

THE HEALTH REFORMER.

Nature's Laws, God's Laws; Obey and Live.

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Moral Effects of Tobacco-Using.

[WE quote the following from a little work entitled, "Tobacco and its Effects," by Henry Gibbons, M. D., Editor of the *Pacific Medical and Surgical Journal*.]

The use of tobacco tends to vitiate the sense of taste, and to create unnatural and morbid thirst, which craves some other means of gratification than the pure and wholesome beverage provided by the Creator. In this way it leads to the use of strong drink, and becomes a stepping-stone to intemperance.

It has been contended that tobacco is in some degree a substitute for alcohol, and tends to protect from intemperate drinking. But such is not the experience of mankind. Bad habits do not go singly; they are gregarious. One brings another of its kind. The man who loses his self-control in one respect is less his own master in everything. There is no slavery more relentless than that of tobacco—no chain harder to break. Even the appetite of the drunkard is often more easily overcome.

Besides, tobacco leads away from good company, and into bad company. From the family circle and from the society of virtuous females it is often excluded; from corrupt society *never*. The young man who takes in his mouth a cigar or pipe, turns his back forthwith on the sanctuary of home, and on the temple of religion, and sets his face toward the saloon, the bar-room, the grog-shop, the gambling-house, the brothel. The path of abstinence leads in the direction of sobriety, domestic enjoyment, chastity, and religion. The path of indulgence, to idleness, tippling, profanity, and licentiousness.

But why need we argue against the propriety or morality of the practice? Do not its victims themselves almost invariably condemn it, and wish that they had never become its slaves, and that they had strength to break their chains? The father who

should train his children to chewing or smoking would be considered a monster. And yet every parent who indulges in tobacco is guilty of that sin. Let him preach as he may, his example is infectious, and more powerful than his precept.

Great is the responsibility of every man and every woman in regard to the rising generation. Through the faculty of imitation which is implanted in human nature by the Creator for wise and useful ends, children are drawn toward their seniors by invisible cords, with force that they cannot easily withstand. What they see us do they are inclined to do; and we are under the most solemn obligation, as Christians and as moralists, to set before them an example which they can follow with safety. In this point of view, what shall be said of the parent who, by his example, lures his offspring into the snare of evil habit? or of the professing Christian or the minister of the gospel who is seen walking in the street or stepping from a saloon puffing his cigar? What respect has such an individual for that cardinal law of Christianity which requires him to do nothing that shall cause a brother to stumble?

That it is the plain duty of religious teachers, and of every person who acknowledges the obligations of religion, to shun all conduct which will weaken their influence for good and bring reproach on their profession—to avoid all example which will lead the steps of youth into the path of error and vice—cannot be called in question. The apostolic law, which will forever stand as a test of Christian practice, even forbids the use of "meat" with which custom had associated anything detrimental to truth or good morals, if the use of it cause a brother to stumble or to go astray. How much more imperative is the obligation to abstain from a baneful superfluity!—baneful to one's self and baneful to others!

And what shall be said of those who mingle the indulgence with the exercises of pub-

lic worship? When Frederick the Great, at the coronation of his mother as Queen of Prussia, saw her, during the ceremony, watch the opportunity to take a pinch of snuff, he sent a gentleman to remind her of her place and rank. The King had an inward sense that the act was derogatory to the dignity and solemnity of the occasion. Is a merely human ceremony worthy of greater reverence than the public worship of Almighty God?

If bad habits are greivous, so are good habits. Children trained in a positive aversion to any evil practice, are likely to shun other evil practices. Public sentiment has associated tobacco with strong drink and profanity; and the educators of children wisely seek to implant in the tender conscience a virtuous and active hostility to this triple alliance of vice. There is sound philosophy in this; for it is as easy to guard against all as against one. With such training, youth are not only fortified against the enemy for their own good, but they are armed for warfare against evil in other shapes, and qualified in a degree to become soldiers in the great army of Christian reform. The hope of a fallen world is in just such an education for the entire coming generation.

On the same principle, men who have fallen into vicious habits can scarcely mend in one respect without advancing toward a general reformation. No matter where they begin, the first lesson of self-control invites to further effort; the first triumph over themselves invites to other victories. We see it illustrated by inebriates who take the pledge of temperance with no other than a selfish aim, and with no design to mend in other ways. But no sooner have they mastered one vice, and broken the chain of one habit, than they feel impelled to go farther; and with more of the Spirit of God working in them than they may be conscious of, they proceed to cast off the slavery of tobacco, and to free themselves from the habit of profanity. And so, having entered the straight way, they march onward in light and in joy. By being faithful in little things, they become rulers over more.

It will not be denied that the appetite for tobacco is entirely sensual and animal; that it is associated with the lowest grade of human influences; that it pertains to no endowment which man possesses in distinction from the beast. Therefore it cultivates and strengthens the animal nature at the expense of the intellectual and moral. Its tendency is to degrade the higher qualities of our being.

Man's appetites and propensities are good in themselves, and necessary to the existence and growth of the body. As servants they

are in their place, but their mastery is sin. The laws of health and the laws of Christian morality correspond in demanding that they be kept in subjection to the rational and spiritual faculties. He who permits their control not only lowers the dignity of his nature as a rational being, but rebels against the discipline of the school of Christ. The slave of appetite cannot be a Christian.

Persons often cajole themselves with the notion that moderate indulgence is safe, at least *for them*; that *they* are their own masters; that *they* are in no danger of becoming slaves to appetite or habit. But they have no right to tamper with evil, and to enter into temptation. Even admitting that there is no danger to themselves, they break the law in becoming stumbling-blocks to others. Let them reflect that no vicious habit is so easily propagated as the use of tobacco; that it takes root among youth almost invariably from the example of their seniors; that they cannot indulge without ensnaring and poisoning their own or their neighbor's children.

Meat for Students.

A PHYSICIAN, writing in the *Sanitarian* for November, offers many excellent suggestions respecting the diet of students. We quote his remarks concerning flesh food, which will be read with interest. The doctor says:—

"I am about to utter a most heterodox sentiment, and one which I feel sure will shock and horrify the majority of my readers. But I make it boldly, confident that it is correct. It is this: *Meat should be eaten very sparingly, if at all, by all brain-workers, for the plain and simple reason that it is too stimulating to the brain.* 'Prove it,' cries beef-eater. In the *Lancet*, Vol. I, page 186 (1869), we read: 'A bear kept at the Anatomical Museum of Glessen showed a quiet, gentle nature as long as he was fed exclusively on bread; but a few days' feeding on meat made him vicious, and even quite dangerous. That swine grow irascible by having flesh food given them is well known—so much so, indeed, that they will then attack men.' Those who have kept a watch-dog know that he is much more fierce, and liable to attack burglars, if he is fed exclusively upon meat, than upon a vegetable diet.

"In 'Experimental Researches on the Food of Animals,' page 24, London, Doctor Dundas Thompson quotes a narrative of the effects of a repast of meat on some native Indians, whose customary fare, as is usual amongst the tribe, had consisted only of veg-

etable food. 'They dined most luxuriously, stuffing themselves as if they were never to eat again. After an hour or two, to his (the traveler's) great surprise and amusement, the expression of their countenances, their jabbering and gesticulations, showed clearly that the feast had produced the same effect as any intoxicating spirit or drug. The second treat was attended with the same result.'

"In 'Transactions of the Obstetrical Society,' Vol. III, 1861, page 143, Dr. Druitt, in describing the properties of a liquid essence of beef, which had been prepared according to his own instructions, speaks of it as exerting a rapid and remarkable stimulating power over the brain, and introduces it to notice as an auxiliary to and partial substitute for brandy, in all cases of great exhaustion or weakness, attended with cerebral depression or despondency. Correspondingly stimulating properties have also been recognized as an effect of the copious employment of Liebig's Extractum Carnis. No less an authority than Pavy (F. W.) pronounces this beef-tea scarcely an article of nutrition, its restorative powers being due to its stimulating effects upon the brain. The great German chemist has certainly been very successful in extracting the stimulating without the nutritious qualities from meat. Now, if he would only reverse the order of things, and tell us how to extract the nutritious without the stimulating properties from a piece of beefsteak or roast beef (for meat in its solid form, as eaten by well people, unlike beef-tea, is highly nutritious), he would confer a great boon upon mankind.

"Again, when a man is stricken by paralysis (one of the most formidable of brain diseases), what does the wise physician say? 'You must eat no meat; it is altogether too exciting to the brain.' It is the best, and sometimes almost the only thing, that can be done for the sick man now; but it is like 'locking the barn-door after the horse is stolen,' for very rarely, if ever, does he regain his former health and vigor. There are hundreds of men, this moment, in New York—clergymen, active business men, lawyers, authors, students—all brain-workers, who are living high pressure lives, and eating meat two, and perhaps, sometimes, three times a day, and who, on account of this marriage of excitants, are doomed, sooner or later, to be laid upon the shelf, either from paralysis or general break-down of the nervous system, or some mental or nervous disease. If they were coal-heavers, truck-men, omnibus drivers, etc., etc., I do not think they would be in any danger, for I am not a vegetarian.

"Those who perform manual labor, or those who do not work at all, either with hand or brain, provided they do not lead very inactive lives, or do not possess a very sensitive nervous organization, can eat meat during cool or cold weather with impunity. Although the cases are very few in which its consumption is a *sine qua non* to the maintenance of perfect health and strength, still, as it is a very enjoyable article of diet, and we all like to gratify our palates, it may safely be eaten by many people. Individual cases prove but little; still, I will state that I knew of a professor in a medical college, a surgeon, who was obliged to relinquish the use of meat because it made him too nervous to perform surgical operations before the students. It has an equally marked, although dissimilar effect upon myself, producing such distressing insomnia (sleeplessness), that I have not eaten meat, of any consequence, for years. My experience and observations show that in many cases of insomnia, not dependent upon other diseases, there is so strong a probability that meat is causing all the mischief, that its relinquishment should be insisted upon by the attending physician before resorting to sedative or narcotic drugs.

"So greatly conducive to irritability of the nervous system is meat, especially beef, that among its minor evils may be reckoned the weeping over lessons, the fractiousness, the petulance, the hysterical laughing and crying, the low spirits, excessive home-sickness, etc., etc., which appear to be the usual accompaniments of boarding-school life. This is lamentable. Whenever I see a school of young ladies afflicted with 'nervousness,' it reminds me of a beautiful garden of roses infested with mosquitoes. It always requires considerable moral courage on the part of the medical attendant to prohibit the free use of meat, except in cases of very grave nervous disease, like paralysis, etc.; for it seems to be the universal opinion, that the butcher's cart and the meat market are the only barriers between mankind and death. This is not so—provided food equally nutritious is substituted for it."

Virtue.—Confucius, the celebrated Chinese philosopher, was the author of the following excellent aphorisms:—

Even a man's faults may reflect his virtues.

A man should not be concerned that he has no place. He should be concerned to fit himself for one.

Virtue is not left to stand alone. He who practices it will have neighbors.

Let every attainment in what is good be firmly grasped.

My friend Chang can do things hard to be done, but yet he is not perfectly virtuous.

The wise man never hastens, neither in his studies nor words; he is sometimes, as it were, mute; but when it concerns him to act and practice rectitude, he, as I may say, precipitates all.

The Drunkard's Railroad.

Trains move by the following Progressive Time Table.

LEAVE		
Sobriety,	5 00	Reformationburg.
Rumsellerville,	5 15	Robberstown,
Sippington,	5 25	Delirium Falls,
Tippleton,	6 00	Demonland,
Topersville,	6 13	Hornetsnest Thicket,
Loafersburg,	6 30	Snakesburg,
Rowdyville,	6 45	Screach Owl Forest,
Quarrelville,	7 00	Dismal Swamp,
Llarsville,	7 10	Hobgoblin Woods,
Fightington,	7 15	Rattlesnake Ledge,
Cursington,	7 33	Dark Tunnel,
Guzzler's Junct'n,	7 35	Whirlwind Crossing,
Drunkard's Curve,	8 00	Thunderland,
Debauch Slough,		Poison Switch,
Rioter's Hollow,		Bloody Cheam,
Arson Crossing,		Maniac March,
Thieves' Gully,		Misery Thicket,
Gambler's Causeway,		Desperation,
Kill-conscience Cut,		Suicide Cave,
Prison-ton,		Murderer's Gulch,
Beggartown,		Hangman's Hollow,
Pauper Desert,		DEAD RIVER, OR
		PERDITION.

EXPRESS.

LIGHTNING EXPRESS.

All trains will stop at *Reformationburg* if passengers desire to leave at that station. But all persons so stopping will forfeit their through ticket to *Perdition*.

Tickets are sold by all Sample Rooms and Rum Holes, they being our only authorized agents.

Daily Patrons of the Road, above *Tippleton*, supplied with Through Tickets at reduced rates.

From *Drunkard's Curve* the train is an express—all taking in being done above that station, and principally of respectable people. Passengers for all places beyond are thrown out without stopping the train, except at *Reformationburg*.

Persons desiring to leave the train, will find the stages of the TEMPERANCE ALLIANCE at *Drunkard's Curve*, ready to convey them free to any of the villages upon COLD STREAM RIVER.

Passengers not allowed to stand on the platform, or to put their heads out of the windows, below *Debauch Slough*—the corporation not wishing to alarm persons who are not patrons of the Road.

Sleeping cars are provided for through passengers, who will be awakened frequently, that an opportunity for alcoholic refreshments may be given.

Persons living in the vicinity of this Road must "look out for the engine," as no bell is rung or brakeman employed below *Drunkard's Curve*, and the Company disclaim all responsibility for damages.

All Baggage at the risk of the owners. Widows and Orphans in pursuit of baggage lost by friends on this Road, are informed that the Corporation will adhere strictly to the usage of the Road, and positively will not restore lost baggage.

