sept. 1, 1875.*

Amateur Nursing.

PHYSICIANS of all schools are fully agreed respecting the paramount importance of suitable nursing in the treatment of the sick. The following very excellent hints on the subject are from the *Saturday Review*:—

Affection only, however warm, will not qualify a sick-nurse. The cool head and steady hand of a professional stranger is too often to be preferred. Many a life has been sacrificed by ignorance, or stupidity, or anxiety, when the nurse would gladly have died to save the patient. The event of a fever has before now been determined by the clapping of a door, or by an injudicious spoonful of unsuitable food. The indulgence of some whim which a fond mother cannot deny to her sick child may prove fatal. The longed-for change of posture may be accorded a day too soon. A moment's thorough draught, a cup of tea, a piece of news, a second pillow, may settle the struggle between life and death. How often the doctor leaves a house feeling that it is only in spite of the nursing that his patient will recover! He shudders to think of the messes which will be brought up as beef-tea. He is in despair when a poultice is prescribed, as he is almost certain it will be so applied as to do more harm than good. And, valuable as all kinds of baths are in illness, he dare not order them, knowing the insane way in which his orders will be carried out.

It is painful to see a patient nursed in the common manner. The tact required for a sick-room differs from all other kinds of experience. Amateur nurses seldom possess it. Now and then a lady is to the manor born, and without instruction or previous experience blossoms into a full-grown nurse at a moment's notice. The doctor who finds one ready in a house rejoices heartily. His own credit as well as the recovery of his patient is probably assured. Seldom, however, has

he this good fortune. His ordinary experience is very different. If he wishes the sick-room kept at a certain temperature, he cannot have it managed. The fire is alternately half extinct and blazing up the chimney. There is no care to have it warm at sunrise and sunset, and moderate when the sun is shining and the air warm. The invalid is awakened from a priceless sleep by hearing the cinders fall on the unprotected fender, or by the noise of a clumsy hand putting on coals, which might easily have been wrapped in pieces of damp paper and left ready for noiseless use. The morning meal is perhaps delayed until the patient has passed from appetite to faintness. Perhaps when it comes it is smoked.

Household troubles are freely discussed in the room. Mary has given warning because there is so much more going up and down stairs since missus was ill; the cook is so extravagant, and yesterday's dinner was spoilt; Johnny has cut his finger, and Lucy has tumbled down-stairs; such things are told as if they would amuse the invalid. But worse than this is the mysterious whispering at the door, and the secrets obviously kept to excite the nervous patient's suspicions. The irritating creak of a dry boot, the shuffling of a loose slipper, try a sick person's patience unreasonably; and the amateur nurse argues against such silly fancies, and thinks they are matters in which reasoning can be of any avail.

The untrained nurse never commences her arrangements for the night until the patient is just beginning to grow a little sleepy. She then arranges the pillows, moves the chairs, stirs the fire, and perhaps makes up her own bed. Such fusses at sleeping-time produce fever in a most unaccountable way, and the amateur is amazed and bewildered because the patient lies awake all night. Besides all this, and no matter how noisy and elaborate the preparations for the night's campaign, several things are forgotten down-stairs; no ice is to be had in the middle of the night, no hot bricks, no boiling water. Amateurs do not know that sick people should not be asked what they will have, but should be saved even the mental exertion of making a choice. However desirable it may be that they should arrange their affairs, business matters should not be discussed before them. Sometimes a man who has not made his will before his illness is anxious and uneasy till he has made it, and gets better when the matter is off his mind. But to arrange such things requires nicety and tact such as the amateur, who perhaps shares the sick man's anxiety, cannot show.

Children's Eyes.

ANY malady which deprives a growing child of its natural, playful exercises, and shuts it up in the poisonous atmosphere of an imperfectly lighted and ventilated, or overheated domicile, is eminently worthy of our earnest and thoughtful attention.

The more intractable forms of these diseases—phlyctenular, or so called strumous ophthalmia—occur in children who may have inherited feeble constitutions. In many instances, however, they occur in those who have been born without any special constitutional defect, but who have had their digestive and other blood-making organs injured by a promiscuous dietary, and too little out-of-door life. The practice, common in every walk of life, of giving the diet of the family table to a young child so soon as it can stretch out its hands to gratify its natural gluttonous propensities, is here seen to produce one of its many evil results. Such remarks may seem to some to be trite, but they will not cease to be pertinent so long as the evil at which they are aimed continues to be so wide-spread. If children when weaned were put first upon a milk, and then a milk and farinaceous diet, and not allowed to have the full, promiscuous dietary of adult life, we would see a vast improvement in public health and a lower death rate. We would, moreover, see less of those forms of self-indulgence which spring from the uncontrolled selfishness and gluttony that begin at the nursery table.

We are prepared to urge, then, in every case of phlyctenular or eruptive inflammation of the conjunctiva, that the diet and regimen be placed upon a hygienic basis. We should also prescribe woolen underclothing, with a change of the same for the night, that the winter temperature of the domicile need not be kept above 65°. We should improve the action of the skin by baths and daily friction. We should insist upon daily out-of-door life, and keep the child, when domiciled, in a well-lighted room, warmed, or at least ventilated, if possible, by an open fire in winter, and its eyes free from eyeshades, bandages, poultices, and sugar-of-lead washes. When I say well-lighted rooms, I do not mean those middle or inside rooms in which so many people spend so much time, or in which they incarcerate their children, but outside rooms that are penetrated and purified by direct sunlight. A child should never be allowed, sick or well, to play long or sleep in a room that is not above the ground level and daily pervaded by direct sunlight. People who value the lives of their children should select their homes with these things in view.—*Dr. C. R. Agnew.*

Excessive Death Rates among Children.*

BY STEPHEN SMITH, M. D.

ON an average of years, of all the persons who die annually in this city, about one-half are children under five years of age. To be more exact; in 1872, 32,647 deaths were recorded officially; of these 16,188 were under five years of age—the latter being 49.58 per cent, of the former. But the number of children under five years is not far from 120,000, in a population of 1,000,000, and yet the mortality in the former class is equal to that of the latter. In other words, the mortality in about one-tenth of the population is as great as it is in the other nine-tenths.

This is a very startling announcement, and ought to excite the universal inquiry, "Why this waste of child life? Is it inevitable, or is it preventable?" If the official statement were made of any kind of stock, as for example of sheep, that one-half of all which die, on an average, are under one year, what an interest would be created! Conventions of sheep graziers would be held, the causes of such mortality would be thoroughly investigated, and the proper remedies and preventive measures would be employed at whatever cost. But we learn that half the deaths in this city are of children, at the same relative age, with the most perfect indifference. We seem to regard those deaths as inevitable, and put forth no adequate effort to save the victims of our neglect and ignorance. Nay, more, we stand by their death-beds and congratulate them upon their escape from the evils of this world, and relieve our sorrow by uttering pious benedictions over their graves. There have been ages of the world when child life was not regarded as of special value, and when such indifference to the terrible mortality among children, which we witness now, was to be expected. But it must hereafter be considered as a marvelous feature of Christian civilization, that so little value is attached to the means of preserving the life and health of children.

Let us first notice the *age* at which these children die. It is under five years, and three-fourths are under one year. What does this fact signify? Why, that these children are still in the nursery; still under the immediate charge of the mother or nurse. The plain inference is *that the causes of this excessive mortality are in the home, and in the nursery.*

Notice next the *diseases* of which they die. In 1872, of the 16,000 children dying under five years of age, 8,000, or one-half, died of what are called zymotic or ferment diseases. Some writers call them *foul-air*, others *filth* diseases. Let us note one variety of these affections, as an illustration of the effects upon the health of children, of the conditions under which they live. In 1872, 5,172 persons died of diarrhœal diseases. Of this number 4,680 were children under five, and 3,542 were children under one year of age—that is, upwards of ten-elevenths of the deaths by diarrhœal diseases in that year were of children under five years of age. Consider the large proportion over, as compared with that under, five, and the fatality of this affection among children becomes apparent. It is *the* fatal disease of early childhood, in the summer, causing upwards of one-fourth of all the deaths under five. Now, what particular significance have these facts? Why this—diarrhœal diseases are but expressions of derangements of the digestive organs, which are generally induced by indigestible food. We are authorized then in concluding that about one-fourth of the children dying that year, under five years of age, came to their deaths through the effects of indigestible food.

Notice, next, *where* these children die. Official records show that about two-thirds of all the children dying under five years of age are inmates of the tenement houses. And what is a tenement house? It is a house in which three or more families live separately. The average tenement house of this city contains ten to twenty families. These families generally have two rooms, one in which they cook and eat, in the other they sleep and store their goods. Neither room has any adequate ventilation. In these two small rooms are gathered all the clothing, beds, food, &c., of five persons; here they sit, eat, sleep, and perform all acts of dressing, washing, &c. Is it strange that mixed families, living in such daily and nightly contact, and in such a stifling air, soon lose all sense of decency, if they ever had any, and degenerate to a condition of filthiness far below ordinary domestic animals? One hundred such persons living under one roof soon create an atmosphere throughout the house fatal to infantile life.

Notice, next, *when* the children die. Of the 16,000 deaths of children under five years of age, 10,000 died in the months of April, May, June, July, August, and September. That is, two-thirds die in the spring and summer months. But of this 10,000, 5,000, or one-half, died in the months of July and August. What do these facts teach us?

* Remarks made at a meeting of the Pastor's Ladies' Aid Society of Grace Chapel, New York, June 9, 1875.

Why, that heat develops conditions in the tenement houses exceedingly fatal to child life. Heat, moisture, and filth, are the active agents in the causation or fatal aggravation of the diseases of which these children perish. If now we put these several inquiries together, viz.: *at what age—of what diseases—where and when do the children die in excess?* we have a consecutive answer, as follows:—

The children die in excess while confined to the nursery; of diseases contracted in or aggravated by the nursery, especially in the tenement houses; and in the warm months of the year.

The natural inference to be drawn from this answer is, that when a child escapes from the nursery, its chances of living are greatly increased.* And such is the fact—and this fact suggests the inquiry: "What is there in the nursery of the tenement house that is so fatal to children?" That question can be readily answered by personal inspection of an ordinary tenement-house apartment on any summer day. Such inspection will not only convince you that there are causes and conditions sufficient to account for the great mortality among the children confined to the nursery, but that those causes and conditions may be removed, and that, too, largely by your aid.

Let us notice, first, *domestic filth*. How all-pervading it is! It fills the air; it covers the clothes and furniture; it is gathered in heaps in the hall and area; it clogs the house drains; it covers the yards and the streets. The air breathed, the food eaten, the water drunk, are impregnated with filth. And what is this filth? Examine it in its most impalpable state, as the dust on the mantel, and you find it composed of particles of sand, carbon from coal, fibres of wood and cotton, epidermic scales from the human body, granules of starch, excreta of animals, hairs and down, spores and filaments of fungi in great abundance. Nor is this dead and inert matter. Test it by placing a little in a glass tube with water, after exposing it to the direct rays of the sun for a time. See how a drop under the microscope swarms with animal and organic life! The ray of light that shoots across the darkened room is made golden by the filth which fills the air. These floating atoms may be particles of animal matter from small-pox, or scarlet fever, or diphtheria; germs of the most fatal diseases.

Examine now in detail the different parts of the apartment. Notice the *walls* of the room—how begrimed! Rub your hand over

one. What a putrid odor! See the reddish and greenish streaks in the wall; these are the ancient signs of the plague of leprosy affecting the walls. Place an atom of this filth from the surface under the microscope, and see how it teems with vegetable growth! Germs of typhus, of diphtheria, of small-pox, of scarlet fever, and of a thousand nameless diseases may cover these walls, ready to be detached and lodged in the sensitive throat, lungs, or stomach of children, and excite a fatal disease.

Notice next the *floor*. The boards are spongy with dry rot, spotted with grease, and every crevice is full of dirt. If we should analyze that filth, what should we find? Vermin of every description—some harmless, so far as we know, others poisonous when in contact with children, all liable to be the carriers of contagion—here is found every form of fungi growing in damp and dark places; the moisture, the grease, the heat, supply the food for these growths; transplant such fungi to the throat or even the skin of the child, and it often finds the soil in which it grows most luxuriantly.