The Conductor of the morning Jersey Lightning Express is *T. H. E. Devil, Esq.*, well known to the traveling public who patronize our line, and popular at the principal stations on the Dead River Line.

Being the ruler of *Perdition*, he spares no pains in securing the through tickets, or rendering other services to passengers bound for his kingdom.

Passengers in the sleeping cars, especially Stockholders, will be waked up at *Screach Owl Forest, Thunderland*, and at the end of the Road.

Stages from *Tobaccoland* connect with all Trains.

Special trains will be dispatched at any time, on application made to the Superintendent, for political conventions, picnic parties, and all associations owing allegiance to *King Gambrinus* or *King Alcohol*.

Water as a Cosmetic.

The experience of centuries places good, wholesome water at the head of all cosmetics. It is infinitely superior to chemical compounds of druggists, and always has been. No complexions compare with those of young misses who have had no acquaintance with cosmetics. That healthy glow which tints the cheeks of the country girl, unsophisticated and happily ignorant of the mysteries of a fashionable toilet, can neither be improved by art, nor imitated successfully by science.

On being transferred to a city, a young lady first begins to imitate those whom she supposes to be superior to herself. From that day, her facial deterioration commences. Concentrated food, stronger tea and coffee, and more of it than she had been accustomed to at her rural, happy home; later hours, musical excitements, theatrical spectacles, new exhibitions of the follies and frivolities of fashionable life, stimulate the pulsations of her heart. The brain is overtaxed, and with dancing and phantoms, when day is turned into night and night into scenes of bewilder-

ing enchantments, the rose is no longer seen on her fair face. She becomes dyspeptic, hectic, yellow, and enfeebled.

With this condition come physicians, pills, vials, plasters for a pain in the side, and a troublesome cough.

Pearl-powder will not bring back the bloom of health, nor rouge spread thinly with consummate skill over a blanched, sunken feature, recall the lost complexion. Hygeia is discouraged, and takes her departure.

Legislation could not effectually stop the sale of quack medicines. People, not by any means the most intelligent, will have them.

This is a glorious land of liberty, in which every one takes what he likes under the name of remedies. Availing themselves of a national weakness in that direction, ingenious speculators accumulate enormous fortunes by the sale of pills and other nostrums, represented to meet all the contingencies of life, which range themselves in the train of formidable diseases.

Oleaginous compounds, not soap, are probably worse than liquids of a stimulating character rubbed on the skin, because they suddenly close up the pores.

Washes, which are announced to have a detergent property, but acting upon the same principle, are dangerous applications.

Simply bathing in pure water is a thousand times superior to the most costly articles for giving and sustaining that soft, delicate complexion which indicates health and vigor.

A better idea of the importance of the sudorific tubes may be formed by this curious anatomical statement, that were it possible to unite them all in one pipe, by joining them end to end, there is enough of them on the surface of an ordinary-sized woman to extend *two miles*!

Remarkable beauties sometimes appear to have become prematurely old. Faded beauties wilt rapidly when they begin to show the sere and yellow leaf. Were some of those cases investigated scientifically, it might probably be shown that they hastened an event they dreaded, by tampering with their fine faces with just such appliances as we have here deprecated. In their anxiety to prevent the appearance of deterioration, they produced prematurely that which they intended to prevent.—*Ways of Women.*

—It matters to us in life not so much what part we play, as it does to play our part well. In a drama it is not so much a question who played the king or the peasant, as who played the part best.

Eccentricity and Insanity.

No other cases have been the cause of so much perplexity to the arbiters of justice in our courts and the occasion of so many patent displays of ignorance on the part of members of the medical profession, as those which involve decisions relating to the sanity or insanity of individuals. The trouble on the part of the doctors has arisen from their attempts to decide a question which from the common standpoint is impossible of decision, viz., where sanity ends and insanity begins. A writer has hazarded the assertion that there are very few perfectly sane people in the world; and there seem to be plenty of facts to support the assertion. By perfect sanity we should wish to be understood as referring to an absolutely sane condition at all times, and under all circumstances. Thousands of individuals are entirely sane upon all subjects but one. That one may be money, appetite, politics, or any other soul-absorbing subject; but it may be the only one relating to which the affected individual is so warped as to be unable to exercise his reasoning faculties.

The following paragraphs from the *Galaxy* contain many interesting thoughts on this subject:—

“Dr. Maudsley, Professor of Medical Jurisprudence in University College, London, does not look upon the insane temperament as in all cases an evil, and his view is borne out by the history of great men, *i. e.*, great performers. Napoleon, Mohammed, and many others of the men who accomplished extraordinary things, are known to have had the temperament known as ‘insane.’ But in its less marked forms this temperament is the source of much that is delightful in life. The Professor says: ‘When we look into the matter, it is truly remarkable how much mankind has been indebted for its originating impulses, and for special displays of talent if not of genius, to individuals who themselves or whose parents have sprung from families in which there has been some predisposition to insanity. Such persons are apt to seize on and pursue the paths of thought which have been overlooked by more stable intellects, and so, by throwing a side light upon things, to discover unthought-of relations. One observes this tendency of mind even in those of them who have no particular genius or talent; for they have a novel way of look-

ing at things; do not run in the common groove of action or follow the ordinary routine of thought and feeling, but discover in their remarks a certain originality, and perhaps singularity, sometimes at a very early period of life. This is illustrated now and then by a remarkable aptitude for punning, and by strange quirks and cranks of fancy, such as a person not so peculiarly gifted might die before he could invent. . . . It is a fact, too, that they frequently display remarkable æsthetic feeling and special artistic talents and aptitudes. An intensity of feeling and energy characterizes them, inspired with strong faith in the opinions which they adopt, they exhibit much zeal and energy in the propagation of them, and so become useful as reformers; they are possessed of a degree of fanaticism which bears them on to their end, reckless of the most formidable obstacles.

"This method of dealing with insanity may not be altogether pleasing to a world which is constantly increasing its power of acute perception, in which bright thoughts are so eagerly sought that a great many men make a living by evolving and publishing them, and in which such publications are no doubt increasing and spreading the tendency to mental brilliancy. But it certainly promises to be more fruitful of good than the opposite mode. If eccentricities which are commonly known as 'harmless,' and intellectual *tours de force* that are constantly admired, are acknowledged to be in many cases the sign of a sufficient difference from the ordinary mental constitution to form a mildly insane temperament, we shall perforce have insanity so constantly and familiarly brought to our cognizance that its terrors will be in great part removed. When the insane are no longer thought to be something incomprehensible and apart from the ordinary man, their chance of cure will be immensely increased. In this respect the modern theories of insanity, though they have greatly enlarged the definition of the disease, and thereby included within its circle a much larger number of persons, have really diminished the evil resulting from the disease. The proportion of cures is much greater, and the treatment, though slowly, is steadily improving."

Diet and Taste.—The relation of diet to the taste is illustrated by the fact that Dutch cinnamon tasters, who could distinguish half a score of varieties of cinnamon, were required when on duty to live wholly on rice, bread, and fruits, so as not to impair the keenness of their gustatory sensibilities.

Dancing and Morals.

A WRITER of some note has recently issued a work in which round dancing, especially waltzing, is condemned in the most vigorous manner possible. The writer pronounces the practice both immoral and indecent, and quotes a remarkable letter from the pen of a well-known and talented woman in illustration of its effects.

The lady says, in speaking of her girlhood:—

"In those times I cared little for Polka or Varsoviene, and still less for the old-fashioned 'Money Musk' or 'Virginia Reel,' and wondered what people could find to admire in those 'slow dances.' But in the soft floating of the waltz I found a strange pleasure, rather difficult to intelligibly describe. The mere anticipation fluttered my pulse, and when my partner approached to claim my promised hand for the dance I felt my cheeks glow a little sometimes, and I could not look him in the eyes with the same frank gayety as heretofore.

"Girls talk to each other. I was still a school girl, although mixing so much with the world. We talked together. We read romances that fed our romantic passions on seasoned food, and none but ourselves knew what subjects we discussed. Had our parents heard us, they would have considered us on the high road to ruin.

"Yet we had been taught that it was right to dance; our parents did it, our friends did, and we were permitted. I will say also that all the girls with whom I associated, with the exception of one, had much the same experience in dancing; felt the same strangely sweet emotions, and felt that almost imperative necessity for a closer communion than that which even the freedom of a waltz permits, without knowing exactly why, or even comprehending what.

"Married now, with home and children around me, I can at least thank God for the experience which will assuredly be the means of preventing my little daughters from indulging in any such dangerous pleasure. But, if a young girl, pure and innocent in the beginning, can be brought to feel what I have confessed to have felt, what must be the experience of a married woman? *She* knows what every glance of the eye, every bend of the head, every close clasp means, and, knowing that, reciprocates it and is led by swifter steps and a surer path down the dangerous, dishonorable road.

"I doubt if my experience will be of much

service, but it is the candid truth, from a woman who, in the cause of all the young girls who may be contaminated, desires to show just to what extent a young mind may be defiled by the injurious effects of round dances. I have not hesitated to lay bare what are a young girl's most secret thoughts, in the hope that people will stop and consider, at least before handing their lilies of purity over to the arms of any one who may choose to blow the frosty breath of dishonor on their petals."

What it Takes to Kill a Man.

THERE is one thing which many people are ignorant of, and which is of great importance for them to know; and that is the amount of privation, suffering, exposure, hardship, and disease which will produce death. The ideas of many people on this subject are utterly vague. On the one hand, there are persons who are continually fearing lest they or others will by some excess or exposure imperil their lives; while on the other hand are persons, intelligent and sensible in many respects, who, with the most absurd and criminal carelessness, do and endure those things which, by the most simple and unchangeable laws of cause and effect, must produce death. They work for days and years beyond all reason; they stimulate their jaded energies, and lash themselves to endurance when so exhausted that repose is imperatively demanded; they eat unhealthful food improperly prepared; they breathe air that is foul and fetid; they pursue their occupations in places where the genial and lifegiving sunlight never comes; they dose themselves with poisonous drugs in quantities sufficient to destroy human life; they go on regardless of every symptom of disease, with deranged digestion, diseased lungs, failing appetite, unnatural pulse, with pains thrilling their nerves and hectic fever glowing on their cheeks; they live in climates which are unhealthful, in dwellings which are damp, and where disease riots and inmate after inmate expires; until at last, having outraged their whole physical nature, they die; and the wonder of every sensible person is that they did not die long before. Many of these persons might have lived to a good old age, if they had only known how much flesh and blood can endure; if they had only known what was safe and what was unsafe; but again and again persons of intelligence and ability walk straight to the grave, and never know their danger, until the spray of the dark river dashes itself at their feet.—*Hastings.*

The "Hardening" Process.—Some parents think if they clothe their children scantily—let them run without shoes and with legs all bare, neck and arms exposed to all kinds of weather—they will "harden" them; and they will refer you to those who do so now, and say, "They will endure very much more than the child who is warmly dressed." They do not consider that it is only the toughest that can bear this treatment; that the parents who thus care for their little ones destroy all the weak ones, as they cannot survive such "hardening;" they do not consider that only the strong, robust, and healthy by nature live under such treatment for any length of time, nor do they think that when born with such constitutions they might be still larger and stronger if properly cared for.

But properly caring for them does not include shutting them up in the house, in a close room, with impure air to breathe. Such a care is the worst kind, and is a cause of a very large percentage of our weak children. Keep their skins clean and sweet by frequent ablutions, clothe them warm, with flannel next their skin, with frequent changes, and then let them out in the pure out-door air, and teach them to breathe all they can. If people—if parents, present and prospective—would read and think more upon the rearing of healthy children, we should soon see a new development of health, and should not so often hear it said, "I am sick."—*When and How.*

A Timely Warning.—Cooling off suddenly when heated sends many a farmer's youth to an early tomb. It is often a matter of surprise that so many farmer's boys and girls die of consumption. It is thought that abundant exercise in the open air is directly opposed to that disease. So it is, but judgment and knowledge of the laws of health are essential to the preservation of health under any circumstances. When overheated, cool off slowly—never in a strong draught of air. Gentle fanning, especially if the face is wet with cold water, will produce a delightful coolness which leaves no disagreeable results.—*Sel.*

As true an advertisement as ever was written, was seen the other day in an exchange, although we presume the advertiser did not mean just what he said, but it read like this: "Babies having taken one bottle of my soothing syrup will never cry any more."

—Knowledge and timber should not be much used until they are seasoned.

LITERARY MISCELLANY?

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

BIDE A WEE, AND DINNA FRET.

Is the road very dreary?
Patience yet!
Rest will be sweeter if thou art aweary,
And after night, cometh the morning cheery,
Then bide a wee, and dinna fret.

The clouds have silver lining,
Do n't forget;
And though he's hidden, still the sun is shining;
Courage! instead of tears and vain repining,
Just bide a wee, and dinna fret.

With toil and cares unending
Art beset?
Bethink thee, how the storms from heaven descending
Snap the stiff oak, but spare the willow bending,
And bide a wee, and dinna fret.

Grief sharper sting doth borrow
From regret;
But yesterday is gone, and shall its sorrow
Unfit us for the present and the morrow?
Nay, bide a wee, and dinna fret.

An over-anxious brooding
Doth beget
A host of fears and fantasies deluding;
Then, brother, lest these torments be intruding,
Just bide a wee, and dinna fret.—*Sol.*

Importance of Preserving Physical Health.

BY MRS. E. G. WHITE.

It may seem strange to some that, while all is stir and activity in the Temperance cause, I should, in discussing that question, enter so fully into the home life, and the development of character in the child, as it progresses from infancy to maturity. My apology is that the work of temperance reform must begin at home, and with the early training of the child, in order to be thoroughly successful. The moral sensibilities of parents must be roused to appreciate the responsibility incumbent upon them in rearing their children with the strength of character, and integrity of purpose to resist temptation, and to present a firm front against the attacks of popular vice, in all its seductive and dangerous phases.