Examine next the *beds and bed clothes*. Few ladies would even dare to handle such foul stuff. How dirty, how greasy, how spotted with the blood of vermin accidentally killed! What a horrible odor, if you venture to smell of the first uncovered bed! What makes these clothes so offensive? Why! they are saturated with the perspiration and foul emanations from the unwashed bodies of those who sleep in them. Are they never washed? Yes, certainly, they are washed often, but they are never made clean and never properly dried. Turn the bed over—what a horrible stench from the mattress! What is inside that gives out such an odor? filthy hair, or straw, or husks—the best material possible to collect and retain filth, and furnish a hot-bed for vermin. How they swarm over the canvass, bedstead, and walls on this unexpected exposure! Has this bed not been aired and sunned? Never.

Look under the bed—what bundles of dirty clothes, moldy shoes, remnants of food, heaps of miscellaneous refuse, appear. How long has this collection remained here? for months, perhaps for years.

Look into the closets. How crammed full they are of bundles of dirty clothes, and odds and ends of everything that will contain filth.

Unroll a bundle—what a sickening smell—what numbers of vermin. Examine the cupboard; at the bottom are pails of putrid garbage; above, butter, bread, potatoes, meat, all thrust in with the refuse from the table and stove. Notice the body clothes and bodies of

* In August last, 155 in the 1,000 children under five died; and but 16 in the 1,000 persons over that age.

the children. How utterly nasty are the rags that hang around them, stiff with excreta. And yet the skin which these rags are intended to cover is still more filthy, being plastered with grease and slime.

Turning from the examination of the sources of filth, notice one or two points in domestic management bearing upon the health of the children. Take the case of foods. First is the milk. Dilution has dissipated its nutritious qualities, and in the hot and fetid air in which it is kept, chemical changes soon develop elements indigestible and irritating to the stomach of the child. The meats are the coarse and less digestible and nutritious parts, being the waste of the butcher's stall. The vegetables and fish are the refuse of the markets, sold by licensed hucksters. That word "licensed," so conspicuous on their carts, really means that they are retailing articles that cannot be sold in the market. The vegetables are unripe, or have been kept until they are rotten, and the fish and poultry are putrid. Then notice the cooking. The meats and fish are generally fried in rancid fats until all the nutritious juices are converted into indigestible and irritating oils, and the vegetables are boiled until they are deprived of the little remaining nutritious substance. All the foods are plentifully seasoned with peppers.

These foods, thus selected and prepared, are served without regard to the age or condition of the members of the family. Young and old alike eat from the same dish, and drink the same unwholesome compounds, misnamed coffee and tea. The infant, if bottle-fed, as is too often the case, has, in addition to the stomachful of sour and innutritious milk, its share of the indigestible mess thrust into its mouth.

Again, inquire as to the habits of these children. Do they ever bathe? Seldom, if ever, under five years. All the hot summer through, though Croton water is running in the hall, the child is not allowed a full bath. And yet a suitable bath every afternoon would protect these children from the depressing effects of heat.

Is it surprising that these children die in such numbers? Is it not rather surprising that any one of them lives to the age of five years? But what untold injury is inflicted upon the child who lives to escape the nursery, and grow to man or womanhood! How deformed and crippled in body—how depraved in morals—what evidences of old age and decrepitude they exhibit at twenty—what monstrosities in crime at ten!

In reviewing these facts, the practical question again arises, "Why this waste of

child life? Is it inevitable, or is it preventable?" You must be prepared to reply: "It is preventable." All the unhealthful conditions mentioned are created by the tenant, and are removable at his will. On visiting any domicile of the poor, however repulsive it may be, you recognize at once how that home may be improved and made comparatively healthy by the housekeeper; you know how the walls may be cleansed with lime and carbolic acid; how the floors may be deprived of dirt by dry scrubbing; how the furniture may be cleaned by rubbing; how vermin may be destroyed; how the bed and body clothes may be cleaned and made wholesome; how the various foods may be selected, preserved and prepared, so as to be digestible and nutritious; how the children are to be bathed and taken into the open air.

You may allege that the poor are so perverse that such instruction would be rejected. This depends upon the manner in which the instruction is given. Long experience in visiting the poor will convince any one that there is no family so degraded that you cannot entirely change gross domestic habits; that in the great majority of instances you can secure all you attempt in cleanliness, in the care of children, and in the preparation of foods. This radical change in the habits of ignorant people cannot be effected by one visit, nor ten; nor can it *ever* be accomplished by those to whom the work is repulsive, and who stand afar off and simply say, "Be ye clean." It must be undertaken, if at all, in downright earnest by those who can bring themselves into full sympathy with the poor, and enter heartily into the trials, troubles, and difficulties which beset them on every hand. The well-qualified visitor who calls regularly, week after week, upon a given poor family, inquiring kindly into all the family affairs, and advising and aiding to relieve sources of domestic unhappiness, imperceptibly gains the confidence of the children and parents, her visits are welcome, her advice is sought, and she becomes the mistress of the household. Says an experienced sanitary missionary: "I am constantly appealed to to teach how to clean and cook, and I daily see the home life of my families improving under my advice and instruction; their rooms are becoming models of cleanliness and good order; the food is well-selected and prepared; the children are daily bathed and taken to the parks; and scarcely a case of sickness is known among the children of my families throughout the year." There are tenement houses in this city in which the annual rate of deaths has been reduced from 55 in 1,000, to less than 10 in 1,000, by improvements in

the domestic habits of the families. In one instance I attempted the experiment of improving the domestic habits of the inmates of one of the most unsanitary tenement-houses of the district, for the purposes of preventing the high death rate that had for years distinguished that house. The task was by no means as difficult as I had expected, though the people were the most stolid of their class. With cleanliness, ventilation, more select and better-cooked foods, daily bathing of the children in the summer, suitable clothing in the winter, &c., the sickness rate fell until that house became noted for its healthfulness.

No charitable work can compare with this in the fruits which it will yield. Where the experiment of sending out sanitary missionaries has been tried, the saving of nursery children has exceeded 75 per cent. as compared with previous death rates. How an enterprise which reduced the annual mortality among children under five years of age from 16,000 to 4,000 would dwarf all other municipal improvements!—*Sanitarian*.

Small Waists and Consumption.

THE desideratum of small waists has been the premature death of thousands upon thousands of the fairest and most promising young ladies, before they had time to learn the dangers they were inviting by following the example of those who teach by their practice that they prefer conformity to the requirements of a perverted taste to exemption from the penalties of being out of shape, in the sense of those who exercise no judgment in regard to this important matter. . . . Favored, as many robust women are, with a fine organization in other respects, they can live out a long life in comparative health and comfort; but they are few compared to the vast number who fall short and die before they have attained all they might have had on earth. The first or topmost rib on either side, just under the collar bone, is short, thin, and sharp on its inner curvature. It has no motion, being a brace between the dorsal column and the breast-bone. It is immovable for the purpose of protecting large arteries and veins belonging to the arms on either side of the neck. In cases where the chest has been manipulated till the lungs cannot expand downward they are forced up above that rib. Rising and falling above and below that rib level, the lobe chafes and frets against the resisting curvature. It is inflamed at last and the organ becomes diseased. If that chafing is not relieved, but in each respiration

the serous covering of the lung is irritated continually, the inflammation is apt to extend quite into the body of the organ, increased and intensified by exciting emotions, laborious pursuits, or unfavorable exposures. Finally, the mucous lining of the air-cells within the lung sympathizes and becomes inflamed also.

In this condition we may trace the commencement of pulmonary consumption. It would be denominated sporadic and widely different from pulmonary disease by inheritance. . . . Consumption is not only developed by tight lacing, but a multiplication of causes, where the original conformation of the individual was favorable for a comparatively long life, is beyond question. Medications cannot stay the onward march of disorganization when ulcerations eat the tissues. Once destroyed, they can never be reproduced. Therefore, if prevention is better than cure, less expensive and always more agreeable, why not profit by these suggestions? No compression of the base of the chests of men being induced by tight dressing, a chafing of the upper surface of the lung rarely occurs to them. * * * * *

Great men, giants in any department of busy life—those who make the world conscious of their influence—those who quicken thought or revolutionize public sentiment, and leave the impress of their genius in the history of the age in which they flourished, were not the sons of gaunt mothers whose waists resembled the middle of an hour-glass.—*J. V. Smith's Ways of Women*.

The Biblical Wine Question.

BY REV. P. R. RUSSELL.

I HAVE of late had my attention called especially to the wine question by our Sunday-school lesson of the third Sabbath of July, in which we find Christ making wine at the marriage feast of Cana of Galilee. I was amazed and mortified too at the interpretation given of that first public miracle of our adorable Redeemer by some good men in the pulpits and Sunday-schools, in which they represent the Saviour as making not less than from 120 to 130 gallons of intoxicating drink for a wedding party, who, they understand, had already "well drunk" of such liquors, and were, therefore, partially intoxicated. This interpretation is, no doubt, a glaring mistake, and an unintended reproach upon the spotless character of the blessed Jesus, and a shame to all his sober-minded disciples. No greater incongruity, nothing more absurd can be conceived of than that Jesus should aid and abet a drunken revel; or that

he should any how or in any degree, endorse the liquor traffic, or the drinking habits which curse and disgrace our civilization. I find, in looking over the text, not one particle of evidence that more than one cup of wine of any kind was made; nor an intimation that any drank of this but the "governor of the feast," and there is no evidence at all that the wine furnished was alcoholic and intoxicating. The truth is, as to the wines referred to in the Scriptures as follows:—

1. *The Jews and other Eastern nations had alcoholic wines.* These were more or less in use; but they were of a mild character compared with the fiery, bewitching, compounded and adulterated wines of our land and day. True, they had a mode of adulterating their wines with myrrh and other drugs to increase their strength and convert them into opiates, but they knew nothing of the art of the experts of our day, by which the wines of commerce are compounded of poisonous drugs, and often without one drop of the juice of the grape. Those alcoholic wines of Bible lands and times, mild as they are, were spoken of as bad—as evil and only evil, a curse to man and an emblem of the divine wrath against sin and sinners. A few texts will illustrate the fact. There was a kind of wine which was a curse instead of a blessing to those who used it. Why "drink the wine of violence"? "Who hath woe? who hath sorrow? who hath contentions? who hath babblings? who hath wounds without cause? who hath redness of eyes? They that tarry long at the wine [yayin]; they that go to seek mixed wine." Prov. 4:17; also 23:29, 30. "They also have erred through wine, and through strong drink are out of the way." "They err in vision, they stumble in judgment." Isa. 28:7. When this wine is red in the cup, it is said "at the last it biteth like a serpent, and stingeth like an adder." Prov. 23:31, 32. "Their wine [*Hebrew*] is like the poison of a serpent." Ps. 58:4. This kind of wine is an emblem of the punishment of the wicked. "Take the wine cup of this fury at my hand." "To give unto her the cup of the wine of the fierceness of his wrath." Jer. 25:15; Rev. 16:19. See also Ps. 75:8; Isa. 51:17; Rev. 14:10.

2. *Then there is another kind of wine, not intoxicating, not alcoholic, and a blessing is in it, and it is a scriptural emblem of all spiritual blessings in Christ Jesus.* That the Jews and all other orientals had a mode of preserving the juice of the grape without fermentation, admits of no doubt. The proof is overwhelming. I can give but a tithe of the testimony I have at hand on this point. They had various ways of doing this, such as boiling down the juice till it became a kind of sirup; also filter-

ing out the gluten and fumigating it with sulphur. Prepared in either of these ways it was put in jars or pitched skins, closed up tight and sealed with pitch, kept in cool places, sometimes sunk in water, at others buried in the earth. In Grecian Antiquities, vol. ii. p. 360—"The Lacedæmonians used to boil their wines upon the fire till the fifth part was consumed; then after four years were expired, began to drink them."

Aristotle, born 384, B. C., says: "The wine of the Arcadia was so thick that it was necessary to scrape it from the skin bottles in which it was contained, and to dissolve the scrapings in water." Horace, born 65, B. C., says: "There is no wine sweeter to drink than Lesbian; it was like nectar and more resembled ambrosia than wine; it was perfectly harmless and would not produce intoxication." (*Bacchus*, p. 220.) Dr. Kitto says: (vol. ii. p. 477) "The Mishna states that the Jews were in the habit of using boiled wine." G. W. Brown, who traveled extensively in Africa, Egypt, Syria, and the Holy Land, from 1792 to 1798, states that "the wines of Syria are most of them prepared by boiling immediately after they are expressed from the grape till they are considerably reduced in quantity, when they are put into jars or large bottles and preserved for use." He adds: "There is reason to believe that this mode of boiling wine was a general practice among the ancients." Dr. Browning says: "The habit of boiling wine is universal." Caspar Neuman, M. D., Professor of Chemistry in Berlin, says: "It is observable that when sweet juices are boiled down to a thick consistence, they not only do not ferment in that state, but are not easily brought into fermentation when diluted with water."

Dr. Jacobus, commenting on the wine made by Christ, says: "This wine was not the fermented liquor (and it may be added still more emphatically, not the kind of compounded, adulterated wine now in general use) which passes now under that name. All who knew of the wines then used, will understand rather the unfermented juice of the grape. The present wines of Jerusalem and Lebanon, as we tasted them, were commonly boiled and sweet, without intoxicating qualities. . . . Those were esteemed the best wines which were the least strong."

Such wine was, of course, good wine; it was delicious, nourishing, and a blessing to man. It is made every season in my family, and we always have it on hand to use on the table when desired. It is spoken of in Scripture, not as a curse, a poison of dragons, biting like a serpent and stinging like an adder, but as a blessing—an emblem of salvation.

"As the new wine is found in the cluster,

and one saith, Destroy it not; for a blessing is in it." "Wine, which cheereth God and man." "The mountains shall drop down new wine, and the hills shall flow with milk." "With corn and wine, I have sustained him." Isa. 65: 8; Judges 9: 13; Deut. 7: 13.

This kind of wine is an emblem of spiritual blessings. "Ho, every one that thirsteth, come ye to the waters, and he that hath no money; come ye, buy, and eat; yea, come, buy wine and milk without money and without price." Isa. 55.

3. The word wine, as found in the Bible, is a generic word, and is applied to the juice of the grape, in all of its forms, and changes, just as we use the word cider, to denote the juice of the apple before and after fermentation, the pure and the adulterated article of the tippling shop. This simple fact clears up the discrepancy of wine's being sometimes spoken of as a curse and scourge of man, mocking him, biting him, stinging him like a venomous serpent; and then at other times as a blessing, and an emblem of his salvation, doing him good like a healing medicine. Understand the fact, that the Jews had different kinds of wines, some fermented and intoxicating, and others unfermented and unintoxicating, but sweet, healthful and nourishing, and this apparent contradiction is harmonized and gone.

Can it be possible that that wine which is a curse, the poison of dragons, which "biteth like a serpent and stingeth like an adder," which makes the drinker "babble," "err in vision and stumble in judgment," and is an emblem of God's wrath, is the *same wine* which is a blessing, which is associated with corn, oil, and milk, and is the chosen emblem of the great salvation? Can it be so? Does the word of God, properly interpreted, thus blow hot and cold at the same utterance? Do the sacred writers thus contradict themselves, and utter jargon and nonsense? No—never.

I am happy to say that the unfermented wine, the pure juice of the grape, is increasingly manufactured in Vineland for sacramental and medicinal purposes, and that more than 200 churches in both of the cities of Philadelphia and New York are using it, and that it is fast passing into general use.

Vineland, N. J.

Health and Happiness.

HEALTH and happiness go together. There is no use of talking about it, for they do. Not all the medicines or creeds in the world can make a bilious, nervous, sick person happy. He must be well before he can say, "I am in good condition in mind and body." There are a great many wrong notions in the

world, and everybody has imbibed some of them. All have prescriptions for whoever complains. Some take this or that nostrum; others lay all unhappiness to the heart or conscience, while the seat of trouble is the stomach or liver. And it will be so long as the world stands, unless a reform be made in our habits. In the first place, a man's house should be the most healthful, quiet, restful spot on earth to him. The religion of a man's life should begin here; find its spring and nurture here. All the churches and meetings under the sun cannot do or undo what his home does. When he enters there, and shuts the door behind him, he should feel that the cares, duties, business, noise, smells, and everything else of the outside world are shut out. Here are relaxation and rest. He throws off his former life as he throws off his coat. When he sleeps, he should do it as going into the land of forgetfulness to come back refreshed and new. When he eats, it is to be nourished, the old wastes made up by new supplies. When he reads or chats with his family, it should be as he would sit down in an orchard to enjoy its fruits, or in a flower garden to be delighted and soothed by its beauty and fragrance. Home should be the club, library, picture-gallery, and sanctuary. But there are material arrangements, connected with our social life; and not least among them are cooking and breathing. Poor or partially cooked food will drive health out of the body, and happiness out of the heart; and bad or no ventilation will ruin the peace of any house. One of the best and greatest blessings in a house is an open fireplace. It is where the members of the family mostly congregate, and are in the best spirits. The hearth-stone has witnessed more cheerfulness, and listened to more pleasant words, and seen brighter, happier faces than any other place in the world. The only prescription we give is, go and make your home bright and healthful, and it will be happy.—*Providence Journal*.

"Dressed to Kill."

If there were no other cause (and their name is legion) to account for the feeble physiques and prevailing ailments of the present generation of women, I believe that their present mode of dress alone would explain the mystery nearly all. That a woman wears a biased* dress and a long skirt is enough, in itself considered, to make an invalid of her under favorable conditions, and sure to do so under disadvantageous ones.

* By this is meant what women call "a plain waist."

I put this assertion strongly because I feel and believe it in the strongest manner.

You will remind her of our grandmothers,—the fabulous grandmothers, the healthy, wealthy, and wise—they who scrubbed floors, did the family washing, wove carpets, spun their husbands' coats, and brought up fourteen children, in biased waists and long skirts. I reply that it is because they scrubbed floors, did the washing, wove the carpets, spun the coats, and because they brought up fourteen children—and because they did this, and the time faileth me to tell what else, in long skirts and biased dresses, that American girls are what they are to-day—pallid, puny, undersized, undersouled, devoured by the backache, the headache, the heartache, a dark puzzle to the physiologists who undertakes their present relief, a sad problem to the political economist who looks to the future ideal society, the mothers of which they will be.

There is a grim wealth of tragedy in the terse, popular phrase descriptive of a fashionably attired woman. It has ceased to be a metaphor that she is "dressed to kill."

"Six new diseases," we are told, "have come into existence with the styles of dress which require the wearing of multitudinous and heavy skirts."

Indeed, I wonder that there are not sixty. I wonder that women sustain, in even the wretched and disheartening fashion that they do, the strain and burden of their clothing. I wonder that any of us are left with unimpaired vitality for the pursuance of self-culture, for the prosecution of our business, for the rearing, care, and support of our families, for the whirling of the wheels within wheels of social duties which devolve dizzily upon us, till "the whip of the sky" has ceased to lash us into the struggle for existence. No doctrine but the doctrine of the "Survival of the Fittest" will touch the problem. We are of tougher stuff than our brothers, or we should have sunk in our shackles long ago. It has been well said by one, "Whenever I discuss this subject with the 'unawakened,' I resort to the simple inquiry, 'Could your father or your husband live in your clothes? Could he walk down town on a rainy day in your skirts? Could he conduct his business and support his family in your corsets? Could he prosecute 'a course of study' in your chignon?'"

The prompt and ringing, No! of the only possible answer, is startling and suggestive. The muscular masculine physique could not endure the conventional burdens which the nervous feminine organization supports. The

man would have yielded and sunk where the woman has struggled and climbed.

* * * * *

Nor can we overestimate the mischief brought upon our sex by habitual attention to the making and mending, to the fashioning and refashioning, of our clothes. Much sewing is a weariness to the flesh, and of making many garments there is no end.

A long train of doleful diseases follows upon the confinement of women to the needle or the treadle, as any thoughtful physician of the sewing sex can testify. For the one stitch necessary to keep body and soul together, probably twenty go in these days to frill and flounce them, to ruffle and tuck them, to embroider and braid them, till so much of soul is stitched into the body, and so much of body into soul, that the task of indicating which is which becomes a prize problem to the most studious mind.

"I spent one hundred hours," said an educated and cultivated lady recently—and said it without a blush of shame or a tremor of self-depreciation—"I spent just one hundred hours in embroidering my winter suit. I could not afford to have it done. I took it up from time to time. It took me a hundred hours."

One hundred hours! One could almost learn a language, or make the acquaintance of a science, or apprentice one's self to a business, or nurse a consumptive to the end of her sufferings, or save a soul, in one hundred well-selected hours. One—hundred—hours!—*Elizabeth Stuart Phelps.*

Is He Sick?

YES, he is. But it is a reproach that he should be sick from the cause that made him so. His face is pale, his eye livid, and if he should try to walk, he would reel like a drunken man. The secret is just this: He made his first experiment at smoking, and smoked too long. Of course he will get over his present wretched feeling, and then he will perhaps smoke again. It will be with some pain and trouble that he will learn this expensive and harmful habit. When the habit is confirmed, he will waste on it more money than he now has any idea of. Among my acquaintances is a young man whom I greatly esteem for many good qualities. He has one very serious fault, and that is, he smokes almost constantly. Though he is not yet thirty years of age, he has smoked away *three thousand dollars*. He will never get a penny of it back, and it has done him no good. It would be enough to buy a comfortable house

or a small farm. The wind has blown that house or that farm away in smoke.

Thousands of men do not expend so much as this. But the small sums expended year by year at last amount to a large sum. Often, too, these men feel too poor to pay money to the Lord's service.

The safe thing to do is, never to taste tobacco in any form at all.—*Sel.*

Holding A Council.

Not long since, in a certain locality, of a certain State, a grand council of allopathic physicians was held on the case of a lady who was very ill, and their verdict was that she must die. Of course they left the field, and a young homœopathic M. D. came in for the management of the case.

In a short time, the lady began to mend, because she got but little medicine. It was medicine that was killing her, as she often protested. This the new M. D. well understood, and he let nature have her own way; and the result is, the lady is getting better every day.

What a pity that all drug doctors will not hold a grand council, and give up all their patients to nature and nature's laws, and thus stop this drug disease, which is the worst and most common of all diseases.

Could not there be a contingent fund raised by the government, to help the M. D.'s who would thus give up their "fee" for the public good, until they could all find some honest business, by which they might live without dealing in poisons?

If they will not do this, is there no method of detection, by which their deeds of medical crime may be brought to light, and the people undeceived, and better informed, and this terrible work of wholesale poisoning put an end to, and evil workers warned or punished?

JOS. CLARKE.

A Chapter on Manners.

It is a sign of bad manners to look over the shoulders of a person who is writing, to see what is written.

It is bad manners to occupy a seat while other people stand around without one.

It is bad manners to go into any person's house without taking off your hat.

It is bad manners to use profane language.

It is bad manners to use your own knife on the butter dish.

It is bad manners to go into any person's house with mud or dirt on your shoes.

It is bad manners to talk in company when

others are talking, or to talk or whisper in church.

It is bad manners to talk in company to one or two persons about some subject which the others do not understand.

It is bad manners to stare at strangers in company or in the street.

It is bad manners to say "yes" or "no" to a stranger, or to your parents, or to aged people; let it be "yes, sir," and "no, sir."

It is bad manners to pick your teeth at the table, and bad manners to pick them with a pin in any company.

It is bad manners to comb your hair and brush your coat in the eating room.

It is a sign of low breeding to make a display of your finery or equipage.

It is bad manners to boast of your wealth or prosperity or good fortune in the presence of the poor, or those less fortunate than you are.

It is vulgar to talk much about yourself.—*Sel.*

Eat Slowly.