I am thoroughly convinced that to realize a permanent change for the better in the morals of society, the education of the masses must begin with their early lives. The mother must be the first teacher through that stage of life in which the foundation of character is laid. The guidance of the child,

in its first years, is almost wholly committed to her. And, as a rule, she has the essential elements to be the best teacher it can possibly have; she has the deep love and sympathy for the child, the earnest desire for his welfare, the skill in his management which no other can possess to so great a degree. If, in her efforts to mold the character of her child, she keeps a firm hold upon God, and seeks by prayer and consecration to follow the divine will, in training the charge he has given to her, she can almost insure for him an honorable and upright future.

The habits formed in early youth, the tastes acquired, the powers of mind expanded, the self-control gained, the principles inculcated from the cradle, are almost certain to determine the future of the man or woman. Therefore, I have felt an intense earnestness in bringing before the mother, subjects which it is not fashionable to discuss in connection with the great cause of Temperance, now agitating the public more than ever before, because of the crime and corruption occasioned by intemperance and lax morals, which might have been prevented by the proper training in youth of the present generation.

One of the greatest aids in the perfecting of pure and noble characters in the young, and strengthening their capacity to resist temptations to do evil, to indulge appetite or to fall into any debasing excesses, is the possession of sound physical health. The mind and body are intimately connected. If the former is to be firm and well-balanced, the latter should be in the best possible condition. Conscience and right principles of life should be sustained by firm, quiet nerves, a healthy circulation, and the activity and strength of general health.

It is of the highest importance that men and women be instructed in the science of human life, and in the best means of preserving and acquiring physical health. Especially is youth the time to lay up a stock of knowledge to be put in daily practice through life. Youth is the time to establish good habits, to correct wrong ones already contracted, to gain and to hold the power of self-control, and to lay the plan, and accustom one's self to the practice of ordering all the acts of life with reference to the will of God, and the welfare of our fellow-creatures. Youth

is the sowing time, that determines the harvest both of this life and the life beyond the grave.

The youth of our time should be patiently instructed by both parents and teachers in the laws of physical health, and the means provided by the providence of God for the restoration of that health when once impaired by voluntary or involuntary violation of Nature's laws. Jesus did not ignore the claims of the body. He had respect for the physical condition of man, and went about healing the sick, and restoring their faculties to those suffering from their loss. How incumbent then is it upon us to preserve the natural health with which God has endowed us, and to avoid dwarfing or weakening our powers.

Parents should impress upon their children the fact that all their powers are from God; that he has claims upon every faculty; that in sinning against their bodies, by abusing their physical health in any manner, they sin against God, and slight one of his choicest blessings. God gives us health to use in his service; and the greater physical strength we possess, the stronger our powers of endurance, the more we should do for the Master; and instead of abusing and overtaxing our strength, we should sacredly preserve it for his use.

The young should be shown that they are not at liberty to do as they please with their lives; that now is their day of trust, and by and by will come their day of reckoning; that God will not hold them guiltless for treating lightly his precious gifts; that the world's Redeemer has paid an infinite price for them, and their lives and talents belong to him; that they will be finally judged according to the faithful or unfaithful stewardship of the capital which God has intrusted to their care. They should be taught that the greater their endowment of means and opportunities, the more heavily does the responsibility of God's work rest upon them, and the more are they required to do.

The moral sensibilities of the youth must be aroused to the fact that their physical, mental, and moral powers are not their own, to use for their own selfish gratification, but lent them of God, to use in his service; and that his displeasure is visited upon those who develop and indulge injurious appetites and passions, and debase their God-given powers to their own sinful pleasures. If the youth are thus brought up to feel their responsibility to their Creator, and the important trust given them in their own lives, they will hesitate to plunge into the vortex of dissipation and crime that swallows up so many of

the brilliant, promising young men of our age.

Let the work of reform begin at home; train up the child to habits of industry, and serious reflection; present life to him as a grave reality; show him his duty to his God, his neighbor, and himself; inculcate moral and religious principles in his mind; give him a suitable education, the means of earning an honest living; let him know you are ever ready to give him tender sympathy and sound advice, to help him if he stumbles, and to encourage him onward; and he will not be likely to go far astray, or miss being a blessing and ornament to the world.

"Out West."

FIRST PAPER.

BY MARY L. CLOUGH.

It is an uncertain term, with a wide significance as to latitude and longitude. In New York it is Chicago, in Chicago it is Denver, and in Denver it is San Francisco. But in San Francisco, they still talk of going West, through the Golden Gate and over the blue ocean to Pacific-built Honolulu. And even there, they point with out-stretched hand to the Celestial Empire and the flowery shores of Japan. Verily the East has become West and the West has become East, and the earth is but a spinning ball for the feet of the generations.

"Out West"—what a glamour of romance used to enshroud that fabulous region! What mystical visions thronged the brain, of waving plains and distant mountains, troops of flying Comanches all hanging upon one side of their horses with only a foot upon their backs to preserve an equilibrium, while they shot clouds of death-dealing arrows at their enemies from beneath their steeds; where white caravans of emigrant wagons wended their way over the green prairies, and all sorts of spiritings away and hair-breadth escapes and daring rescues happened to beautiful young maidens, who miraculously preserved the spotless purity of a white gown, and the usual attractiveness of toilet, through the dust of the road, the panic of Indian capture, and the mad ride through rivers, rain, and mud. We had all the world of *possibility* from which to draw romances. Did not the spurred and blanketed Mexicana—lost scion of Castilian nobility—haunt the rocky passes, in wait for tribute from unwary travelers, his Spanish eyes flashing beneath his sombrero? Did not Kit Carson make the canyons ring with the shrieks of the riddled

Apaches, and pilot whole trains through regions where every clump of sage brush ambushed a murderous savage? Were any fictions more marvelous than the actual occurrences in the silver mines of Nevada and the gold-fields of California, where a man might go to bed at night hungry and a pauper, and rise the next morning a millionaire, snapping his fingers at gilded coaches and liveried servants and coats of arms? where the learned scientist and the ignorant boor who signed his name with a cross, where the pious parson and the kid-gloved gambler, all herded in the same narrow gulch? where the East and the West, the North and the South, pig-tailed John Chinaman and Swedish Hans, all washed their gold pans in the same muddy slime? where morals and money, right and wrong, virtue and law, were all in an inextricable muddle, reconstructed occasionally when Judge Lynch walked coolly in to settle some unusually knotty difficulty, including a murder, or what was looked upon by the miner as worse—a theft?

It made no difference in that happy time and place whether one was out at the elbows and carried an empty stomach or not; by a lucky stroke uncounted millions might be his to-morrow, and in anticipation he was already a prince. But I fear I wander from the subject, which, thank Heaven, is broad enough; from the great prairies and the cloud-cleaving summits of the Sierras, to the blue Pacific and round the world. Ask the Indian where is the West, and he will stretch his dusky hand toward the far horizon, saying, "There sunset!" and travel so far as you will, the sun is always setting, but you find no place where he reins his steeds, beyond which there is no West. Yet here in America we tacitly give it a vague, uncertain locality, retreating year by year as the redeemed soil blossoms into cultivated fields and gardens and orchards. Out West is not what it was in our grandfathers' time, when the great Mississippi valley was being settled up, and the hardy squatters built their log-cabins in the green clearings of Ohio. Neither is it the Out West of our fathers, when St. Louis was the out-post of civilization, and the Missouri River marked the boundary of the white man; when the painted warriors marshaled their howling hordes on the rolling prairies of Kansas, and held full sway to the Rocky Mountains; when California was reached by a long sea voyage, doubling the fearful cape, or worse still, slowly and painfully crossing deadly Panama, or, worst of all, trailing that weary way on the perilous over-land, where the bones of hundreds bleached on the lonely road, victims of Indian slaughter, exposure,

starvation, and home-sickness, reaping death where they sought golden harvests. It is not the Out West of a few years ago, when the "Pike's Peak fever" broke out, an epidemic full-grown; when the long trains of white covered wagons dragged wearily over the burning alkali desert four or five weeks to reach the Mecca of their pilgrimage; when the great national thoroughfares were crowded with every description of vehicle, from the six-mule government freight, to the enterprising Yankee with his hand-cart (said Yankee by the way returned the next year a rich man and married the proud Miss McBride). Well do I remember a party of Connecticut boys who were footing it through and "going to sleep in barns" at night.

The "Out West" of *to-day* is girded by the telegraph and bridged by the iron rails, over which glides the panting locomotive, with its glittering train of carriages, traversing profound solitudes, theater of uncounted adventures and Indian massacres, yet bearing its living freight of wealth, fashion, and refinement, as safely and comfortably as if in the midst of the cities of civilization. In the luxurious Palace drawing room, one may recline on velvet cushions, and gaze through plate-glass windows upon the shifting panorama of the plains. At night one may go to bed and sleep as quietly as if at home, and enjoy the full pleasure and novelty of the trip, with none of the old-time draw-backs. Here one finds the most magnificent railroad carriages on the continent or in the world. There is a feeling of unchained liberty on these broad expanses, bounded only by God's far horizon, treeless, shrubless, houseless. Earth meets sky in one vast spherical outline, and the road lies, a straight ribbon of silver, under the light. The locomotive, like a trained trotter on the clean level of the home-stretch, buckles down to her work; and the sharp clank-te-clank grows shorter and shorter; the sparks leap backward like whole showers of exploded rockets; she is skimming the track like a bird, and the gray wastes of the plains fly past like swift-dissolving views; the frightened herds of buffalo plunge over the sandy wastes, jarring the earth with the thunder of their million hoofs. Never was a cleaner road, or a smoother run. Thirty hours from Kansas City to Denver, and there lies the "City of the Plains" on the broad valley of the wooded Platte, the mountains describing a semicircle about her, dark, and heavily timbered in the immediate prospective, blue and hazy in the distance, tier upon tier, height above height, all crowned by the jagged teeth of the Snowy Range, snow-slashed and cloud-capped, sharply cutting the

blue, Italian-like sky. That giant Colossus, Pike's Peak, stands guard, in grim, hazy grandeur, at the south-east, and all about lies the softly undulating plateau, rolling up gracefully to the billows of the foothills.

Denver, with its magnificent blocks, its imposing residences, its beautifully ornamented grounds, its fountains, statuary, shaded avenues, busy marts and schools and churches, its wealth, fashion, and refinement, is not the Denver that huddled in its dirty tents and cabins, a decade and a half ago, when the Indian encampment was the larger part of the town, and all provisions were freighted across the plains, and the Wells Fargo overland mail was the closest connecting link to "America." It is not the Denver that rushed from its bed in the horror of that dark and deluged night when the water-gates of the mountains were burst open, and the seething flood, a liquid, moving wall, swept down through the ancient dry bed of Cherry Creek, where, in easy security, Denver had built the best of her town,—her banks, her stores, her exchanges, her offices. As one looks on the shallow creek-bed, where only a sluggish stream creeps, lazily now, it is difficult to picture it a wicked torrent, raving like a maelstrom. That night of danger, death, and disaster, when the shrieking of women and children, the cries for help, and the gurgling groan of the dying, mingled with the roar of the water, and the crash of wrecked buildings, all seems like a delusive vision now. But Cherry Creek, never since entirely dry, creeps along to remind the city of its latent power, and warn it from too close an approach.

Colorado is the Sanitarium of America. Given, the blues, weak chest, dyspepsia, nervous debility, incipient consumption, a year among the grand old hills, in the spicy pine-woods, and the smiling parks, by the laughing water-falls, and on the green plateaus—result good appetite, sound sleep, sanguine hopes, *coulour de rose*,—health! It is pleasant to leave the crowded hives of the mining towns, pent up in the narrow canyons, stifled with the smoke of the furnaces, stunned by the thunder of the silver stamps, and flee to the undesecrated solitudes, to stretch yourself upon the emerald turf, near where the water weeps softly through the willows over its pebbly bed, to look up at the blue ribbon of sky spanning the canyon; to mark how the sombre green of the plumed pines climbs from your resting-place, to the top of the mountain, an unbroken wall of foliage a thousand feet high, striking sharply against a heaven that does not look like intangible atmosphere, but

a deep azure canopy that one might touch if he could reach so high.

Among these wilds is the place for thought and reverie; and here is also the paradise of adventure. It gives one a glorious sense of achievement to stand upon the backbone of the continent, in the treeless, shrubless realms of the hurricane. Nothing can be more sublimely lonely than these illimitable stretches of desolation. One feels a solemn awe creep over the spirit, a sense of the littleness of human strength and wisdom, as if one stood more than ever before in the presence of God. All about are cloud splitting peaks, gray and barren, slashed and garlanded with snow. They rise height above height, far and wide as the eye can reach, crowding off into the distant west. Toward the east, the plains stretch out like a vast blue sea, growing pale and paler in the distance, till one knows not where they mingle with the sky. Miles below your feet, great forests mass themselves, little lakes laugh in the sunshine from their green nests, the aspen leaves shimmer in the sun. The trees cluster in the valley, but the great mountains stand bare-headed before God. It is soul-inspiring to stand upon the great continental divide, where spring the rivers of the East and West; where the breezes from the Atlantic and the Pacific suck through the lonely pass; and we look down upon the line of steam that girdles the world.

Phosphorescence of the Sea.

THIS wonderful sight is observable in all seas, but is most striking in the Indian Ocean, the Arabian Gulf, and other tropical seas. In the Indian Ocean, Captain Kingman, of the American ship *Shooting Star*, traversed a zone twenty-three miles in length so filled with phosphorescent matter that a little before eight o'clock at night the water was seen rapidly assuming a white, milky appearance, and during the night it presented the appearance of a vast field of snow.

Scientists have discovered that this phosphorescence is often produced by low forms of animal life. Figuier gives in his "Ocean World" some very interesting facts relating to this curious phenomenon.

Some of the animals which produced the appearance described were thought to be about six inches long, and appeared formed of a gelatinous and translucent matter. At times, the sea was one blaze of light, produced by countless millions of those minute

globular creatures called *Noctiluca*. The motion of a vessel or the splash of an oar will often excite their luminosity, and sometimes, after the ebb of tide, the rocks and seaweed of the coast will be found glowing with them. Various other tribes of animals there are which contribute to this luminous appearance of the sea. M. Peron thus describes the effect produced by *Pyrosoma atlanticum*, on his voyage to the Isle of France :—

"The wind was blowing with great violence, the night was dark, and the vessel was making rapid way, when what appeared to be a vast sheet of phosphorus presented itself floating on the waves, and occupying a great space ahead of the ship. The vessel having passed through this fiery mass, it was discovered that the light was occasioned by living animals swimming about in the sea at various depths round the ship. Those which were deepest in the water looked like red-hot balls, while those on the surface resembled cylinders of red-hot iron. Some of the latter were caught: they were found to vary in size from three to seven inches. All the exterior of the creatures bristled with long, thick tubercles, shining like so many diamonds, and these seemed to be the principal seat of their luminosity. Inside, also, there appeared to be a multitude of oblong, narrow glands, exhibiting a high degree of phosphoric power. The color of these animals when in repose is an opal yellow, mixed with green; but, on the slightest movement, the animal exhibits a spontaneous contractile power, and assumes a luminous brilliancy, passing through various shades of deep red, orange, green, and azure blue."

The phosphorescence of the sea is a spectacle at once imposing and magnificent. A ship, in plunging through the waves, seems to advance through a sea of bright flame, which is thrown off by the keel like so much lightning. Myriads of phosphorescent creatures float and play on the surface of the waves, so as to form one vast field of fire. In stormy weather the luminous waves roll and break in a silvery foam. Glittering particles, which might be taken for sparks of living fire, seem to pursue and catch each other—lose their hold, and dart after each other anew.

From time immemorial the phosphorescence of the sea has been observed by navigators. The luminous appearance presents itself on the crest of the waves, which, in falling, scatter it in all directions. It attaches itself to the rudder, and dashes against the bows of the vessel. It plays round the reefs and rocks against which the waves beat, and,

on silent nights, in the tropics, the effects are truly magical. This phosphorescence is due for the most part to the presence of a multitude of *Noctiluca*, larval crustacean forms, some few Mollusks and Acalephs, which seem to shine by their own light. Of the most remarkable of the mollusks met with are several species of *Pyrosoma*, which present the appearance of a sort of mucous sac of about an inch long, which, thrown upon the deck of a ship, emits a light like a rod of iron heated to a white heat.

Sir John Herschel noted on the surface of calm water a very curious form of phosphorescence; it was a polygon of rectilinear shape, covering many square feet of surface, and it illuminated the whole region for some moments with a vivid light which traversed it with great rapidity.

The phosphorescence of the sea may also result from another cause. When animal matter is decomposed, it becomes phosphorescent. The bodies of certain fishes, when they become a prey to putrefaction, emit an intense light. MM. Becquerel and Breschet have noted fine phosphorescent effects from this cause in the waters of the Brenta at Venice. Animal matter in a state of decomposition, proceeding from dead fish, which floats on the surface of ponds, is capable of producing large patches of oleaginous matter, which, piled upon the water, communicates to a considerable extent, especially when the water is agitated, a phosphorescent appearance.

Table Etiquette.

"The turnpike road to people's hearts I find
Lies through their mouths, or I mistake mankind."

THERE are those among us who seem to think that if one has enough food to satisfy the cravings of his appetite, it matters little how it is served; and they are inclined to treat all suggestions in regard to table etiquette, and other dietetic refinements, as mere frivolous affectations, by which those who are rich and stylish endeavor to place themselves above those who are poor and lowly.

When Charles Wesley advocated the adaptation of the music of the opera to the sacred songs and music of the church, he said,—

"I do not know why the devil should have all the best tunes."

Neither do we know by what reason the rich should claim all the refinements and elegancies of the table.

They are not always costly, and they do not require much expenditure of time. A

table can be set with grace and elegance as expeditiously, and with no more expense, than if the dishes are thrown on, as it were, without any regard to symmetry or form. The chief dish can be placed in front of the head of the house, and the side dishes well arranged at the right and the left; the sauce and fruit dishes placed at the right hand, and flanked by the wooden bread-platter with its light, wheaten loaf.

Moreover, it is no more expensive to have a dish served at the left hand of your guest, so that he can help himself with his right hand, than to have it brought most awkwardly to his right side. There may be, however, an immediate gain of time in hurrying through your daily repasts; but the haste will surely be repaid to you by dyspepsia and its hundred attendant ills.

A great deal of information can be given and received at the table; and each dish should be prolonged with cheerful interludes of pleasant and social talk and conversation. "*Chatted food is half digested*," is an old proverb which contains much good advice.

Our business men, as a general thing, bolt their food as though it were a duty rather than a pleasure for them to eat. The city man swallows his breakfast in the greatest haste, often, however, reading the newspaper as he eats, and allowing his brain no rest. At noon he drops his pen and rushes out to a restaurant and appeases his appetite in the shortest time possible, with a confused mass of soup, meat, vegetables, and the inevitable pies of such places. Then he hastens back to his counting-room, and finishes the business he has on hand, never thinking that such a manner of eating is slowly digging his grave.

At five or six he closes his desk, and leaves his office or counting-room, and betakes himself home; and it is to be hoped that then at least he enjoys his dinner in quietness and peace.

The dweller in the country takes his food in a similar style, thinking that he requires only time enough to satisfy his hunger at every meal; and often finishes his enormous plateful of meat, etc., pie or pudding, before his wife and daughters, who have been engaged in supplying his wants, have half finished their repast.

We believe that sociability is an essential element of both a pleasant and a digestible meal; and we protest emphatically against the habits which we, as a nation, have contracted.

These habits are also one cause of the great increase of sudden deaths which startle us so sadly, and which are far more prevalent

among men than among women, who usually indulge in more time and more conversation while eating.

The sudden announcement of bad news, or the occurrence of anything to annoy or distress the mind, will take away one's appetite entirely.

Now this fact shows us that the mind should be in a quiet, gentle, and cheerful condition when one is satisfying the cravings of nature, and also that enjoyment is highly conducive to a good appetite and digestion.

"A man's body and his mind are like a jerkin, and a jerkin's lining; rumple the one, you rumple the other." So both the brain and the stomach must be at ease to enable the latter to perform its functions perfectly.

Therefore let us beg of you, never to swallow your food in silence, nor to brood over your business affairs while eating; but lead the conversation to genial, kind, and cheering topics.

Don't find fault with this, that, and the other dish; don't bring disagreeable subjects into your conversation; but make these daily meetings of the family a delight and pleasure to all, and let each one take a part in the conversation.—*Sel.*

The Ancient Ruins of Colorado.

A CORRESPONDENT of the Worcester *Spy* writes as follows of certain highly interesting discoveries recently made by the Geographical and Geological Survey of the Territories conducted by Dr. Hayden:—

"Prof. Hayden has given Southwestern Colorado a new interest, by discovering and describing the ancient ruins in that section and in Southeastern Utah. The fertile valley of the Animas was densely inhabited and highly cultivated by an enlightened race of people centuries ago. The ruins of the houses, corrals, towns, fortifications, ditches, pottery-ware, drawings, non-interpretable writings, etc., show that many arts were cultivated by these prehistoric people which are now entirely lost. Their houses were built of almost every kind of stone, from small bowlders to the finest sandstone.

"The finest of these ruins, and the nearest perfect, are situated about thirty-five miles below Animas City, in a large valley fifteen miles long by seven wide, on the west side of the river. This valley has been covered with buildings of every size, the two largest being 300 by 6,000 feet, and about 300 feet apart. They are built of small blocks of sandstone, laid in adobe mud, the

outside walls being about four feet and the inside walls from a foot and a half to three feet thick. In the lower story are found port-holes a foot square. There are rooms now left, and walls for about four stories high are still standing. About the second story, on the west side, there was once a balcony along the length of the building.

"No signs of a door are visible in the outer walls, and the ingress must have been from the top, in the inside there being passages from room to room. Most of them are small, from eight by ten to twelve by fourteen feet, the doors being two by four feet. The arches over the doors and port-holes are made of small cedar poles two inches wide, placed across, on which the masonry is placed. The sleepers supporting the floors are of cedar, about eight inches thick, and from twenty to fifty feet long, and about three feet apart. A layer of small round poles was placed across the sleepers, then a layer of thinly-split cedar sticks, then about three inches of earth, then a layer of cedar-bark, then another layer of dirt, then a carpet of some kind of coarse grass.

"The rooms that have been protected from exposure are whitewashed, and the walls are ornamented with drawings and writings. In one of these rooms the impression of a hand dipped in whitewash, on a joist, is as plain as if it had been done only yesterday. In another room there are drawings of tarantulas, centipedes, horses, and men.

"In some of the rooms have been found human bones, bones of sheep, corn-cobs, goods, raw-hides, and all colors and varieties of pottery-ware. These two large buildings are exactly the same in every respect. Portions of the buildings plainly show that they were destroyed by fire, the timbers being burned off and the roofs caved in, leaving the lower rooms entirely protected. The rock that these buildings were built of must have been brought a long way, as nothing to compare with it can be found within a radius of twenty miles. All the timber used is cedar, and has been brought at least twenty-five miles. Old ditches and roads are to be seen in every direction. The Navajo Indians say, in regard to these ruins, that their forefathers came there five old men's ages ago (500 years), and that these ruins were here, and the same then as now, and there is no record whatever of their origin."—*Pop. Sci. Monthly*.

Home Religion.—I have no faith in that woman who talks of grace and glory abroad, and uses no soap at home. Let the buttons be on the shirts, let the children's socks be

mended, let the house be as neat as a new pin, and the home be as happy as home can be; and then, when the cannon balls and the marbles and shots, and even the grains of sand, are all in the box, even then there will be room for those little deeds of love and faith which in my Master's name I seek of you who love his appearing. Serve God by doing common actions in a heavenly spirit, and then, if your daily calling leaves you only cracks and crevices of time, fill these up with holy service. To use the apostle's words, "As we have opportunity, let us do good unto all men."—*Spurgeon*.

The Esquimaux of Alaska.

THE Esquimaux of Alaska are a much better race of men, physically viewed, than their relatives of Greenland and the East generally, for they are larger in stature, and many of them are models of muscular beauty; they have better faces and are less stolid, being exceedingly vivacious and jolly; they have fixed places for winter residence, but roam about in the summer, camping in huts covered with walrus hides; they have a decided and independent bearing, and are remarkably free and unconstrained in their meeting with white men; but in spite of all this, they have proved utterly intractable in the hands of the missionaries, who have not been able, after years of persistent effort, to convert even a single family of them to enduring Christianity.

They have a Mongolian cast of countenance and complexion; the men and boys shave the crowns of their scalps, leaving a fringe of hair to fall over their foreheads like the "bangs" of our women of the period, while the females gather their long straight black tresses into two twists or braids behind, and wrap them up in copper wire or threads of sinew strung with beads.

Unlike the Indians at Sitka, who have thrown aside, for years past, their skin garments for blankets, or the Aleuts, who have adopted our own costume, these Esquimaux still wear their old-time dresses of bird and reindeer skins. The latter is very skillfully tanned, and usually worn as a coat-frock, or "parki," and breeches, with the hair next to the wearer's body; a collar and cuffs of white dog-skin, or the shanks of the reindeer. They have been but little, if any, changed by intercourse with the Russians, while they have seen very little indeed of our people; they sew with primitive bristle needles, and they cook in primitive wooden vessels, into which they toss heated stones when they

desire to boil or stew their fish or walrus meat.

The diet of the Esquimaux is, as a regular thing, walrus meat varied with whale's blubber of strong, rancid odor, during the long winter months, which begin in November and do not end until June; then they change off to mullets from the fresh-water lakes and sloughs, salmon and trout, interlarded with hair-seal meat, geese, ducks, auks, and their eggs. Seal and whale oil they always preserve in skins, and store it either above or under ground until wanted; this oil is the most offensive thing about their domestic economy, for they make it a point to never use it fresh if they can help it, but wait until it is fairly rotten in its skin bags before it is poured out on their meat and mixed with their berries.

They have but little to tempt the visit of traders—only a few fox-skins, a small amount of walrus ivory, and some whalebone. They have a general supply of old flint-lock muskets, which they seldom use, because they are too poor to buy ammunition. They spear the walrus and seal, shoot birds and fish with bone and ivory-tipped arrows, though they catch most of the former in large nets, which are stretched over the brows of cliffs, or across the numerous inland lagoons; these nets are very neatly made of walrus hide.—*Harper's Monthly.*

Great Shams.—If you are ever tempted to purchase a very large pear, decline the investment or reckon on a disappointment. You will probably find it woolly, almost tasteless, and more like a turnip than a pear. We know, for we have made the experiment in the land where the gigantic pears are grown. Overgrown fruits never seem to us to have the delicate sweetness which may be found in those of the usual dimensions. What is gained in quantity is more than lost in quality.