MANY a man has been choked to death in attempting to swallow his food before he had chewed it long enough.

Food in the stomach, surrounded with its juices, is like pieces of ice in a glass of water; for as the ice melts from without inward, so the stomach juices dissolve the bits of food from without inward; and as the smaller the pieces of ice the sooner are they melted, so the smaller the bits of food the sooner are they dissolved and pass out of the stomach to be distributed to the system, giving it light, and warmth, and vigor. But if the pieces of food are large they begin to rot before they are melted, causing heaviness, belching, nausea, or other discomforts. These make bad blood, contaminating the breath, sending dullness to the head, depression to the spirits, and a universal feeling of unwellness, lasting sometimes for half a day or a whole night. Therefore eat slowly, with deliberation; talk a great deal at meals; cultivate cheerful conversation; and let any man or woman be considered a domestic enemy and pest who says or does anything at the table calculated to cause a single unpleasant sensation in any one present.—*Sel.*

HARD ON MINERAL-WATER RESORTS.—The *Carmi Courier* says: A pair of old boots, a bag of salt, and a pound of copperas, if dropped into a spring at the right time of the year, will go a good way toward establishing a fashionable summer resort.

Female Education.

THE subject of female education has brought out with special force of acclamation the superiority of the present day over the past in the thoroughness of instruction imparted. The slipshod teaching of girls in former days, its miserable pretense and hollowness, is an inexhaustible theme, and, indeed, there is not much to be said for it. Compare the school-books of the past with any paper on teaching addressed to the young women of the present—compare what they are expected to know, the subjects they are to be interested in, the intricacies of grammar and construction which are to be at their finger-ends, with the ignorance of accidental picking up of knowledge which was once the women's main chance of acquirement, and our expectations are not unreasonably raised. The pupils of the new school ought to be more companionable than their predecessors; they ought to talk better, more correctly, more elegantly; and, as their subjects of interest become more profound, as science and art open their stores to them, their vocabulary should meet the need, at once more accurate, more copious, more felicitous. We put it to our world of readers—Is it so? Do our young ladies talk better than their mothers? Do they express their meaning with greater nicety? Nay, do they speak better grammar? Moreover, is this an aim? Are they taught to do this by their sex, who profess to portray the girlhood of our day? Is it not an understood thing that three or four epithets are to do duty for all the definition the female mind has need of, and that solecisms, which would have shocked the ears of an earlier generation, pass unreviewed?—*Blackwood.*

Self-Murder.

THAT man is little less than a deliberate suicide who habitually drinks tea, coffee, or ardent spirits of any kind, to induce him to perform a work in hand when he feels too weak to go through with it without such aid. He is trying to get at the life God has stored up for him for to-morrow, and use it up to-day. This is the reason that the majority of great orators and public favorites die drunkards. The pulpit, the bench, the bar, the forum, have contributed their legions of victims to drunken habits. The beautiful woman, the sweet singer, the conversationalist, the periodical writer, has filled but too often a drunkard's grave. The best possible thing for a man to do when he feels too tired to perform a task, or too weak to carry it

through, is to *go to bed and sleep a week*, if he can; this is the only true recuperation of brain-power; the only actual renewal of brain forces, because during sleep the brain is, in a sense, at rest, in a condition to receive and appropriate particles of nutriment from the blood, which take the place of those which have been consumed in previous labor. Mere stimulants supply nothing; they only goad the brain, force it to a greater consumption of its substance, until that substance has been so fully exhausted that there is not power enough left to receive a supply; just as men are sometimes so near death by thirst and starvation that there is not strength enough left to swallow anything, and all is over. The capacity of the brain for receiving recuperative particles sometimes ceases instantaneously, and the man becomes mad in an instant; in an instant falls into convulsions, in an instant loses all sense, and he is an idiot. We repeat, There is renewed force for the brain only in early and abundant sleep.—*Sel.*

Don't Worry about Yourself.

To retain or recover health, persons should be relieved from anxiety concerning disease. The mind has power over the body. For a person to think he has a disease will produce that disease. This we see effected when the mind is intensely concentrated upon the disease of another. It is found in the hospitals that surgeons and physicians who make a specialty of certain diseases are liable to die of it themselves; and then mental power is so great that sometimes people die of disease which they have only in imagination. We have seen a person sea-sick in anticipation of a voyage before reaching the vessel. We have known persons to die of cancer in the stomach, when they had no cancer, or any other mortal disease. A blindfolded man slightly pricked in the arm has fainted and died from believing that he was bleeding to death.

Therefore, well persons, to remain well, should be cheerful and happy; and sick persons should have their attention diverted as much as possible from themselves. It is by their faith that men are saved; and it is by their faith they die. As a man thinketh, so is he. If he wills not to die, he can often live in spite of disease; and if he has little or no attachment to life, he will slip away as easily as a child will fall asleep.—*Sel.*

Air and sunshine cure more than physic.

The Health Reformer.

BATTLE CREEK, MICH., OCTOBER, 1875.

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

Bogus Health Institutes.

EVERY few days the mail brings us cheap circulars in which are detailed, in bombastic and grandiloquent terms, the fictitious merits of some quackish institution which is managed by a charlatan whose impudence is only equaled by his ignorance, and which depends entirely upon the credulity of the public for its support. The majority of these institutions seek to attract the unwary invalid by the winning title, "Health Institute;" and thousands are annually made the victims of the delusive name.

When we inquire about the nature of the remedies employed at these so-called health institutes, we find, almost without exception, that they are wholly comprehended in the slimy, sulphurous, nauseating waters of some "mineral spring." Sometimes these much vaunted waters are found, upon inquiry, to be the brackish product of a deserted salt well. Sometimes the filtration from a neighboring barnyard supplies the "healing virtues" for which they are celebrated. At the very best, they are simply solutions of subterranean filth, the very thought of eating which would sicken with disgust the ones who take them in another form and even think them *healing*.

But if we deplore and pity the ignorance which leads a credulous public to give their patronage to such worthless institutions, what should be our feeling toward those who are using every means in their power to inspire confidence in that which is worthy only of unqualified condemnation—to take advantage of the ignorance of the people instead of instructing them in the truth—to defraud them of their money as well as their time by obtaining both upon false pretenses, giving no equivalent for either? We cannot be considered harsh in saying that such persons are justly deserving of the most severe censure and thorough exposure. Especially worthy of just indignation are those who are fully aware of the deception which they are prac-

ticing, and of the injury which may result to those who become their victims.

Sometimes we find that electricity is made to lend its well known potency in support of mineral-spring resorts which would not otherwise be able to attract sufficient notice to obtain patronage. In these cases we have a combination of humbuggery. Not that electricity is a humbug, for it is a most valuable remedial agent; but the preposterous claims made for it are often not only most flagrant outrages against truth and honesty, but so palpably absurd as to be intensely ludicrous. Thus, the "medical [?] director" of a newly discovered "magnetic mineral spring" in this State sends us a circular of his institution (possibly expecting a notice, which is hereby given) in which he tells us that "water is *cathartic, emetic, diaphoretic, sedative, anodyne, and stimulent*. Especially may this be said of the ———— *Magnetic Mineral Water*. It will meet all the indications of cure in all positive diseases; that is, will cure all diseases in which *electricity* predominates over *water*, as *electricity* will cure all *negative* diseases where *water* predominates over *electricity*." (The italics are not ours.) Aside from other absurdities, we are gravely informed that water is a "*stimulent*" (stimulant is doubtless meant); how many old toppers would rejoice if they could be made to believe that this were really true by practical experience. Possibly this may be a special quality of said "magnetic mineral water," if so, to its discredit; no sane man believes it true of pure water. Again, this famous water "will meet all the indications of cure[!]," etc. What this statement means, if it means anything, we cannot imagine, unless it be something like what was understood to be meant by the old drug doctor who declared his ability to "cure" a case of convalescence, and sustained his claim by numerous cases.

But what an absurd notion of pathology appears to be entertained by our author, who seems to hold that there are but two classes of diseases. In one, the system contains too much water—is flooded, inundated, in fact. In the other, the system is too heavily charged with electricity! How simple a system of therapeutics necessary to meet the requirements of such a pathology! If a man has too much water in him, give him a few electric

shocks; or, better, hang him out to dry in the sun, desiccate him by evaporation in an oven, a Turkish bath, or under an air-pump. If he is ablaze with electricity, plunge him into a tub of mineral water to put out the fire, or pour a few gallons down his throat.

Here is another chapter of principles from the same source: "Warmth and moisture, or sun and ocean, or electricity and water, in proper quantities, are the elements that produce and impart the life principle of growth and health to all living things. Thus we see that the sun, the great POSITIVE *he*, and ocean, the great NEGATIVE *she*, or sun male, and ocean female, or *electricity and water*, are nature's great builders and repairers, her great curative agents."

Such a rare combination of erroneous statements, absurd logic, silly twaddle, and bad grammar, as the above presents, is not often met with. Its meaning would be incomprehensible without the aid of the *principles* previously noticed; but putting this and that together, we discover that our "medical director" has a very novel method of treatment. If a man is suffering under what he calls a "positive disease," he administers a dose of "negative *she*;" if, on the other hand, he is already laboring under the adverse influence of "negative *she*," his morbid condition will be rectified by dealing out to him an adequate amount of "positive *he*."

Further, we are told that "*all* chronic diseases are curable by these waters," because the union of the magnetism with the elements of the water is so complete "and in much greater quantity than has ever yet been found on this continent;" that they surely cure all *impurities* and diseases of the blood, all skin diseases, "*catarrh, rheumatism, neuralgia, epilepsy*, and all affections of the nerves;" and that they are a SPECIFIC for "those diseases peculiar to *women*."

If such claims were found attached to the advertisement of some patent medicine, we should feel no surprise; but when they are put forth by one who claims to be an honest man, we confess to a considerable degree of astonishment. One of two things seems to be a settled fact; the one who made himself responsible for the above statements was either wilfully dishonest in so doing, or he was shamefully ignorant of the most common

principles which should be familiar to every legitimate member of the medical profession.

But we must not occupy more of our space with this subject at present. We wish it distinctly understood that such criticisms as we have made have not been prompted by anything like a spirit of animosity. We have no personal quarrel with any one. We wish no harm to any one; but we are in duty bound to stand in defense of principles, and to warn our fellow-men against the many alluring pitfalls which are placed for them by designing knaves and money-catchers. The mission of the REFORMER is to benefit suffering humanity by enlightening them respecting the true way to seek health and the only way to preserve it; and we must ever be upon the alert to raise a warning voice against everything which is evidently antagonistic to the best interests of mankind.

Homeopathy in Michigan University.

FOR some more than twenty years the disciples of Hahnemann have been assiduously at work to accomplish the establishment of homeopathy in the State University of Michigan. The subject has been brought up now in one way, and now in another. Some years ago a bill was passed by the legislature providing for the appointment of two professors of homeopathy in the Medical Department. When the regents attempted to comply with the act of the legislature, the members of the old faculty tendered their resignations. Consequently, the plan was abandoned in order to retain the old professors of the regular school. An effort was made to establish a homeopathic college which should be under the direction of the regents, but wholly separate from the University, and located in another city. This scheme failing, a bill was recently passed by the legislature establishing a homeopathic college as a part of the State University. It is to consist of two professors only, a professor of practice, and one of materia medica. The students are expected to gain their knowledge of other branches, as surgery, anatomy, chemistry, etc., from the professors of the regular school.

Here we have the two chief systems of drug medication brought together, like the gods of the heathen in the pantheon of ancient Rome. There are slight grounds for the hope that this

close personal contact may produce a result similar to that which occurred in ancient times. Indeed, a bitter strife has already begun among these rival schools, and we may expect to hear of some sharp encounters during the session about to begin. The medical faculty of the University includes among its numbers some of the most uncompromising enemies of homeopathy; while the homeopaths have wisely selected two of the strongest of their number to occupy the position afforded them. If each party employs its time industriously in hunting up and exposing the weaknesses and errors of the other, then we may fairly hope that ere long we shall hear of some startling developments; and there is a bare possibility that when the conflict is ended, and the field has been cleared of the dead and wounded, the debris of inert lotions and poisonous drugs, croton oil blisters and mustard plasters, tartar emetic and ipecacuanha, big pills and little pills—it will be found that there still remain, unscathed and unsullied, the good old principles which hygienists are trying so hard to impress upon the world. Should this be true, then good will come out of the contest in spite of all its bitterness; and the medical profession may free itself from the rubbish of multitudinous errors which has been accumulating for centuries, as foul water sometimes works itself clear by fermentation.