In the same manner great wealth, great honor, and great rank generally turn out to be great shams. Besides the counteracting influences of great care and great temptation, there is the inevitable satiety in too much of anything which renders it tasteless. For sweetness prefer competence to enormous fortune, the esteem of a few to the homage of a multitude, and a quiet condition to a position of eminence and splendor. There is more flavor in enough than in too much. Solomon's proverb bids us to prefer the dinner of herbs eaten in peace to the stalled ox consumed amid contention; and his remark is the more practical when we consider how often the fat ox seems of necessity to involve contention, while the herbs are not thought

to be worth fighting over. He chose wisely who said, "Give me neither poverty nor riches." He took the smaller and the sweeter pear.—*Sel.*

—Of the teaching of unimportant things, Pres. Chadbourne says: "In connection with some studies are found many things that either have no essential connection with them at all, a mere temporary connection, or one that is worthy the attention of professionals alone. It makes one shudder to think of the trash which scholars have been compelled to learn in connection with the simple studies of grammar, geography, and arithmetic. Small text books, containing only the essentials of the subjects treated of, only those parts that have life in them, that cannot be eliminated without leaving the subject imperfect, are rare. It takes a brave man, and one merciless toward himself, to make a small, simple, but thorough text-book. Such books we must have, if we use text-books at all."

—Mrs. Cady Stanton is credited with making a very sensible and sarcastic reply to some one who asked her if she thought that girls possessed, as a general thing, the physique necessary for the wear and tear of a college course of study. Mrs. Stanton answered: "I would like to see you take thirteen hundred young men and lace them up, and hang ten to twenty pounds' weight of clothes on their waist, perch them up on three-inch heels, cover their heads with ripples, chignons, rats and mice, and stick ten thousand hair-pins into their scalps; if they can stand all this, they will stand a little Latin and Greek."

—A young woman is said by the *London World* to have argued, in the midst of a dinner-party discussion of Brigham Young's death, that the principles of Mormonism ought to be reversed. "Times," she said, "are so bad, and fashions so expensive, that it is absurd for one man to have four or five wives; whereas, if each woman had four or five husbands, see how much cheaper it would be for each husband, and how much better wives could dress."

"I tell you, sir," said Dr. — one morning to the village apothecary, "I tell you, sir, *vox populi* should not, must not, be disregarded." "What, doctor!" exclaimed the apothecary, rubbing his hands. "You don't say that's broken out in town, too, has it? Lord help us!"

Popular Science.

Feeling the Pulse by Telegraph.—Some months ago Dr. Upham, of Salem, Mass., in order to explain to his audience the variations of pulse in certain diseases, caused the lecture-room to be placed in telegraphic communication with the city hospital of Boston, distant fifteen miles, and by means of special apparatus the various pulse-beats were exhibited by a vibrating ray of magnesium-light upon the wall. These experiments have lately been repeated at Paris with success.

Relative Strength of Wood and Iron.—Herr Hirn has been conducting a series of experiments in Germany on the comparative strength of wood and cast-iron in their different applications, and finds that in a great number of cases the former has the advantage. Professor Hirn finds the strength of wood to be in direct ratio to its *density*, and this strength is increased by immersing the pieces of wood in linseed oil, heated from 185° to 212° Fah., and letting the wood thus immersed remain for two or three days, or until partially saturated.—*Sci. American*.

The Coming Winter.—Astronomer Royal Smyth, of the Royal Observatory, Scotland, says that the coming winter is going to be exceedingly cold. From the observations of earth thermometers over a period of thirty-nine years, he finds that between 1837 and 1876 three great heat waves from without struck Great Britain; namely, the first in 1846-5, the second in 1858-0, and the third in 1868-7. The next one will probably come in 1879-5, within limits of half a year each way. The periods of minimum temperature, or greatest cold, are not in the middle time between the crests of these three heat waves, but are comparatively close up to them, on each side, at a distance of about a year and a half. Hence the next cold wave is due at the end of the present year, and very frigid weather may be looked for.

Steam Power.—The aggregate steam power in use in the world, at present, is estimated at 3,500,000 horse power employed in stationary engines, and 10,000,000 horse power in locomotive engines. This force is maintained without the consumption of animal food, except by the miners who dig the coals, and the force maintained in their muscles is to the force generated by the product of their labor about one to a thousand. This steam power is equal to the working force of 25,000,000 of horses, and one horse consumes

three times as much food as one man. The steam-power, therefore, is equivalent to the saving of food for 75,000,000 of human beings. Further, three power-loom attended by one man, produce seventy-eight pieces of cotton fabric, against four pieces produced by one hand-loom, worked by one man in the year 1800.—*N. Y. Sun*.

Influence of Valleys on Health.—Mr. Alfred Haviland lately informed the London Social Science Association that many diseases were induced by the common tendency to place houses in valleys instead of on the hill-sides. He says that valleys do not get a full share of fresh air. The wind blows over, not through them, and the atmosphere within their boundaries is comparatively stagnant. His observations are therefore opposed to the common belief that valleys are especial channels for atmospheric movements; but his opinions are sustained by Dr. B. W. Richardson, who is good authority. The latter gentleman enumerated twenty-five or thirty diseases which he thought might be attributed to the propensity for valley homes. Among them are croup, influenza, scrofula, rheumatism, fistula, calculus, and, possibly, some malformations.—*Galaxy*.

Electric Candles.—A correspondent of the *San Francisco Call*, writing from Paris, says of electric candles, a new invention:—

"Yesterday evening I visited this peculiar candle manufactory, in the Avenue des Villiers, the director of which is a Russian engineer and also the inventor, M. Joblockoff. The laboratory is hung with pictures and colored stuffs, which can be as easily distinguished in their shades as if in full noon-day. The candles have the same ratio to gas and oil lamps as sun to moonlight. The inventor poured some glasses of water on the flame of his dips, but they burned away all the same. They emit no smoke, and consequently cannot blacken objects; nor any heat—350 times less than an ordinary candle. There can be no fire, no explosions, and the light can be laid on some three to fifteen times cheaper than gas or oil light. The light does not tremble or twinkle much, and none at all if it passes through a globe slightly opaque. The candle is composed of two cylindrical sticks of charcoal, separated by a preparation of sand, ground glass, and kaolin; a magneto electric machine furnishes the current, which flows from one point to the other of the charcoal rods. Each candle burns three hours, and the extinction of one lights up another."

Cutting Metals.—A French machinist has discovered that by keeping his turning-tools constantly wetted with petroleum he was able to cut metals and alloys with them, although when the tools were used without the oil their edges were turned and dulled. The hardest steel can be turned easily if the tools be thus wet with a mixture of two parts of petroleum and one part of turpentine. We may add that holes may be drilled in glass bottles with an ordinary blacksmith's drill moistened with turpentine.—*Four. Chemistry.*

Atoms.—A scientist makes the following observations respecting the possibility of observing atoms with the microscope:—

"Were it possible to magnify the atoms of matter to a diameter available for distinct vision, we should be met at the outset by a difficulty too astounding for realization. It is a matter of easy proof that the magnifying of any object while in motion will exhibit that motion increased in velocity just as many times as the diameter of the object is augmented. Suppose we had at our command an instrument competent to amplify the atoms to the one-fiftieth of an inch in diameter: in the case of the hydrogen-atom the necessary magnifying power would be 10,000,000 diameters, under which power the atoms would have their motions enhanced by the same multiple, and we should then be called upon to examine an image the fiftieth part of an inch in diameter plunging across the field of vision five hundred million times faster than the flight of a cannon-ball."

The Modern Piano-Forte.—The *Popular Science Monthly* contains a very interesting article on this subject from which we extract the following paragraph:—

"In the final adjustments of the piano-forte by men of extremely keen sensibilities, certain defects, limitations, and peculiarities of the human ear, have been discovered that are noteworthy. The Greek architects well knew that long horizontal lines, if straight, would not appear to be straight when viewed from below, and therefore in the Parthenon they executed exceedingly delicate curves. Their columns were not exactly cylindrical, and many similar and most subtle deviations from geometrical truth were employed that remain as evidences of their consummate skill. In music, also, certain *nuances*—deviations from rigid accuracy or mathematical truth—are constantly made by which the powers of true artists are manifested. These minute

shades of difference—these slight variations or modifications of quality of tone, power of tone, pitch, speed, etc.—when not exaggerated, but determined with an art-concealing art, are found to be true to Nature, and find their justification, not as exceptions to general rules, but as exemplifications of the highest principles. The refined perceptions of piano-forte finishers have led them to the fact that the highest notes of the instrument should be tuned slightly sharper than perfect, or each note will appear to be flat, when compared with the octave below. If these notes are tuned perfectly, and proved to be so by various tests, there still remains a secret dissatisfaction and consciousness of a certain dullness, which detracts so much from the good effect of the instrument as to lead some persons to suppose it to be one of inferior quality. The expedient, therefore, of slightly raising the pitch of about seventeen of the highest notes (when the piano-forte is extended to high C) is adopted, by which the instruments gain greatly in brilliancy, briskness, sprightliness, or whatever term may fitly denote the reverse of flatness and insipidity."

Ammonia Vapor.—Schlessing reasons that as with a given tension of ammonia vapor in the air hot or warm water dissolves less than cold water, the tropical waters must leave a larger proportion of atmospheric ammonia undissolved than waters of arctic seas. This partially accounts for the greater luxuriance of tropical vegetation, the atmosphere being richer in this gaseous manure, which is precipitated by cold rains or dew.

—By recent experiments in electro-chemistry at the Mint in Philadelphia, films of gold have been obtained so thin that it would require 2,500,000 to make an inch in thickness. They are transparent, of a bright green color, but by reflected light resume the real gold color.

—It has been observed that selenium, a metal which is a very poor conductor of electricity in the dark, upon exposure to light becomes a very good conductor, the change being effected through the influence of light. It has been suggested that the therapeutic influence of sunlight may be due to its increasing the conducting power of the nerves.

—Natural leaves, sprays, and grasses may be beautifully frosted by dipping them in a thin solution of gum arabic and then sprinkling powdered glass over them.

THE HEALTH REFORMER

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

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Typhoid Fever.

At this season of the year one of the most formidable diseases which the physician has to meet is typhoid fever. Sometimes single, isolated cases of the disease occur, but more frequently cases occur in groups, the reason for which is found in the nature of the cause of this grave disease.

Probably no disease has been studied more assiduously and effectively than this. One point which has been settled beyond all chance for doubt is the direct relation of the disease to sources of filth. The products of the decomposition of animal excreta are viewed by the majority of the medical profession as the direct cause of the disease. When these poisonous elements are received into the system, they occasion the symptoms characteristic of the disease, unless there is a sufficient degree of vital activity to cause their expulsion without a general systemic disturbance.

The chief symptoms characteristic of the disease are the following: Chilliness at irregular intervals; loss of appetite; lassitude; headache; nosebleed; usually constipation at first, sometimes looseness of the bowels; inability to sleep in many cases; tongue coated, either whitish, yellow, or brown; a very bad taste in the mouth. As the disease advances the febrile symptoms increase. The temperature rises, and the fever is continuous, without either intermission or marked remission. A black or brown accumulation known as *sordes* appears upon the teeth and lips; the bowels become tender—usually upon the right side first—and are distended with gas; in the majority of cases there is diarrhoea; in severe cases there is more or less delirium and sometimes coma; occasionally hemorrhage from the bowels occurs late in the disease, and is a very grave symptom.

The physician will note other symptoms than the above, but these are sufficient to enable any person ordinarily well informed to distinguish the disease. In case there is any question respecting the diagnosis, a competent physician should be consulted; and in any case, unless it is a very mild one indeed, it would be wise to call in a physician.

The treatment of typhoid has undergone great modifications during the last few years. One of the greatest improvements is the liberal use of water as a means of diminishing the temperature. As nearly all the danger comes from the high temperature which attends the disease, diminishing the animal heat is one of the most important indications to be fulfilled. There is no means by which this can be accomplished so effectively as by the use of water. The cooling effects of water appliances may be conveniently secured by means of the pack, affusion, the cool full bath, and the sponge or hand bath, with other cooling appliances.

A writer in a recent number of the *New York Medical Journal*, gives a complete record of the temperature of a typhoid patient who was treated at the Riverside Hospital, Blackwell's Island, N. Y., almost the sole remedy employed being the wet-sheet pack. In order to make the pack more effective, the patient was laid upon a rubber blanket after being enveloped in a sheet, and water of the ordinary temperature was poured upon him for fifteen minutes to one hour. This treatment never failed to bring the temperature down from one to three degrees. The pack was repeated three to five times in the twenty-four hours. Large doses of quinine were given a few times in place of the pack, but the effect upon the temperature was not one-fourth as great, which demonstrates the superiority of the pack.

When the pouring pack cannot be used to advantage, a very excellent way is to pack the patient in the ordinary way, covering him lightly, then opening the pack about once in five minutes, and sprinkling the patient with cool or tepid water, according to his sensations. Care should be exercised to keep the feet warm during the pack.

The application of large cool compresses to the trunk of the body, changing frequently, is a very excellent means of keeping the temperature down. Sponging the patient with tepid water every hour or half hour, according to the urgency of the case, is also a very convenient and effective measure.

The application of cool compresses, and even ice, to the head and spine, not only lowers the temperature, but prevents, in most cases, the delirium and other serious head symptoms, which usually accompany the disease, as well as contributing greatly to the patient's comfort by relieving the intense headache, which constitutes the greatest cause of suffering in these cases.

The tenderness and tympanites of the bowels, together with the diarrhoea, are best relieved by frequent and thorough fomentations, followed by the cool compress applied over the bowels constantly, and changed every few minutes.

It should not be forgotten that the patient needs nourishment, and should take it with regularity, even though he should not care for it. Ripe grapes, and other fruit, with oatmeal or graham gruel, are excellent food if relished, especially in the early part of the disease. Milk and beef-tea are better reserved for the latter stages of the disease, when the febrile action is somewhat lessened.

In the management of this disease nearly everything depends upon careful nursing. Treatment must be administered at the right time, and in a very thorough manner. Thorough ventilation is of the first importance, and the bedding should be changed very frequently, at least every other day. The discharges from the bowels should be instantly disinfected. A strong solution of copperas or a solution of permanganate of potash should be kept in the vessel, so as to disinfect the discharge from the bowels at once. Fecal discharges, after being disinfected, should be buried. These precautions are necessary to

prevent the communication of the disease to others.

When the patient begins to mend, and seems to be convalescent, there should not be too much haste to get him up, to have him sit up, walk, ride out, etc., as it is just at this period when some of the gravest difficulties are most likely to occur, as hemorrhage of the bowels, and perforation of the intestine. These are the two most unfortunate accidents that can occur in the course of this disease. Perforation gives rise to general peritonitis, which is pretty certain to end fatally. Hemorrhage is less certainly fatal, but in cases in which extreme prostration exists before its occurrence, the patient is quite likely to die.

The following summary of conclusions, drawn from a careful study of this disease, was prepared by Dr. J. W. Lazzell, of West Virginia; we quote from the *Herald of Health*:—

"1. That typhoid fever in its ordinary form is but very feebly contagious.

"2. That a malignant or putrid form is communicable, and sometimes eminently so.

"3. That a case may occur, seemingly sporadic or spontaneous, and yet prove a focus of contamination.

"4. That constitutional predisposition renders some persons more liable than others, such persons taking it from the slightest exposure; and while the rule is to be affected only once, yet exceptional cases may contract it the second, and even the third time.

"5. That atmospheric peculiarity renders it more virulent and communicable some seasons than others, a hot and a dry season favoring, probably, its propagation.

"6. That the system may be saturated or impregnated with the virus, which may remain latent for three or four weeks, or more, only requiring some disturbing cause to arouse it into action.

"7. That the virus may remain for a length of time in clothes or fomites, provided they be kept in a confined condition, excluded from the air.

"8. That stimulants are unsuited to patients, even in the later stages, and that, provided they are under a good system of management, the less medicine the better, as a number of cases treated on lime and water and milk did well, and all recovered."

The Death of Dr. R. T. Trall.

MANY friends of hygiene were doubtless made sad by the note which appeared in our news columns last month announcing the death of Dr. Trall. We had then received no information concerning the matter except through the uncertain medium of the newspapers, and so did no more than copy the announcement as it appeared in the *N. Y. Sun*. We have since learned something further of the circumstances of the case through the courtesy of Mr. Albert Turner.

As we are informed, the first cause of illness was a severe cold. This was treated, in accordance with the Doctor's directions, by a pack. He did not recover, however, as he hoped, but grew rapidly worse, his symptoms finally culminating in a severe chill, which, according to one report, marked the commencement of pneumonia, being attributed by another to the influence of malarial poison, which was very abundant in that section at the time. He soon succumbed to the disease, passing away very easily at his home in a cottage near the institution at Florence Heights, on Sunday, Sept. 23, at the age of sixty-five years.

For more than thirty years Dr. Trall had been an active worker in the cause of medical and sanitary reform. He was among the early pioneers of hygienic reform, and, as a writer and educator, has doubtless done more than any other hygienic worker during the last fifteen years. He wrote numerous works on hygiene and allied topics, which have accomplished a great amount of good, and will continue to bear fruit long after his death.

As a writer, Dr. Trall possessed much more than ordinary abilities. His style was terse, pungent, and effective. His ideas were always well defined and clearly expressed, without redundancy of language. In controversy, he was shrewd, uncompromising, and unsparing of the opposition. He never failed to make his arguments appear to the best possible advantage, never lacking an apt illustration to impress his points.

The death of Dr. Trall will doubtless be a great surprise to many who have expected that he would illustrate in his own person the advantages of a careful and unstimulating dietary in prolonging life. Such may

consider with advantage the following facts bearing on the case:—

1. Dr. Trall was an invalid when he adopted the hygienic mode of living, many years ago.

2. At the time of his death he was well advanced in years, much beyond the average length of human life, his years having doubtless been greatly lengthened by his mode of life.

3. There are other laws relating to health besides those pertaining to diet, some of which are even more important than the dietary. Dr. Trall has for many years overtaxed his nervous system by severe and excessive mental labor. He confined himself very closely to his study, and indulged in a great deal of night work.

4. Lastly, there are certain disease-producing causes which will prostrate the system and even occasion the loss of life, independent of modes of life or personal habits.

The death of Dr. Trall should certainly be in no degree attributed to his observance of the laws of hygiene. His life had, undoubtedly, been prolonged for many years by his careful habits in most respects, and hygiene should receive credit for this, rather than blame that he did not survive longer.

Effects of Drunkenness.

THE Commissioners of Public Charities and Correction for the city of New York, state in their report that more than ten thousand men, and as many women, were committed to the work-house on Blackwell's Island in 1876. The commissioners also state that drunkenness was the immediate cause of the imprisonment of three-quarters of the men, and seven-eighths of the women, and the predisposing cause in the cases of all the rest. The editor of the *Sanitarian* comments as follows on these facts:—

"The aggregate cost of sustaining the charitable and correctional institutions under the charge of the commissioners for the year, was \$1,150,230.55. The police and judicial departments, in dealing with the same class of persons, cost probably five times as much more, or more than \$5,500,000. As a credit side to this expenditure, it ought to be stated the city received for the year about \$300,000

for *license-fees*—for the privilege of promoting intemperance; the privilege of creating indescribable family miseries; the privilege of causing disease in a variety of forms, but especially idiocy and insanity; the privilege of fostering vice and crime—*these privileges* the city sells for \$300,000 a year, and reaps in return inestimable misery, at a pecuniary cost of millions!

“The terrible consequences of intemperance, the part it plays in pauperism, disease, vice, and crime, if in the State of New York alone, would horrify the world! But that which it is doing here, it is doing all over the country. It is the black death of the nineteenth century, scarcely less fatal to human life than was that which swept through Europe and Northern Asia five hundred years ago, and tolerated no less blindly. Indeed, the superstitious and imaginative creations which led the people in that age of the world to attribute the cause of the diseases which swept them away to eclipses, meteors, comets, and earthquakes, while they were blind to the influence of miasms, airless huts, corrupting food, and personal filth, were more excusable than the people of this age and generation are in their willful blindness to the debasing, demoralizing, and death-dealing devastations of intemperance, which they not only tolerate, but sustain at enormous costs. And to expect to stay the terrible epidemic of intemperance, disease, and crime which now prevails, or to reform the criminal's life by the multiplication of asylums, the building of finer jails, larger and better penitentiary accommodations—even to the extent of luxuries—by this continuous and exclusive dealing with *consequences* instead of causes, would only be equalled by the folly of trying to extinguish the flames of a burning city by building a new and larger one of the same combustible material, and with more commodious hospitals for the treatment of the burned.”

Local Anæsthesia.—It is often very desirable to be able to lance a boil, felon, or abscess of any sort without pain to the patient, especially in cases of nervous ladies and children. This can be easily accomplished thus:—

Lay upon the affected part a piece of ice

sufficiently large to cover the incision to be made. Sprinkle upon the ice a little salt, and in a minute or two the skin will be observed to have become white and insensible, when the operation should be performed at once. Knife, napkins, and all other necessities should, of course, be in readiness before the ice is applied, as the operation should be performed at once when the part is ready. The knife or lancet should be very sharp, as the frozen skin is exceedingly tough.

—The death certificates received by the Boston Board of Health show an appalling amount of ignorance on the part of many medical practitioners in that literary city. One which was received from a woman doctor read as follows:—

“This certifies that a baby boy died on the bornday of Febberly, 1876. Cause of death, ‘Born.’”

Other certificates stated the cause of death as “lack of villality,” “canker humer,” “lung dises,” “daeth barne,” “swallowing,” “canther of the bowels,” and “chituses.”

—An old physician declared that “if all the quack medicines were banished from the drug stores half the doctors would starve.”

People's Department.

A Word from Texas.—Our old friend, Mr. Jos. Clarke, who is laboring as a missionary of reform in Texas, writes as follows:—

“The fair face of the REFORMER greets us very pleasantly, and we hail its advent, as an old friend and teacher. May its usefulness increase and grow, until its voice is heard wherever disease is aggravated by drugs, and wherever death is hastened by empirics and quacks, and medical vampires, who, for lucre's sake, suck the life blood from the sick and the afflicted and suffering.

“We have seen the effect of care, in the dietetical department of life, since we have been in this State: here are three families from the North, who have been here from eight months to about two years; and although the water has been most of the time rather indifferent, and altogether inferior to the water we have been accustomed to at the North, yet our health has been uniformly good. We attribute this great favor, in a

great degree, to the teachings of the HEALTH REFORMER, which is in every house, and the teachings of which are carried out to a great extent, though no one of us claims perfection in these matters.

"Pork, tobacco, tea and coffee, and whisky form no part of our sustenance. We subsist upon the best that nature affords, as fruits, grains, and vegetables. This kind of diet keeps our blood from being too black or too blue, and of course we are not disposed to acts of violence, or deeds of cruelty; and though we do not pretend to be in all respects such peacemakers as the Bible recommends, yet we hope by continuing the life we have begun, and continuing to read and study the HEALTH REFORMER and other well-known studies, to become, ere long, real *genuine peacemakers and health reformers*."

"In this region of country, tobacco, snuff, whisky, fat bacon, and salt meats are largely consumed, and all the wonder is that human nature does not give way and let the people all into the grave at once; but humanity is certainly exceedingly tough, and will stand a vast amount of abuse."

A Note from England.—EDITOR HEALTH REFORMER: I think I ought to mention one fact concerning one of the Health Tracts you publish. I gave a copy of "Pork" to a member of the Sons of Temperance, not knowing he was employed at a buttermilk's where that article is sold. Since reading it, he has had no more pork for himself or family, and he has lent the tract, which has done further work. He ceases to recommend the article in the shop, and when asked if the pork is good, he can only answer, "As good as it ever was." If every health tract that has ever been published was as effective as that on "Pork," how the cause would have been advanced.

W. H. CLARK.

"Drips" and "Sirups."—The HEALTH REFORMER has several times spoken quite plainly in regard to the deleterious character of much of the liquid sweetening sold under the inviting names of "Golden Sirups," "Silver Drips," etc. In some instances there has been positive merriment over the supposed "absurd notions" (?) of the REFORMER in regard to sirups. Such individuals would be benefited by candidly reading and considering the following paragraphs from the *Inter-Ocean* of Sept. 21, 1877. A question is asked as follows:—

"In the articles on sorghum culture published in the *Inter-Ocean*, the statement is

made that good cane molasses cannot be made for the prices paid for fancy sirups now in the market; that the 'golden drips,' 'silver drips,' etc., are manufactured by the aid of chemicals from cotton rags, paper, sawdust, etc. Is it true? Where are such manufactories, if any?"

To this question, which is sent from Harlem, Iowa, there is a decisive response as follows:—

"ANSWER. Such is the case. Woody fiber may be made into sugar in the following way: Cut it into small pieces, and to each two parts add three of sulphuric acid, and let it stand for a day. Dilute the mixture largely with water, and boil for a few hours; add chalk to neutralize the acid, and let it settle. Pour off the top, and boil down to a sirup. There are numerous establishments in the United States where this process is carried on, which use the rags gathered in the streets of large cities, scraps of cloth and paper from the gutters, cigar stubs and quids of tobacco, old bones, rotten vegetables, the sweepings of bar-rooms and stores, etc., in the manufacture of 'fancy sirups;' and it is probable that fully seven-tenths of the 'golden drips,' 'silver drips,' etc., sold in the country are manufactured in this way."

The foregoing speaks for itself. It is a candid statement made for the benefit of hundreds of thousands of readers. Surely such a testimony is worth remembering.

G. W. A.

From an Agent.—A lady agent writes as follows from Ontario:—

As the result of lending the May No. of the journal I have just received a subscription from a friend who is troubled with bleeding at the lungs by spells. She saw the communication from J. H. Merrill in said number, and wishes to ask him through the REFORMER what is the particular regimen which helped him so much. If he will please answer through the same medium, or by private letter, he will confer a favor.

Her address is, MRS. NELSON FREEMAN,
Union, Ont.

We have no doubt that Mr. Merrill will be pleased to describe through our columns the regimen that led to his recovery.

—Oatmeal contains as much sugar as new milk, fifty per cent. more than rye meal and wheaten bread, and nearly fourteen times as much as Indian meal and rice.

The Sanitarium.

—The gymnasium in the new Main Building, which is situated only a few feet from the parlor of the old building, is being rapidly finished off so that it can be used during the winter, for recreation. It will be fitted up for croquet and other games, and will be warmed by steam, and is so thoroughly ventilated that patients can enjoy the advantages of out-of-door exercise without exposure. The broad verandas afford a fine covered promenade more than thirty rods in length. Those who are strong enough find a fine exercise for their muscles of locomotion in climbing the seven flights of stairs which lead from the basement to the summit of the tower, an altitude of eighty feet; and the beautiful prospect from the top amply repays the exertion.

Musical Entertainments.—Once in two weeks, on Monday evening, the patients and as many of their friends as can find room in the large parlor are entertained by musical performances by the best musicians in the city. The exercises are varied, being sometimes chiefly vocal, and at other times mostly instrumental. Last Monday evening a large audience was delighted with the excellent music furnished by a party of well-trained singers who generously tendered their services for the occasion. The quartette of gentlemen's voices called forth most hearty applause, as did also the cultivated lady soloist. In fact, the entire performance was a complete success.

Next Monday evening, Nov. 12, the friends at the Sanitarium will be treated to an orchestral performance which promises to be very fine.

Lively Times.—Cold weather and rainy days do not bring "dull times" at the Sanitarium. If there is no sunshine out-of-doors, all set at work to make an abundance of sunshine and good cheer in-doors. Every one is kept so busy with treatment and exercises that there is no time for "the blues." One of the most pleasant features of Sanitarium life which has been revived with the approach of the cold weather is the daily gymnastic

drill. Every morning at 9:30 A. M. all the patients who are able to leave their rooms, old and young, gather in the spacious parlor for the morning exercise, which is accompanied by music, and is very enjoyable. The exercises consist of a variety of light calisthenic movements calculated to call into gentle action all the muscles of the body, without fatiguing any. Especial pains is taken to develop the muscles of the chest so as to improve the breathing capacity. It is very pleasant to see a large room full of patients all moving in perfect harmony, and every countenance beaming with the exhilaration resulting from a quickened circulation and the dissipation of all thoughts of disease and suffering.