Typhoid Fever.

At the present season of the year, this disease is usually more prevalent than at any other. Youths and middle-aged are the chief sufferers. The disease is not contagious, as many suppose, but it is more than probable that it is produced by the entrance into the system of organic germs from human excreta. These germs reproduce themselves within the system. The discharges from a typhoid patient are especially potent in communicating the disease. It is believed by many able physicians that the exciting cause of typhoid fever may be generated wherever organic filth is left to undergo putrefaction.

The principal lesion present in the disease is sloughing and ulceration of the glands of the large intestine, especially the cœcum, which is preceded by inflammation of those structures. Sometimes the ulceration be-

comes so extensive that the intestinal wall is penetrated; this accident, called perforation, is usually fatal. These lesions do not occur in any other disease. They are not the disease itself, but one of the results of the disease, as is the eruption of small-pox the result of that disease.

The history of the disease is peculiar. It develops gradually. The patient hardly knows when he first began to feel ill. The first prominent symptoms noted are irregular chills, or chilly sensations, sometimes followed by perspiration; headache, especially in the front portion of the head; irritability, mental confusion and inactivity; loss of appetite, nausea, and perhaps vomiting; nosebleed; pain in loins and limbs; diarrhea; general lassitude and debility. One patient may not have all of these symptoms, but more or less of them will be marked.

During the first stages of the disease, the face is flushed; as the disease progresses, the countenance assumes a blank, stupid appearance, due to the mental condition. The headache, which is at first severe, commonly disappears about the second week. Delirium is often present, especially in the later stages if the disease continues more than a few days. The patient mutters incoherently, and often endeavors to get out of bed. Persistent delirium is a very unfavorable symptom. Wakefulness and restlessness are common symptoms. In severe cases, coma or senseless stupidity are present. In these cases involuntary discharges often occur.

Typhoid patients usually have complete loss of appetite; but there are exceptions to the rule. The tongue is usually coated, either whitish, yellowish, or brownish—sometimes black. A dark matter, *sordes*, occurs upon the teeth and lips in severe and protracted cases. In most cases, diarrhea is present; sometimes it is wholly absent, or only begins after a copious enema. It is a criterion of the severity of the intestinal lesions. The discharges are of an ocher color. Hemorrhage from the bowels sometimes occurs. The abdominal symptoms are distention with gas, tenderness, especially low down on the right side in the region of the cœcum, and gurgling.

A characteristic eruption usually occurs over the chest and abdomen, appearing be-

tween the seventh and the fourteenth days of the fever. It consists of isolated papulæ of a rose color, which momentarily disappear on pressure. The skin is dry during the greater part of the disease. When perspiration occurs, it usually denotes a mitigation of the severity of the symptoms, and betokens improvement.

A slight cough is a common symptom. It simply denotes slight bronchial irritation, and need give no apprehension, unless there are other symptoms which denote the occurrence of pneumonia, which is not infrequent in this disease, and greatly increases its gravity. Profuse nosebleed sometimes occurs so frequently as to endanger the life of the patient.

The pulse and temperature are both greatly increased, as a rule almost without exceptions, the acceleration of the pulse being usually in proportion to the gravity of the disease. When the pulse is above 120 for a considerable time, a fatal termination may be feared. A long-continued and considerable elevation of temperature is also very unfavorable.

The duration of the disease varies from one week to two months. The doctrine of critical days has little foundation in fact, and is discarded by the most respectable medical authors.

TREATMENT.

The old-fashioned treatment by bleeding, mercury, quinia, emetics, digitalis, and a score of other drugs, is declared unavailing even by the most eminent apostles of drug practice in this and other countries. Dr. Flint, of Bellevue Hospital College, New York City, says of the water treatment, "The wet sheet—after the mode practiced by the hydropathists, commonly called packing—I have tried in a limited number of cases. A distinct amelioration of the symptoms followed in every case, and in two cases, immediate cessation of the fever followed. As an effective measure for diminishing heat, reducing the frequency of the pulse, tranquilizing the nervous system, and, perhaps, promoting elimination by means of copious perspiration, water applied in this mode claims a fair trial at the hands of physicians in typhoid and typhus fevers as well as other affections."

Much of the danger arises from the unnatural and excessive heat. For the purpose of reducing this, all sorts of drugs have been employed, but with very little success. Dr. Flint says of remedies for this purpose, "Foremost among these measures is the use of cold water, either in the form of affusion, as advocated by Currie, nearly a century ago, the cold bath, the wet sheet, or sponging the surface of the body. The mildest mode of refrigeration is that last mentioned; namely, sponging the body with cool or tepid water. Repeated once, twice, or oftener, daily, the temperature is somewhat lessened, and a corresponding improvement in the symptoms is manifested. The other modes of refrigeration are more effective, and they are indicated in proportion as the temperature is higher. Affusion and the cold bath involve inconvenience, as well as, on the part of the patient, fatigue, and generally a sufficient effect may be procured by the wet sheet."

The German physicians have adopted the water treatment of fevers almost entirely. We heard Dr. Flint state, at a meeting of the Academy of Medicine in New York City, that he should employ it much more in his practice, in future, than he had done in the past. His views were heartily indorsed by many distinguished members of the profession present.

The headache may be relieved by the application of cool wet cloths, which should be of only three or four thicknesses of linen, and should be changed every few minutes. If the pain is greatly increased in paroxysms, it may often be relieved by hot fomentations of brief duration—ten or fifteen minutes, followed by a light tepid compress. Rubbing the head with the moist hand often gives much relief to the patient, soothing him to sleep in many cases.

To relieve the abdominal tenderness, apply hot fomentations occasionally for a few minutes at a time. The abdominal bandage or wet compress should be worn constantly, being often changed.

Nosebleed may require checking by mechanical means. If the cough is troublesome, or pneumonia occurs, apply a wet compress to the chest.

The diet is a matter of prime importance. For the first few days, give the patient little

if any food, for he cannot assimilate it. Then feed him very lightly on baked apples, rice, oatmeal, corn-meal, or wheat-meal gruel, plain crackers, and almost any kind of ripe fruits, as apples, pears, peaches, grapes, steamed figs, etc. The mild acids of lemons and oranges are usually very gratefully received. Do not overfeed the patient, as such a course will increase the fever. When convalescence approaches, the patient will be very liable to overeat as he finds his appetite returning. Be especially careful to avoid the use of animal food at this period, as it will cause a return of the fever in some degree. Cooling drinks may be administered to suit the demands of the patient if care is observed to give only small quantities at a time, but as often as necessary. In cases of coma, the patient may manifest no desire for drink, although the system may be suffering for want of it. The attendant should carefully attend to the wants of the patient in this respect. Small bits of ice may sometimes be given to advantage.

The life of the patient will often turn upon attention to many of the little details of nursing which are too often neglected. Perfect quiet is indispensable. No matter of business or domestic affairs should be allowed to occupy the mind of the patient. No visitors should be allowed. The sick room should have a cheerful aspect, and should be well ventilated, day and night.

A matter of special importance to both patient and attendants is the care of the intestinal discharges. The vessel containing them should be partially filled with a solution of permanganate of potash in proportion of one grain to the ounce of water, so that all discharges shall be immediately disinfected.

When convalescence is established, the patient is not yet out of danger, for some of the worst accidents frequent in this disease often occur at this time, and relapses are not infrequent.

Cigar-Box Coffins.

A RECENT number of *Scribner's Monthly* relates the following rather amusing anecdote of Jarvis, the distinguished painter:—

"Walking down Broadway, one day, he saw before him a dark-looking foreigner

bearing under his arm a small, red, cedar cigar-box. He stepped immediately into his 'wake' and whenever he met a friend (which was once in two or three minutes, for the popular artist knew everybody), he would beckon to him with a wink to 'fall into line' behind. By and by the man turned down one of the cross streets, followed close by Jarvis and his 'tail.' Attracted by the measured tread of so many feet, he turned round abruptly, and, seeing the procession that followed in his footsteps, he exclaimed, 'What for the debbil is this? What for you take me, eh? What for you so much come after me, eh?' 'Sir,' exclaimed Jarvis, with an air of profound respect, 'we saw you going to the grave alone with the body of your dead infant, and we took the opportunity to offer you our sympathy, and to follow your babe to the tomb.' The man explained, in his broken manner, that the box contained only cigars, and he evinced much gratitude for the interest which had been manifested in his behalf."

How many fathers have in effect, if not in fact, carried their infants to premature graves in cedar cigar boxes! Men who use tobacco, not only saturate their own bodies with the filthy poison, but they fill all the atmosphere around them with fetid, nauseating, poisonous odors, not only from the pipe, and cigar, but from their foul breaths, and the still more sickening exhalations from their bodies. Has such a man small children? Then let him recollect that every plug he chews, every pipe he smokes, every cigar he puffs, not only poisons himself, but extends its baleful influence to his tender babes.

Many a babe has died of convulsions because its vital breath was contaminated by tobacco filth. Many a delicate mother, too, suffers untold agonies from sick headache, nervousness, neuralgia, and kindred diseases, just because her selfish husband is unwilling to deny himself the gratification of a useless, sinful, filthy, disgusting habit, but persists in polluting the air of his household with the same poison that has made a boor and a sot of himself. Not infrequently do we receive the most touching letters from wives who have suffered thus all their lives, beseeching us to make such an appeal as will touch the stony hearts of their husbands—their sworn protectors—and lead them to abandon that which is fast destroying not only their own lives, but the lives of their wives and chil-

dren. But what can we say that will move those who have long refused to yield to all the noble influences which should sway a man who still retained a modicum of self-respect. If prayers, entreaties, tears, and love of kindred will not cause a man to yield to right and reason, words are impotent.

Tobacco-using, that savage vice, which found a fitting origin in barbarism, eagerly copied by Europeans, and then by Eastern nations, has come to be a well-nigh universal vice. Its prevalence, however, does not mitigate its heinousness; it only makes more glaring the hideousness of this crime against self and society.

We hear much about temperance pledges, temperance societies, temperance lectures, journals, etc., why not have an anti-tobacco crusade? Who will fight King Tobacco? Who will sign a teetotal tobacco pledge?

WHY AMERICANS DIE.—According to reports, Germany, with its population of 42,000,000, graduated, last year, only 660 physicians, while the United States, with a population of 40,000,000, sent out, the same year, from its medical schools, an army of 3,000 new graduates armed with blisters, lancets, and purgative pellets. In Germany, one in seven of all applicants for a degree were rejected. We hazard nothing in saying that not more than one in twenty of American applicants were "plucked," to use the language of the schools, though many are notably deficient. Is it any wonder that more than half the children of America die under five years, and that our nation is rapidly sinking into chronic invalidism?

DOMESTIC EDUCATION.—The celebrated Scotch divine, Dr. Guthrie, was not only a great religious reformer, but was also an energetic worker in the temperance cause as well as other social reforms. Here are a few of his remarks respecting domestic education:—

"We have a great many things taught in our schools now—physiology, philology, craniology, geology—and what the better is a girl for it when she becomes a tradesman's wife? She cannot darn her stocking, bake her bread, boil a potato, or light a fire. When I see a servant making two or three attempts to light a fire, I am tempted to say, 'My good friend, let me try and do it for you.' I do not, remember, despise theseologies, but I am for stitchology, bakeology, and boilology."

People's Department.