Questions and Answers.

Fat as Food.—A school girl, whose parents are subscribers to the REFORMER, finding in her school physiology statements which seem to conflict with the teachings of the REFORMER, wishes us to give our opinion concerning the following statements, which she copies from her text-book:—

"Children who dislike fat cause much anxiety to parents, for they are almost always thin, and if not diseased, are not healthy. If care be not taken, they fall into a scrofulous condition, in which diseased joints, enlarged glands, sore eyes, and even consumption occur; and every effort should be made to overcome this dislike. If attention be given to this matter of diet, there need be no anxiety about the possibility of increasing the quantity of food consumed, while with neglect, the dislike will probably increase until disease is produced. The chief period of growth—that is from seven to sixteen years of age—is the most important in this respect, for a store of fat in the body is then essential. Those who are inclined to be fat usually like fat in food, and then it may be desirable to limit its use. Some who cannot eat it when hot like it when cold, and all should select that kind which they prefer. Those living in Russia and Lapland devour very large quantities, as seven pounds daily, and eat it even raw; while those living in hot countries use very little. It produces more heat than any other kind of food."

To the above, which is quoted from a popular school physiology, we have to reply,—

1. The author makes empirical statements without adducing a single fact in support of his assertions. However, we are disposed to excuse the omission of the proof, in consideration of the fact that to require it would be to demand the performance of an impossibility.

2. The author says that children who dislike fat, "if not diseased, are not healthy." Query: If they are neither healthy nor unhealthy, in what condition are they?

3. What is said about "diseased joints, enlarged glands, sore eyes, and consumption," is simply absurd. If the writer had explained how a dislike for fat would cause a child to "fall into a scrofulous condition," or how the abundant use of fat would prevent such a catastrophe, his statement would be deserving of attention; but since he simply sets up an absurd claim without any attempt at proof, we wait for evidence.

4. Fat is not necessary for the support of any of the vitalized tissues. It never has any part to act in the vital activities of the body, being used only in the production of animal heat. Hence its importance in the maintenance of growth is very slight compared with that of other constituents of food, and the impression conveyed by the author quoted is a very exaggerated one.

5. The fact that the inhabitants of cold countries eat a great deal of fat is no argument for its use, since the people of those countries are notably unhealthy. Dyspepsia and torpidity of the liver are universal complaints. They are a dwarfed, shortlived race; and while their inferior physical development and liability to disease may be in part due to the rigorous climate, there can be no doubt that the gross habits of diet, and especially the excessive consumption of fats, is in great degree the cause of their ill health.

6. While fat is an important constituent of food, it is by no means necessary that fat pork, lard, suet, or even butter, or any other kind of animal fat, should be employed. Nuts contain fatty elements in abundance. Corn meal contains a very considerable proportion of fat. Oatmeal, peas, beans, and other articles of food, contain fat in quantities entirely adequate to meet the demands of the system, as has been proven again and again by vegetarians.

Hardened Wax in the Ears.—M. A. inquires what to do in a case of hardened wax in the ears.

Ans. A little warm sweet-oil or glycerine

should be dropped into the ear whenever there is an accumulation of wax. Apply two or three times, until the wax is softened; then syringe the ear gently with warm water. If necessary, employ a small scoop or spatula or remove the wax. Care should be used not to injure the drum membrane by too vigorous syringing, or violence in the removal of wax.

Taking Cold.—A. K. C. says that it is almost impossible for him to get into a violent perspiration without taking cold. Wishes to know if there is any remedy.

Ans. Yes; do not get into "a violent perspiration;" or in case profuse perspiration cannot be avoided, use great care to protect the body afterward. If the clothing becomes wet or damp from any cause, it should be removed at once, or as soon as possible, and exchanged for dry, warm clothing after the body has been vigorously rubbed. These precautions will almost always prevent cold.

Leprosy among the Jews.—H. H., Texas, wishes information concerning the correctness of a statement made by a clergyman in his hearing, to the effect that leprosy prevailed to a much greater extent among the Jews than any other nation, notwithstanding the attention which they gave to their dietary.

Ans. The statement is quite at variance with the truth. One form of leprosy is very common in many Eastern nations. It prevails to some extent among all classes, but especially among the poor whose sanitary conditions are such as to favor disease. Gross living is generally recognized as one of the principal causes of the disease.

Bathing in Dirty Water.—A. P. D. asks if it is healthy to bathe in water caught from a steam pipe, the water being about the color of soap suds.

Ans. Probably a person would not be injured by bathing in the water described; but he should be careful to take the precaution to wash himself very thoroughly in clean water after his bath. Perhaps it would be just as well to bathe in the clean water in the first place, since it would require less effort to remove the excretory products which accumulate upon the skin than the film of grease which would be deposited from the mixture of oil and water in the tank.

F. S. H. asks if the system requires poison.

Ans. The system has no use for poison of any sort. It can only be supported by proper nourishment.

DIETETICS.

"Eat ye that which Is Good." As a Man Eateth, so Is he.

—According to the *Dietetic Reformer*, the sanitary authorities of London condemned nearly 600 tons of animal food found in the markets, as unfit to be eaten. It is fearful to contemplate the dietary of the inhabitants of cities whose sanitary authorities are less critical.

—Apple tea for the sick is made as follows: Peel, core, and quarter one pound of apples; boil for half an hour in a quart of water; strain, add juice of one lemon, and sweeten to taste. Rhubarb, strawberry, or other fruit may be used in like manner; black currant tea is much recommended in England.

—The simplicity with which some of the ancient Romans lived was so great that when the Samnites sent a present of gold to a great general, Manius Curius, the messengers found him cooking his own dinner, which was a turnip roasted in the ashes of his fire; and he had only a wooden dish on which to eat it.

Bread Crusts.—What becomes of the old crusts of bread in Paris? asks *Figaro*, and then tells their transformations. The *boulangier en vieux*, "baker of the old" freely translated, utilizes the pieces of dry, damaged, and abandoned bread. He gathers the crusts in boarding-houses, convents, and hotels. These morsels, covered with sand, stained with ink, and often picked from heaps of refuse, are sold by servants to the "baker of old," who turns them into new preparations. The merchandise is first carefully divided. The fragments which are judged to be still in a presentable condition are dried in an oven and form *croutes au pot*, which are used in soup at low-class restaurants. Almost all the lozenge-shaped crusts served in dishes of vegetables have this origin. The crumbs and defective crusts are pounded in a mortar until they become a white paste, which butchers use to adorn cutlets. All the material that appears absolutely incapable of further service is roasted, reduced to charcoal, ground into powder, and by the addition of a few drops of essence of mint is converted into a tooth paste. Such is one of the metamorphoses of Parisian industry.

Eating Fruit.—We hardly know how to account for the popular impression that still prevails in many rural districts, that the free use of fruit is unfriendly to health. It has much to do with the scarcity of fruit gardens and orchards in the country. As a matter of fact, cities and villages are much better supplied with fruit the year round, than the surrounding country. There are hundreds of farms, even in the oldest parts of the land, where there is no orchard, and the only fruit is gathered from a few seedling apple-trees grown in the fence-corners. The wants of cities are supplied not so much from the proper farming districts, as from a few men in their suburbs, who make a business of growing fruit for market. The farmers who raise a good variety of small fruits for the supply of their own families, are still the exception. The villager, with his quarter or half-acre lot, will have his patch of strawberries, his row of currants and raspberries, his grape-vines and pear-trees, and talk intelligently of the varieties of these fruits. His table is well supplied with these luxuries for at least half of the year. But there is a lamentable dearth of good fruit upon the farm from the want of conviction that it pays. It does pay in personal comfort and health, if in nothing else.

The medical faculty will bear testimony to the good influence of ripe fruit upon the animal economy. It regulates the system better than anything else, and forestalls many of the diseases to which we are liable in the summer and fall. A quaint old gentleman of our acquaintance often remarks that apples are the only pills he takes. He takes these every day in the year, when they can be found in the market, and fills up the interval between the old and the new crop with other fruits. He has hardly seen a sick day in forty years, and pays no doctor's bill. We want more good fruit, especially upon our farms, and the habit of eating fruit at our meals. This is just one of the matters in which farmers' wives can exert an influence. A few dollars invested now will bring abundant returns in from one to five years. It is more intimately connected with good morals than our philosophers think. With good digestion it is quite easy to fulfill the law of love.—*Am. Agriculturist.*

FARM AND HOUSEHOLD?

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

Timely Hints.—Those who have not already done so should hasten to make preparations for the winter which is just upon us. Any repairs needed about the house to secure warmth and comfort should be made at once. The house should be banked, unless it has a close foundation; but straw or leaves, covered with dirt, should be used instead of manure, which is frequently employed. During the cold weather, while it is frozen up, manure will of course be harmless; but as soon as the warm sun of early spring melts away the ice and snow, decomposition begins and the whole house is surrounded with a prolific source of disease.

Farmers should not neglect to provide comfortable quarters for their stock. Cattle, sheep, and colts will suffer more from the chilly storms of late fall and early winter than from the severer cold of the later part of winter, since their protection of warm fur is not yet fully grown. It is very poor economy to deprive animals of proper shelter, since they require more food to maintain necessary warmth than if they are properly housed. Besides, it is certainly a cruel thing to deprive dumb animals of the protection necessary to prevent their suffering.

For the convenience of the housewife, a good supply of dry wood should be put under cover so as to be handy for use in all weather.

Care should be taken to close the cellar before the fruit and vegetables are injured by freezing; but the windows should be opened every warm, sunny day, to allow of change of air and thorough ventilation.

Every prudent mother will see that each member of her family is well protected against the cold by thick shoes or boots, warm stockings, and woolen under-garments. There is more real necessity for special care in this regard at the outset of winter than after the system has become better accustomed to the change from the warm season to a cold one. Thousands of lives are annually sacrificed by want of care in this respect.

Winter Preservation of Cabbages.—The winter sorts should be left in the ground as late as they can be pulled up by the roots, which in this climate will be about the end of November. Place in trenches, leaving a space six feet wide between them. Have the ground level where the cabbages are placed, so that they may pack nicely. Pack the heads close together, leaving the roots up. As the weather grows colder, cover gradually with earth dug from the space between the trenches, so that by the time of severe frost they will have a covering of five or six inches of soil. The roots will still be partially exposed. If it is necessary to cover a large quantity of cabbages, a more expeditious method is to plough a furrow, in which place the heads of the cabbages and then turn in the soil on them. As this covers them up with soil at once, it is not so good as the other plan, which has the great advantage of delaying the final covering as long as frost will permit. Good cauliflower and broccoli may be had as late as January, by placing unmaturing heads in a light cellar or cold frame.—*N. Y. Herald.*

To Clean Pictures.—Having taken the picture out of the frame, take a clean towel, and, making it quite wet, lay it on the face of the picture, sprinkling it from time to time with clean soft water; let it remain wet for two or three days; take the towel off and renew it with a fresh one. After wiping the picture with a clean wet sponge, repeat the process till you find all the dirt is soaked out of it; then wash with a soft sponge, and let it get quite dry; rub it with some clear nut or linseed oil, and it will look as well as when freshly done.

Upholstering Old Cane Chairs.—When the cane seat of a chair is broken, it may be made as good as new, or better, by upholstering it at home. After removing the superfluous bits of cane, cover the space with matting formed of three-inch-wide canvas belting woven together. Tack it temporarily in places. After placing over this some coarse muslin, draw both smooth, and secure at the edge with twine, making use of the perforations. Remove the tacks, turn the raw edge over toward the center, and baste it down. Arrange the curled hair or wool, or whatever

you propose to use for stuffing, and keep it in position by basting over it a piece of muslin. Then carefully fit the rep, pin it in different places until you are certain it is in perfect shape, and tack it permanently,—following, of course, the tracing made for the cane. Cover the edge with galloon to match the rep, using tiny ornamental tacks, and tie with an upholsterer's needle in as many places as is desirable, leaving a button on the upper side. When the back of the chair is to be repaired, a facing must be tacked on the outside.—*Sel.*

Polishing Brass.—For polishing the brass work of engines, rub the surface of the metal with rotten-stone and sweet-oil, then rub off with a piece of cotton flannel, and polish with soft leather. A solution of oxalic acid rubbed over tarnished brass soon removes the tarnish, rendering the metal bright. The acid must be washed off with water, and the brass rubbed with whiting and soft leather. A mixture of muriatic acid and alum dissolved in water imparts a golden color to brass articles that are steeped in it for a few seconds.

Removing Grease-Spots.—The following cleansing fluid is very highly recommended: Dissolve in a quart of water four ounces of castile soap. Add four ounces of ammonia water and an ounce each of ether and glycerine. The mixture should be bottled as soon as made, and should be kept from the air, as the ammonia and ether are very volatile, and will soon escape if the bottle is not kept tightly corked. A lady who has tried it recommends rubbing the grease-spot with bread crumbs.

To Clean Velvet.—The best mode of cleaning any kind of velvet is to sponge it with benzine collas, and apply a weak solution of gum arabic to the back. Then sew it in a frame (an embroidery frame will do), and iron it on the wrong side with a damp cloth placed between. If the nap requires raising, hold it with the wrong side downward over a basin of hot water. If there are any grease-spots, pour turpentine on the place and rub it till dry with flannel.

Smut Poison.—Great numbers of animals are lost every year from the smut taken into the system in the fodder, especially corn fodder and corn; also in second crop clover, either green or cured as hay. The most particular attention should be given to removing all smut before feeding. In cases of smut

poison there is no remedy and little chance of recovery.