Among the Doctors.—Mr. Editor: I am almost alone in this little town of ten doctors, and they don't like me very much, and especially the doctrine that I am agitating that all medicine is poison; but one of them had the quinsy, and he did not get over it very good, with his neck all scabbed over with iodine, and no appetite. He sent for me to come and give him a bath. I went and put him in a bath-tub, and I rubbed him through the bath and rinsed him out, and I did not take the skin quite all off with a rough towel, but when I got through he took a long breath, and said he never took such a going over in his life. He soon called for something to eat, and the third day he was in his drug-shop ready to deal out his poison. He has spoken very well of me since that, and in one case of inflammatory rheumatism, where he was afraid he would lose his patient, he advised his friends to get me and try water. Everybody said and believed that I had got a patient to die on my hands; but he got well, and they did not all believe in hygiene as they agreed to in case he recovered. Another M. D. of considerable note, on account of wealth, asked me what authority I had to practice without a diploma. I told him I thought if he could practice ten years without one, I would try it two or three. He blushing denied it, and said it did not make so much difference about the diploma. I told him that I understood that he was liked much better before he got one. He wound up by saying they all believed in a proper use of water. I told him the fact was they were too lazy to practice it according to the extent of their belief; there was too much work about it. Another young M. D. of some note, in questioning me as to my plan, said that all disease was poison. I told him he was not correct. "What," said he, "is not all disease a poison to the system?" I told him the cause of all disease was a poison. He said I was right. I am glad there is a hygienic college in Battle Creek. I want to embrace the first opportunity to come and take a course of lectures.

E. K. FERRIS.

Testimonies for Reform.—Mrs. U. D. Richmond, of Mass., sends us the following interesting testimonies:—

"Mr. James Whitmore, of Charlemont, Mass., at the age of twenty commenced the use of tobacco and continued its use fifty-six years, until his nervous system became so im-

paired that he was unable to feed himself. At this advanced age he became convinced that tobacco was injuring him, and ceased the use of it at once. At the end of four years, at the age of eighty, he has so far recovered that he feeds himself as well as ever."

Mr. W. Kemp, at the advanced age of eighty-five, writes in a plain hand that he has used no kind of stimulating drink, not even tea, coffee or chocolate, for twenty-five years. Has eaten no butter for ten years. Uses tobacco in no form. Is called the oldest man in town. Has twenty-six grandchildren and twenty-two great grandchildren. Has read the New Testament through thirty times in five years.

These two testimonies are alone sufficient to fully meet the claim so often made that old people cannot make the change of habits required by health reformers. Doubtless the task is a harder one, but the fact that it has been done, and is done, is sufficient evidence that it *can be done*.

Benefits Received.—Although I cannot report "another convert gained," yet I feel like speaking of the benefits that I have received from reading your valuable pages. For years I had been suffering greatly with disease; and when, in the spring of 1870, Mr. Loughborough called my attention to the subject of health, and gave me the REFORMER, I found that I was violating the laws that should govern all who seek to purify themselves and make their bodies a fit temple for the indwelling of the Holy Spirit. It found me using pork, tea, coffee, mince pies, etc.

My case had been given up as hopeless, and I was advised to secure good homes for my children, that it might not be left for strangers to do after I had gone beyond the reach of mortal care. I cannot find language strong enough to express my gratitude for the light of the health reform. I feel, indeed, that it has plucked myself and daughter from an early grave; and now, with returning health, we enjoy our plain food far better than we ever enjoyed eating when indulging the desires of a perverted appetite.

I now save many a dollar to be used as a blessing instead of a curse.

What a sad thought that so much suffering might be avoided if people would only investigate and follow these things that have been proven, and made ready and within their reach; yet you that labor will receive your reward whether they will hear, or whether they will forbear.

A SUBSCRIBER.

Up-Hill Work.—We were glad to see in the July number of the REFORMER a step taken in the right direction by Rev. Talmage. We have often felt anxious for that class of men. Many of them would be reformers if they only knew how, as the Turk said of the English, "They would be clean if they only knew how."

We do not say that Rev. T. is not sound right through; but we have known many that are sound only skin deep, who discard only a few articles of food as referred to by Mr. T., and yet hold on to their tea, coffee, butter, lard, pork, salt, fine flour, beefsteak, and other things just as objectionable, without number, in which they think their strength lies. After their throats give out, they refer it to overwork and fly to bronchial troches as a remedy. And when fairly sacrificed to these gods, they attribute their loss of health to the arduous work of the ministry, and their friends lay them in the grave with this consolation: He was a martyr in a good cause!

We visited one clergyman and presented him with a REFORMER, which cured him and his family of late suppers; but I could not prevail on him to take the REFORMER. I have visited a president of a college, whose children's teeth rotted out before they shed them through wrong dietetic habits, and yet could not prevail upon him to subscribe. Verily, reform work is up hill.

REV. JAS. LIDSTONE.

Dear Reformer:—I congratulate you on the benevolent work in which you are engaged. I am glad to know that some of your readers are reaping a benefit from the instructions received through your columns; some more, and some less, in proportion as they make a practical use of what they learn. I would gladly share with you in the work, had I the necessary qualifications. But if I can do nothing more, perhaps I can aid a little by encouraging words. I can say with emphasis that I am a confirmed believer in the hygienic system, and therefore can heartily wish you abundant success.

R. F. COTTRELL.

How Fashions Originate.—Trace a fashion to its origin and you will nearly always find that it springs from the consciousness of a defect, and a wish to mask it. The fatherland of crinoline is Spain, and a Spanish queen first wore hoops to dissimulate unequal hips. A Venus of the boulevards, who committed suicide by throwing herself over a balcony a few years ago, revived the high-heeled shoes

which Louis Quatorze originally brought into fashion to appear taller than the king of Spain, at the meeting in the Isle of Pheasants. A lady who derives prestige from rank, fortune, and striking beauty, scalded her arm, three winters back. An ugly mark bore witness to the accident. She thought of wearing, to conceal it, those long-armed gloves, which, out of mercy to the plebian wives of Napoleon's marshals and generals, the Empress Josephine adopted. The hats slanting down over the eyebrows was the result of a lady of exalted rank losing her front hair. Queen Elizabeth's neck was yellow and thin, hence the "stiff muslin mane." The double veil of white and black tulle was contrived by a "parliamentary woman" with a bad complexion. She used pearl powder to hide her red skin, and the black and white veil to dissimulate the pearl powder, which would have shown on black net.—*London News.*

Sponge Baths.—A fat-looking, bald-headed, lobster-colored German in shirt-sleeves appeared in the door-way of an Adams street bathing establishment, addressing a loose-jointed individual with wet, stringy hair, about noon, yesterday :—

"Hold on von minud," called out the first described, "you can no go out dese place so, you not pay me fur dot bat."

"Pay for that bath!" exclaimed the other in apparent astonishment, "who said anything about paying?"

"I say somethings,"bout dot."

"You do?"

"Yaw, I say you must bay me fur dot bat."

"You said it wouldn't cost nothing," said the wet-haired man.

"Noddings!" echoed the bath-keeper, "I no say such a dings!"

"What's that readin' on your sign, then?" inquired the disputant.

"Dot sign reats: 'Turkish Bats, Sulphur Bats, Vapor Bats, and Sponge Bats,'" replied the man of the lobster complexion.

"Well," said the other as he edged away, "that last's it; bein's I didn't have any money, I took a sponge bath!"

The Teuton fell to studying his sign, while his patron meandered toward the City Hall, but when he at last looked up, he had resolved to strike "Sponge Bats" off his list.

It is singular that mineral waters are only beneficial to the wealthy. We never knew a physician to advise a poor man to go to any watering-place.

Care of the Sick.—Dr. Irenæus Prime, one of the editors of the *New York Observer*, after giving some account of his own suffering from the thoughtless conversation of friends during his sickness, gives the following directions about the care of sick persons :—

"From the sick room, exclude all persons but the patient and nurse in charge. Whatever assistance is required should be within easy reach, but the less the number in the room, the less the temptation to converse. If a physician be in attendance, let his directions be obeyed, and discharge any nurse at once who knows so much more than the doctor as to determine whether his prescriptions are the best or not; or dismiss the doctor, and install the nurse in his place. In a battle with death, there should be only one captain. If other members of the family besides the one in charge be admitted, let them enter softly, minister to the sufferer their loving offices, and retire, soothing and not disturbing him by their voices and footsteps."

It is the opinion of the doctor that the lawyer gets his living by plunder, while the lawyer thinks the doctor gets his by "pill-age."

Questions and Answers.

FOWLS.—A. F., asks if the common domestic fowls are unclean according to the classification of Lev. 11.

Ans. We think not, but the fowl has many very uncleanly dietetic habits, notwithstanding; and many hygienists would as soon eat pork as chicken, though we knew of one family which would be horrified at the thought of eating pork, and yet dined upon fowls which subsisted almost wholly on the rotten carcasses of dead hogs.

PILES.—J. L., Me., wishes to know if piles should be punctured if they are obstinate under water treatment.

Ans. Water treatment alone is often insufficient to effect a cure of piles. The proper course in such cases is to have them removed by a skillful surgeon, living hygienically afterward to prevent their return.

SUGAR.—B. D. T., says that his merchant told him that the best white sugars were always made from the poorest grade of brown sugar. He wishes to know if this is true.

Ans. No; your merchant is mistaken. The poor grades of brown sugar are simply

the residue which could not be made into white sugar on account of the large amount of treacle and dirt contained in it.

ROARING IN THE EAR.—M. A. B., O., wishes to know the cause and remedy for roaring in the ears.

Ans. There are several causes; which particular one is at work in your case, we cannot tell without a better account of your symptoms. Perhaps you have catarrh. If so, it is the probable cause, and must be removed to effect a cure.

EXTERNAL PILES—"CRICK IN THE BACK"—**ABSCESS OF GUM.**—B. Q. C., Iowa, asks: 1. What is the cause and cure of outward piles in a boy three years old? 2. What shall I do for crick in the back? 3. A year ago I cured the toothache by running a red-hot knitting needle into the nerve. A gum boil soon formed on the gum and has discharged ever since. What shall I do for it?

Ans. 1. Constipation of the bowels is the probable cause. Cure him by local applications of cool water, and proper diet. See *Ans.* to J. L., above. 2. Rest and apply hot fomentations, followed with friction. 3. By destroying the life of the nerve in the way you did, the adjacent parts became inflamed, and then suppurated. Probably the bone is being destroyed. Consult a good dentist.

CONSUMPTION CURED.—N. B., Iowa, wishes to know if we have cured patients of consumption by the treatment described in the *Hygienic Family Physician*.

Ans. Yes; many of them.

GRAHAM AND SOUR STOMACH.—A. C. C., Mich., says she is a girl, fifteen years of age, enjoying good health in most respects, but suffers from sour stomach whenever she eats graham flour. Wishes to know the cause.

Ans. We cannot attempt to tell without knowing what else is eaten, how much is eaten, how it is eaten, and when it is eaten, as well as how the meal is prepared, etc. There is nothing in graham flour which will cause sour stomach.

BALL'S EYE CUPS.—O. J., Iowa, inquires: 1. Will Ball's eye cups restore eyes which are presbyopic? 2. What is good for deafness and roaring in the head?

Ans. 1. No; they are a humbug and have ruined many eyes. At first they seem to benefit; but their effect is always injurious. 2. See answer to A. B., above.

HOW MUCH TO EAT.—J. H. G., N. C., wishes us to tell him how many ounces per day a man should eat who weighs 140 lbs., and exercises half of each day.

Ans. It is impossible to determine in ounces the exact amount any individual should eat each day, since the nature of the food, as well as the amount demanded, will vary more or less with each day. Each person's judgment must be his guide. If he overeats, he will soon become aware of the fact by the effects—dullness, oppression of the stomach, flatulence, perhaps sour stomach.

BRONCHITIS.—N. B., Ky., wishes to know the cure for bronchitis.

Ans. Strict hygienic living in all respects is the only cure known.

THE BEST SUGAR.—A. B. W., Buffalo, inquires: Is brown sugar or white sugar the most healthful?

Ans. If sugar is to be used at all, the cleanest is the best. Brown sugar contains impurities which are not found in white sugar.

COOKING GRAINS.—A correspondent wishes to know what are the best ways of preparing grains for food.

Ans. According to the recipes given in the *Hygienic Cook Book*, published at this Office. Price, 25 cents.

BOWEN'S CATARRH CURE.—E. A. J., O., says: My wife wants me to use Bowen's Catarrh Cure for catarrh; what do you think of it?

Ans. It is a humbug, like all other catarrh cures. Hygienic living is the only remedy.

L. M., Oakland: 1. Perhaps overeating is the cause of sour stomach in your case; or perhaps you eat too hastily, or too many kinds at a time. 2. Sour fruits may be sweetened with sweet fruits, or with a small quantity of sugar. 3. Pears are healthy food if well masticated. 4. Fruit may be eaten at either meal of the day. It is better for a dyspeptic to avoid eating fruits and vegetables together. 5. Both milk and butter-milk are objectionable, especially for dyspeptics. 6. Frequent sips of cold water, or a warm-water emetic, are the best remedies for a sour stomach.

T. S. B. R.: Improve your general health, take out-of-door exercise, keep the bowels regular by proper diet, and you will do much to relieve the disorders from which you suffer.

E. H. K., Mich.: It would be impossible to name your disease without a fuller description of it. You may have a tendency to paralysis.

DIETETICS.

Do Fish Eat Salt?

THIS question was suggested to my mind on reading a statement that fish thrive in salt water. Of course this has no relation to the subject of hygiene; for no one would expect long to enjoy good health wholly immersed in brine, just because fish can live in sea water. But my question is this, Is there any evidence that fish consume any salt, or that it enters into their system? We know they do not *breathe water*, though they breathe in it. They have a wonderful apparatus for separating the air from the water in which they live. Is it certain that they do not in some manner separate the salt from their food in the process of assimilation?

I do not know what a careful analysis would show in the case, but it is a well-known fact that the presence of salt is never perceived in their flesh. It seems reasonable to suppose that, as they are constantly in the briny liquid, if they took in salt with their food, its presence would sometimes, if not always, be indicated in their flesh.

By this I do not mean that the salt would be assimilated and incorporated into their bodies, for this cannot be done by any living organism; but if it were so constantly imbibed as we might suppose it would be by their always living in salt water, would it not show itself *as salt* in their flesh, and be appreciable to the taste?

What does the editor of the REFORMER say about it?

J. H. WAGGONER.

[We heartily coincide in the reasoning of our correspondent as expressed in the above article. Probably no unprejudiced person will *disagree* with him. A fish, though living in water containing salt, is as perfectly protected from the invasion of his system by that mineral as is the diver with his rubber armor while exploring the submarine depths in quest of some sunken treasure. Look at his coat of mail, made up of horny plates almost impregnable to iron! Can even such a mischief-making element as salt permeate so dense a structure? We fancy not. If, perchance, the fish takes a potion of brine into his mouth when grasping food, he pours it out again through openings at the back of his head, apparently for that especial purpose, so that there is no evidence that the finny denizen of the sea partakes more large-

ly of salt than his brother who dwells in fresh-water lakes and rivers inland. The burden of proof, in this case, lies with our salt-loving friends; let them show us the exact or approximate amount of salt which a cod or halibut, or a small-sized whale, daily requires to supply the necessary amount of hydrochloric acid to dissolve his food.—ED.]

Preserving Fresh Grapes.

PICK carefully the later kinds of grapes. Select such bunches as are perfect, rejecting all upon which there are any bruised grapes, or from which a grape has fallen. Spread them upon shelves in a cool place for a week or two. Then pack them in boxes in saw-dust which has recently been thoroughly dried in an oven. Bran which has been well dried may also be used. Dry cotton is employed by some. Keep in a cool place. In this way, grapes may be kept until long after New Year's with ease.

Another method still more efficient is to select perfect bunches, as already directed, and dip the broken end of the stem of each bunch into melted sealing-wax. The bunches may then be wrapped in tissue paper and placed in layers, or hung in a cool place, or they may be packed in saw-dust.

How to Keep Apples and Pears.

OF the numerous varieties of fruits which are grown in this country, apples and pears are about the only ones that can be kept for more than a few days after they are ripe without the employment of artificial means. And, fortunately, these fruits are the very ones which, upon the whole, are in all other respects the best adapted to meet the wants of man. But even these fruits may be preserved in better condition, and for a much longer time, by the employment of certain means, and by attention to a few practical points. The best methods of preserving fruit are always those which change its natural condition as little as possible.

Preserving fruit in ice-houses has been practiced quite extensively, and with very satisfactory results. But many people have not the means to invest in an expensive fruit house. They can derive great advantage from observing the following rules:—

1. If the fruit is of a late variety, allow it to remain upon the trees as long as possible without freezing.
2. Always pick the fruit by hand and handle with the greatest care.

3. Gather the fruit on a dry, cool day, and place it in heaps or bins for two or three weeks.

4. Then carefully pack in barrels, after assorting, head them up, and place them in a cool place.

Upon the approach of freezing weather, the fruit should be removed to the cellar or winter fruit house. The best temperature for keeping fruit well is about 34° F., or 2° above freezing. The cellar in which ordinary vegetables are kept, is too warm and damp for apples. Thorough ventilation is also essential, especially in autumn and early spring.

Before packing away for the winter, fruit should be carefully assorted. That which has nearly reached maturity should be placed where it will be easy of access. The different kinds ripen at different times. They should, on this account, be carefully watched, that they may be used when in their prime, as they rapidly deteriorate in quality after reaching that period.

Many find it advantageous to keep their apples in thin layers upon broad shelves in a cool place. This plan allows frequent and thorough inspection without disturbance of the fruit. It also permits the removal of affected fruit as soon as it shows symptoms of decay.

Keeping Lemons and Oranges.

It is often desirable to preserve these fruits, which are of excellent service as flavors for other fruits. During the summer there are always times when they can be bought very cheaply in small lots. Then is the time to buy. Place them at once in a vessel of cool water, which should be kept in the cellar, or ice-house. Change the water every day, and they may be kept perfectly fresh for weeks.

These fruits will dry without decaying if they are kept in a perfectly dry place.

Cranberries can also be preserved in water for a long time if the water is often changed.

To Keep Sweet Potatoes.

LITTLE difficulty is usually experienced in keeping the common Irish potato as long as desirable; but the sweet potato requires much more careful treatment for its preservation. The best plan is the following: Select fine, clean sand. Dry it thoroughly in the oven, and bury the potatoes in it, packing them so that the sand will surround each one. Keep them in a place which will be very dry and moderately warm, and they will keep a long time. Irish potatoes require a cool place,

The same plan is an excellent one for keeping parsnips, except that the earth need not be dried, and a cool place is better than a warm one.

Crazy for Meat.

IF you would know the desire human beings have for meat, just see them crowd around the butcher's cart as it passes from door to door in the village or country town; or visit the butcher's shop, and see how in all these cases the money is paid so cheerfully; the dry-goods merchant, the hardware man, the grocery keeper, may have bad bills, and slow pay, but the butcher very seldom has any difficulty of this kind if he is at all careful.

The very smell of blood seems to fire up the customers of the meat-cart, as it does those denizens of the forest, the lion and the tiger. No matter how poor you are, you must have a few pounds of meat, even if the last cent you have must go for it.

The dead body, the corpse of an animal—this is food for man. Never till sin entered did blood flow in behalf of man's appetite. Then there was a time when Adam beheld the lion in his wild frenzy and fury suck the blood of the slain bullock; and there was a time when he first beheld his own offspring eating the dead body of the slain victim. But leave was not given to good men to eat flesh until the days of Noah; even then it was only permission in case of necessity, as in famine or in high latitudes where the cold frosts would nip the fruits of the earth, or as in the case of Noah when all was a wide waste of roiled mud, and the provisions of the ark were exhausted.

But man, in his rage for blood and meat, did not stop at such bounds; his lease of life became shortened, and his age, from eight and nine hundred years, rapidly became less and less until it is now quite uncertain if he reaches forty years.

But you say, perhaps, that there was no guilt attached to meat-eating. So we may say that polygamy was not forbidden for the good from the time of Abraham to Christ; yet it was really contrary to moral and physical law, though God did not condemn it for a long period. Why was this? God is very forbearing, past all our comprehension; and he makes allowance for circumstances. The gross moral darkness of the age of Luther found many good men even among the ranks of the Romish priesthood; but the Reformation came and called them out. So of polygamy; the pure doctrines of Christ led to the banishment of polygamy. So the light of the nineteenth century calls for still greater reforms.

JOS. CLARKE.

SEASONABLE HINTS!

Sanitary Rules.

THE constancy of sanitary laws, and the importance of their rigid enforcement by civil authority wherever their observance cannot be otherwise assured, are now too generally recognized to require further commendation by us. The following rules have been adopted by the Michigan State Board of Health, and are recommended by them for adoption by the local boards:—

FOR PREVENTION OF DISEASE.

RULE 1.—No privy vault, cess-pool, or reservoir into which a privy, water-closet, stable, or sink is drained, except it be water-tight, shall be established or permitted within fifty feet of any well, spring, or other source of water used for drinking or culinary purposes.

Reason.—Soil, especially if it be sandy loam or gravel, or clay with inclined strata or layers, is often an unsuspected conductor of the liquid contents of such receptacles to wells or springs of water. Many well authenticated cases of typhoid fever and other dangerous and often fatal diseases have been traced to the use of water so contaminated.

RULE 2.—Earth privies, or earth closets, with no vault below the surface of the ground, shall be excepted in Rule 1, but sufficient dry earth or coal ashes must be used daily to absorb all the fluid parts of the deposit, and the entire contents must be removed monthly.

Reason.—Dry earth or coal ashes are nearly complete disinfectants if used in sufficient quantities to absorb all the fluids.

RULE 3.—All privy vaults, cess-pools, or reservoirs named in Rule 1, should be cleaned out at least once a year; and from the first of May to the first of November of each year shall be thoroughly disinfected by adding to the contents of the vault, once every month, one or two pounds of copperas dissolved in a pailful of water.

Reason.—During the hot season, putrescent gases are given off from the decomposing excreta in such vault. These gases are not only very offensive, but are frequently the cause of dangerous diseases. They contain compounds of ammonia, which are decomposed by solution of copperas, and the foul odor destroyed. In a family vault two pounds of copperas a month are usually sufficient. In vaults used by a large number of persons, five or more pounds of copperas should be used monthly.

RULE 4.—No privy vault or cess-pool shall

open into any stream, ditch, or drain, except common sewers.

Reason.—Same as for Rule 1.

RULE 5.—No night soil or contents of cess-pool shall be removed unless previously deodorized by mixing with solution of copperas; and during removal the material shall be covered with a layer of fresh earth, except the removal be by the "Odorless Excavating Process."

Reason.—Same as for Rule 3.

RULE 6.—All sewer drains that pass within fifty feet of any source of water used for drinking or culinary purposes shall be water-tight.

Reason.—The danger of contaminating the water.

RULE 7.—No sewer drain shall empty into any lake, pond, or other source of water used for culinary purposes, nor into any standing water.

Reason.—Same as for Rule 1.

RULE 8.—No garbage, materials manufactured in whole or in part of wool, silk, leather, India rubber, etc., or other materials which evolve offensive gases during combustion, shall be burned within the health limits of this corporation.

RULE 9.—No house offal, dead animals, or refuse of any kind, shall be thrown upon the streets or left exposed by any person, and no butcher, fish-monger or vender of merchandise of any kind, shall leave any refuse upon the streets, or uncovered by earth upon the lots of this city (village or township); and all putrid and decaying animal or vegetable matters must be removed from all cellars and out-buildings, on or before May first in each year.

RULE 10.—All families, hotels, restaurants, and others accumulating garbage, are required to have a proper covered receptacle for swill and house offal, and to cause the contents to be regularly removed as often as twice a week between the first day of May and the first day of November, and once a week at all other seasons.

Reason for 9 and 10.—Decomposing animal and vegetable matters are sources of poisonous gases, dangerous to health.

RULE 11.—Between the first day of May and the first day of November, no hogs shall be kept, except in pens with floors, kept entirely free from standing water, and regularly and freely disinfected; and during the months named no hogs shall be kept elsewhere within the jurisdiction of this Board within eighty rods of any dwelling, except in pens with dry floors, or kept free from standing water.

Reason.—Same as for 9 and 10.

RULE 12.—No diseased animal, or its flesh, and no decayed, diseased, or unfit meat, fish, vegetables, or fruit, or diseased, impure, or

adulterated milk or other article, shall be sold or offered for sale as food.

FOR PREVENTING THE SPREAD OF INFECTIOUS AND CONTAGIOUS DISEASES.

RULE 13.—Any householder in whose dwelling there shall occur a case of cholera, yellow fever, scarlet fever, diphtheria, or small-pox, shall immediately notify the Board of Health of the same, and, until instructions are received from the Board, shall not permit any clothing or other property that may have been exposed to infection to be removed from the house, nor shall any occupant take up residence elsewhere without the consent of the Board.

RULE 14.—Persons affected with any of the diseases specified in Rule 13, and all articles infected by the same, shall be immediately separated from all persons liable to contract or communicate the disease, and none but physicians, nurses, and the clergyman of the family, shall be allowed access to persons sick with these diseases.

RULE 15.—Persons recovering from any of the diseases specified in the preceding rules, and their nurses, shall not leave the premises till they have been thoroughly bathed, and their clothing disinfected by washing in boiling water, or heating to 250° Fah.

RULE 16.—All vessels used by such patients shall be disinfected by solution of carbolic acid or chloride of lime, then emptied, their contents buried in earth, and the vessel cleansed with boiling water.

RULE 17.—All personal clothing, bedding, towels, etc., and all articles in contact with, or used by, the patient, shall be washed in boiling water, or exposed to a temperature of 250° Fah.

RULE 18.—Infected feather-beds, pillows, and hair mattresses shall have their contents removed and disinfected by thoroughly exposing them to the fumes of burning sulphur, and their ticks washed in boiling water; but no article shall be burned without the direction of the Board. Infected straw beds and excelsior mattresses shall have their contents removed and buried, and their ticks washed in boiling water.

Poison.—If you do not wish to be poisoned, do not buy green wall paper, green window shades, green carpets, green dresses, stockings with red or green stripes, red under-clothing, hats with green linings, books with green covers, or anything which bears a green color, unless you first get a chemist to analyze a portion and ascertain that there is no arsenic in it. All of these articles have been the oc-

casional of death by reason of the poison they contained. Only a few days ago we analyzed two specimens of wall paper which were loaded with arsenic. Beware!

Banking Houses for Winter.—A correspondent calls our attention to the fact that in the West it is a very common practice to prepare for winter by banking the house with coarse manure. No one who understands the effect of such material upon the health would think of surrounding his house with it. Use straw, or dry leaves, and clean dirt, for the purpose.

To Test Water.—The organic impurities which find their way into wells and cisterns are often the cause of typhoid fever. The gelatinous matter found upon the stones and curb are of this nature. Wholesome water has neither taste nor odor. To test it, place a few ounces in a clean bottle, drop in a small lump of pure loaf sugar, cork it tightly, and place it in the sunshine. If it becomes turbid, after two weeks' exposure, it contains sewage, or organic impurities, and its use is unsafe. If it remains clear, it is pure and wholesome.

Cleansing Rooms.—Rooms which have been long occupied by the sick should be thoroughly cleansed. The old paper, and in many cases the plaster, should be replaced by new, as it becomes saturated with foul and poisonous emanations. The plaster should always be washed with a solution of carbolic acid in water. (Carbolic acid is cheap if bought by the quantity.) Use one-half oz. of acid to a gallon of water, and apply with a whitewash brush. The Chinese remove the plaster from their walls very frequently, being amply paid for the trouble and expense by the great value of the old plaster as a fertilizer, on account of the large amount of organic matter which it contains from absorption. To facilitate the removal of old paper, saturate it with saleratus water.

To Remove Paint Stains.—"Chloroform removes stains from paint, varnishes, and oils. Another very effective fluid for the same purpose is a mixture of six parts of very strong alcohol, three parts of liquor ammonia, and a quarter part of benzole. Spirits of turpentine also, applied immediately, will remove paint stains instantly from clothes."

To Remove Stains from steel table knives, cut a potato in two, dip one of the pieces in finely powdered brick-dust, and rub the knife with it.

Literary Notices.

PRE-HISTORIC RACES OF THE UNITED STATES OF AMERICA. By J. W. Foster, LL. D. Chicago: S. C. Griggs & Co.

This is a work which does great credit to both author and publisher. The first deserves the highest commendation for the persevering industry which has enabled him to place before the world, in this beautiful volume, a concise compendium of the ethnology of this country. The most of that which has hitherto appeared upon this subject has been fragmentary and incomplete. Here we have a systematic and comprehensive treatise upon one of the most interesting subjects of modern science. The facts brought forward in it are presented in such a manner that they will be of interest to the general reader as well as to the student of science. Although we could not indorse all of the theories of the author, we can heartily recommend the work as the best scientific exposition of the subjects considered of any book extant. It deserves careful study, and should find a place in every public library in the country. Some of the subjects considered are, The Antiquity of Man, The Mound-Builders, Shell-Banks, Arts and Manufactures of the Mound-Builders, Ancient Mining by the Mound-Builders, Who were the Mound-Builders, Unity of the Human Race, etc.

The publishers of this work are attaining great success because they publish none but first-class books. All their works are handsome volumes.

THE WORLD ON WHEELS. By B. F. Taylor. Chicago: S. C. Griggs, & Co.

This series of pen-pictures, like all of the works of Mr. Taylor, are rightly classed among the most eccentric literary productions of the day. They are full of wit, and have a brilliancy peculiarly their own. The style might not be wholly pleasing to all tastes, but it deserves the credit of originality and variety, and has won for the author a wide and deserved reputation. The publishers have performed their part in a manner truly commendatory, for the book is a model of neatness and typographical accuracy.

OUR WASTED RESOURCES: By Wm. Hargreaves, M. D. New York: National Temperance Society.

This is, in our opinion, one of the most important works yet published by the above-named organization. We cannot better indicate its value than by giving the headings of a few of the more important chapters. Quantity and Cost of Intoxicating Drinks, Comparisons of the

Cost with other Products, Use of Strong Drinks Causes Bad Trade, The Use of Strong Drinks Prevents Production, The Use and the Traffic in Strong Drinks Injure Labor, Losses of the Nation by the Drink-Traffic, The Use of Alcoholic Drinks Causes Pauperism, Crime Caused by Intoxicating Drinks, etc. The statements made by the author are fortified by numerous tables which have been carefully collected from reliable sources.

BARFORD MILLS. New York: National Temperance Society.

A story-book for children, designed to impress them with the terrible results of the liquor traffic and intemperance, and to illustrate the fact that even young and inexperienced children can sometimes do much good when their sympathies are enlisted. We regret to notice that this work, in common with most other story-books designed for Sunday-school libraries, caters to a morbid taste for sensational literature by introducing into its narrative too much matter of a sentimental character.

PROHIBITION DOES PROHIBIT. By J. N. Stearns. New York: National Temperance Society.

The author of this work is also the business agent of the organization by which it is published. Probably no person is better prepared for the preparation of such a work than was Mr. Stearns. As the title indicates, he has attempted to prove that prohibition is not a failure, as is maintained by many; from our examination of the pamphlet, we are convinced that he has done so. All temperance workers ought to have a copy of this pamphlet.


THE COTTAGE HEARTH. Boston: Milliken & Spencer.


This new monthly is "a magazine of home arts and home leisure." It contains many useful hints and interesting notes. We wish it success.

THE SANITARIAN. New York: A. N. Bell, M. D., Editor.

This journal is doing a noble work for the country in the direction of sanitary reform. Its contributors are men distinguished in the medical profession for their candor and their talents. Each number is valuable, to the practitioner of medicine, especially. We are glad to see that a "Food Department" has recently been added to the journal. We hope this may be enlarged, and become more prominent, as its importance well deserves. Although the *Sanitarian* does not advocate so thorough reforms as does the *REFORMER*, we respect and prize it for the truth it does teach, and wish it continued success.

Items for the Month.

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

 According to Rowell's Newspaper Directory, 1,000 newspapers have failed during the past year, involving more than \$8,000,000; and yet the REFORMER prospers more than ever before, with a daily increasing patronage. During the last year there have been printed and sent out from this office, for distribution to all the different portions of this continent, Europe, Africa, and the islands of the sea, more than 12,000,000 pages of hygienic publications. We would like to see some of our contemporaries report.

Health Almanac.

OUR Health Almanac for 1876 will be ready in a few days, so that orders can be filled in a very short time. We are only waiting for paper from the manufacturers. Great pains has been taken to make it as perfect as possible in all respects. As an almanac, merely, it is much more complete than ordinary almanacs, and gives quite an amount of valuable information respecting chronological epochs, etc., that will be found in no other almanac published. A more complete table of contents will be given next month.

Healthful Cookery.

A HAND-BOOK of Food and Diet, or What to Eat, How to Eat, When to Eat. Motto: As a man eateth, so is he. This is the title of our new cook book. It contains everything to be found in the old book, with much additional and valuable information concerning diet, the preservation of various kinds of fruits, and many new recipes, with numerous useful household hints. One of the most valuable additions is a bill of fare for each month in the year. This alone is worth the price of the book, even to those who already have copies of the old edition. A large edition was published, in anticipation of a rapid sale.

Dress Reform Patterns.

WE give below a brief description of the several garments for which we can furnish patterns. The advantage which these garments afford, is that they secure the four desiderata which physiology tells us should be embodied in the clothing of the body, which are as follows:—

1. Unimpeded action of all the vital organs.

2. An equal temperature of the whole body.
3. Suspension of the clothing from the shoulders instead of from the hips.
4. Reduction of the weight of the clothing.

The following is a list of the garments with the prices of patterns:—

No. 1. A flannel under-garment to be worn next to the skin. It covers the whole body from neck to wrist and ankles. Price, 50 cts.

No. 2. A garment combining chemise and drawers, arranged with buttons so as to support the skirts and stockings from the shoulders. To be worn next to the preceding garment in cold weather. Price, 50 cts.

No. 3. This garment combines chemise and drawers, and also supplies the place of the corset so efficiently that those who have been accustomed to wearing the latter article are happy to dispense with it after a single trial of this dress. It is cut to fit the bust perfectly, thus affording all desirable support. Price with cloth model, 50 cts.

No. 4. Gabrielle Dress. This may be made either long or short to suit the taste of the wearer. When worn with pants it should be from six to nine inches from the floor. Those who do not wish to adopt the pants may wear the dress two or three inches from the floor with dress drawers and leggins. Price, 50 cts.

We can also furnish patterns for skirts, pants for short dress, and dress drawers with leggins, at 25 cts. each.


Those who wish to secure a good fit should send the following measurements:—

1. Bust measure, number of inches.
2. Under bust measure.
3. Waist measure.
4. Length of waist under arm.
5. Hips, three inches below the waist.
6. Width of back across shoulders.
7. Length of drawers from waist down.
8. Length of back from neck to waist.
9. Length of sleeve inside.
10. Length of sleeve outside.
11. Length of shoulder.
12. Around neck.
13. Around arm-size (high up).

When desired, garments will be made at as reasonable rates as possible and sent by express. The patterns will be sent, post-paid, on receipt of the prices marked. We employ an experienced dress maker to cut patterns and make garments, so that all may feel sure of obtaining a good fit if proper measures are sent. We hope that our friends will not fail to avail themselves of this opportunity for obtaining just what they need for their health, comfort, and convenience.

WANTED.—A woman or girl who understands hygienic cooking, to do the work for a family of three. Willing to pay her a fair price, and will treat her as one of the family. A good, comfortable home for the right party. Or, will let the house, furnished, to a competent lady, and board with her.

For particulars, call on, or address,
RALPH E. HOYT,
764 West Lake Street, Chicago, Ill.

 Mrs. Mary E. Cox, M. D., hygienic physician and lecturer (formerly of Chester, N. H.), Ashland, Sanders Co., Neb.