To Clean Cane-Bottom Chairs.—Turn up the chair bottom, and with hot water and a sponge wash the cane-work well, so that it may become completely soaked. Should it be very dirty you must add soap. Let it dry in the open air if possible, or in a place where there is a thorough draught, and it will become as tight and firm as when new, provided it has not been broken.

—The *Boston Journal of Chemistry* maintains that drinking-water may be rendered poisonous by contact with zinc. Several cases are reported in which water has been contaminated by passing through galvanized iron pipes. Ordinary iron pipes are greatly preferable to galvanized.

—Ether, turpentine, or pure benzine will remove printing ink from any article.

—The luster of morocco leather may be restored by varnishing with white of egg.

News and Miscellany.

—Gambetta is thirty-nine.

—Chicago boasts of six medical colleges.

—The Duke of Cambridge is at the head of the British army.

—The Orleans family in France has but twenty-nine members.

—Scotland had snow early in September on the Grampian Hills.

—The orange crop of Florida is said to be larger than ever before.

—There are, in the actually surveyed portions of Minnesota, just 4,999 lakes.

—Chicago consumes from sixty to seventy million gallons of water daily.

—John Taylor has been elected President of the Latter Day Saints, of Utah.

—The fibrous roots of asparagus are coming into use for fine paper making.

—The Czar is said to have concluded not to have "Turkey" for Thanksgiving.

—The railroads are forming a combination to advance freights in all parts of the country.

—The convicts of New York City on Blackwell's Island lately struck on being deprived of their rations of tobacco. So prevalent is the use of this noxious weed among the criminal

classes that, of the nine hundred and thirty-six men there confined, there were not a dozen who did not chew it.

—An exchange suggests that Scotch snuff and whisky are liable to the same objection.

—It is said that the potato after its introduction into Scotland, was condemned as a sinful plant because no mention of it was found in the Bible.

—Brigham Young was the father of fifty-six children, and left seventeen wives, sixteen sons, and twenty-eight daughters.

—The grain crop of 1877 is the largest ever raised in this country, being 320,000,000 bushels of wheat and 1,580,000,000 of corn.

—The local authorities of twenty towns in England are considering the propriety of substituting petroleum for gas in the public streets.

—Iron cross-ties, which are first plunged in a bath of purified coal-tar to prevent oxidization, are being used on some of the German railways.

—The latest reports from India are of heavy rains in many of the districts, which will save many of the crops. The mortality from starvation is greatly decreasing, which gives encouragement that the famine may cease at some not very remote period; but some months must elapse before very material benefit will be received.

—The Chinese merchants of San Francisco have appealed to the Board of Education of that city to have public schools opened for the instruction of Chinese youth.

—At the Odd Fellows' Grand Lodge, held recently in Baltimore, statistics showed that the number of initiations have decreased about ten thousand as compared with last year.

—The great cities all warn people in the country against coming to them expecting to find employment this winter, as the times are still hard, and every department of labor is already over-crowded.

—William Cullen Bryant, Bayard Taylor, and Longfellow have recently been elected honorary members of the Literary Academy of Athens, which is under the special patronage of the Queen of Greece.

—In repairing the old New York post-office recently, it was found that the roof is as strong as when built 125 years ago. The shingles and beams are of oak, and were originally hewn out with the broad-ax.

—A method of burning petroleum under steam boilers has been successful in Italy; it consists in pouring it over a thin layer of asbestos which, being incombustible, serves to retain the oil, and provides a large wick.

—The scheme has been proposed to make a preliminary survey through Africa, with a view to running a railroad from Liberia two thousand miles north-eastward through the center of the continent, in order to open the vast resources of

the country to the United States and Europe, and the petition presented to Congress at its last session for an appropriation of \$50,000 for the purpose is again to be brought up.

—Just as the Turks are feeling triumphant over their successes, their ammunition is beginning to fail. A full cargo of cartridge shells has just been received from New Haven, but they have not sufficient lead at home to fill them, and not money enough to buy it abroad.

—Experiments with electric lights lately took place at Cronstadt. The apparatus was fixed on board the Peter the Great, and was of such intensity that small print could be read on a vessel moored four cables off. It is contemplated to furnish all the forts at Cronstadt with this light.

—The President's message recommends appropriations for the army on the basis of 25,000 men, also a representation at Paris and at the World's Prison Congress. The Secretary of the Treasury calls for \$32,436,736 for the Army, \$2,003,861 for the Navy, \$1,206,453 for the Court of Claims, and \$1,263,000 for various other objects.

—Dr. Lewis Sayre, professor of orthopedic surgery at Bellevue Medical College, New York, who is now traveling in Europe, is meeting with such enthusiastic receptions as were never before proffered to any American surgeon. On a recent occasion his many ingenious devices for the treatment of deformities, especially of the spine, were referred to so feelingly and eloquently in an address by an English surgeon that the whole audience was affected to tears.

—The United States, is one of the greatest grain-producing and grain-exporting countries in the world. Dr. Edward Young, Chief of the Bureau of Statistics, Washington, estimating the annual product at about 1,600,000,000 bushels. According to a recent statistical exhibit made by the French government, the total annual cereal product of Europe averages at present 4,994,000,000 bushels. Of this Russia furnishes 1,606,000,000 bushels, Germany 742,500,000 bushels, and Austria 450,000,000.

—A treasure-hunting expedition is being formed in New York City, which will start this month to search for gold and silver coin, rich jewels, ingots of bullion, and massive plate of the precious metals, to the amount of over \$6,000,000, which have lain in the waters of the Spanish main, off the Venezuela coast, one mile from the Island of Cuagua, for over sixty years. This treasure was the freight of one of Spain's men of war, the San Pedro Alcantara, which was dispatched from Spain in 1815, with 1,300 men and \$3,000,000 of silver on board to renew the navy and land forces. When Venezuela was reached, a revolution was in progress, and the citizens, thinking their property unsafe, transferred it to the San Pedro. The vessel, after securing other treasures, in all \$6,000,000, caught fire during a revel, and was totally destroyed by the bursting of the magazine. A thousand men perished and the treasure sunk in the ocean. Captain Folingsby has received

a contract from the Spanish Government, in consideration of the payment of five per cent. of all he finds, of the exclusive right to drag, dredge, and dive for the sunken treasure for six years. He thinks he can go over all the ground in eight months. His dredges and drags are of the most improved patterns, fitted with chain nettings to let sand escape but nothing else. He expects to search about 500 square feet per day. So far as known, little, if any, more than \$300,000 have been recovered from the wreck. He has, then, a good prospect of finding at least \$4,000,000, or \$5,000,000, and so becoming immensely rich with comparatively little effort.

—Battle Creek College, the newest of Michigan's educational institutions, is prospering beyond all expectation. The enrollment for this term has already reached more than three hundred pupils, and arrivals are of frequent occurrence. The school enjoys the reputation of being unusually thorough.

Literary Notices.

COLLECTION OF CHOICE POEMS. Orrville, Ohio :

H. A. Mumaw.

A pamphlet of thirty-nine pages composed of selections from the poetic writings of Bryant, Holland, Whittier, and other popular poets.

THE CHRISTIAN WOMAN. Philadelphia : Mrs.

Annie Wittenmyer.

A wide-awake temperance monthly, now in its eighth volume. The October number contains a vigorous editorial against tobacco-using, together with numerous other good things. The journal is evidently doing excellent work, and we wish for it the abundant success which it deserves.

FIRST ANNUAL REPORT OF THE CEREAL PRODUCTS OF MICHIGAN. Lansing : W. S. George, State Printer.

In this report the Secretary of State has done good service to the State, as well as great credit to himself. It is of no small value to the residents of the State to be able to show by carefully prepared statistics that Michigan is one of the best grain-producing States in the Union. According to the report the wheat crop for 1877 amounted to 21,000,000 bushels. The county of Calhoun, in which Battle Creek is located, produced over 1,000,000 bushels this year—more than was produced by any other single county in the State.

It is generally admitted that the quality of Michigan wheat is fully equal to that produced in any other State. The State also produces

abundant crops of corn and oats, together with considerable quantities of barley and rye.

Michigan is equaled by few States in the variety of its productions. All the fruits and grains hardy in temperate climates are grown here successfully, making it a very desirable State for residence.


TRANSACTIONS OF THE MICHIGAN STATE MEDICAL SOCIETY. 1877. Lansing : W. S. George, State Printer.

This report of the last meeting of the Association, held last May, contains, in addition to the secretary's report of the doings of the society, seven very interesting papers. The report is prepared in the neat and convenient style characteristic of all publications appearing from the office of our able State Printer, Mr. George.

The careful arrangement of the volume, with its completeness as a report of the proceedings of the meeting, reflect great credit upon the recording secretary, Dr. Geo. E. Ranney, of Lansing. There are many excellent things in the report which we would like to quote, but have space only for a paragraph from the able address of the president of the Society, Dr. Foster Pratt, of Kalamazoo. In showing the functions of and necessity for the medical profession, the Doctor thus refers to the causes of disease :—

“ We live in a world where inanimate matter, whether organic or inorganic, perfectly obeys the laws imposed on it ; where the brute creation, whether inhabiting earth, air, or water, perfectly obeys the laws of instinct which have been enacted for it ; but where *man only* is disobedient to the laws of his being. Though he is ‘the paragon of animals,’ and ‘created but a little lower than the angels,’ though his beauty and intelligence, his capacity for happiness and for suffering, greatly surpass that of all other earthly existences, he is the only disobedient and the only imperfect thing in an otherwise perfect universe. However men may differ in opinion in regard to the primal cause or causes of human imperfection, all men in all ages of the world acknowledge and accept the fact that man is imperfect, and that he is, more or less, consciously disobedient to the laws that should rule him. His physical nature is weakened by wasting in sensual gratification the strength that was intended for use ; his moral nature is depraved by obeying too much the law of selfishness and too little the law of love ; while his intellectual nature—that which lifts him above the brute and allies him by resemblance with God himself—becomes the degraded servant of his sensuality and his selfishness.”

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.

A New Work.

WE have just issued a new work entitled, "A Household Manual of Hygiene, Food and Diet, Common Diseases, Accidents and Emergencies, and Useful Hints and Recipes." The character of the work is thus explained in the preface:—

"As indicated by the title page, this little work deals with quite a variety of topics. It is thought, however, that all the subjects considered will be found usefully suggestive to every household. The aim has been to make the work eminently practical in character, and to condense into the smallest space the greatest possible amount of information.

"The suggestions and hints given under the head of 'Household Hygiene,' if thoroughly appreciated and applied, will obviate a very large proportion of the ills and suffering incident to domestic life.

"The section on 'Food and Diet' contains much which may be new to a majority of those who have never investigated the subject from the standpoint of health. It is not intended to be in any sense complete, the object being only to call attention to a few of the ways in which disease and premature death are occasioned by errors in diet.

"In 'Simple Remedies for Common Diseases' are given directions for treating many common maladies with such remedies, with few exceptions, as are to be found in any household.

"'Accidents and Emergencies' will be found to afford such information as may enable a person to be the means of saving many lives if it is carefully and promptly applied at the proper time."


THIS MONTH'S NUMBER.—Although a little late, we think this number will be found an interesting one to all attentive readers.


Mrs. White's article on the "Importance of Preserving Physical Health" calls attention to a subject of the most vital importance. If all parents could be made to appreciate the importance of the truths which Mrs. W. is inculcating in her monthly contributions, the work of reform which moves so slowly would receive a mighty impetus. The remedy which Mrs. W. recommends for the giant evil of the age, intemperance, strikes at its very root, and would


soon show most unprecedented results if it could only be applied.

"Out West," by Miss Clough, in her characteristic, racy style, will not fail to interest all our readers. We can easily imagine that not a few of them may become so fascinated by the glowing accounts of Western life and scenery which our contributor presents, as to wish to "go west" and view the picture for themselves.


"Typhoid Fever," a practical subject for the present season, should be carefully read. By the general adoption of the plan of treatment described we are certain that thousands of lives might annually be saved which are sacrificed to a less efficient mode.

 Canvassing for the HEALTH REFORMER should be prosecuted vigorously during this month and the next. We have printed several hundred extra copies of this number, anticipating that they would be wanted by canvassers. Now is the time when people generally secure their reading matter for the year, and as many as possible ought to be induced to take the REFORMER.

 The FAMILY HEALTH ANNUAL for 1878 is having a very rapid sale. Over 70,000 have already been ordered, and though our presses run day and night they are unable to keep up with the demand. If the friends of hygiene continue their efforts in the enthusiastic manner in which they have begun, the edition this year will much more than equal that of last. We shall have the special edition ready in a few days.

 Fourteen copies of the ANNUAL will be sent post-paid for \$1.00. Here is a fine opportunity, for those who will embrace it, to introduce the subject of reform to their friends in a very attractive manner. Great care has been taken in the preparation of the ANNUAL, to avoid anything in any degree ultra or likely to arouse prejudice, so that it might be just adapted for use as a pleasant introduction of the subject of reform to those unacquainted with it.

In lots of 100 the ANNUAL will be furnished at 50 per cent. discount. Special rates to missionary societies.

 We are constantly in receipt of queries like the following: "What work shall I procure that will give me full information on subjects relating to the care of the health, ventilation, diet, clothing, etc?" Finding ourselves unable to answer the query satisfactorily, as we know of no single work which treats all of those subjects in a practical and scientific manner, we commenced, some time since, the preparation of

a work to be entitled, Domestic Hygiene, in which we propose to treat the various practical subjects upon which the masses need instruction. We are pushing the work along as rapidly as possible, and will give in a future number a more extended statement of the nature of its contents.

The preparation of the new work announced in this number has engrossed so much of our attention, in addition to other duties during the last month, that we have been again compelled to go to press several days behind time; but we now have reason to hope that we shall not be obliged to be late again.

We are now revising "Plain Facts" for a new, somewhat improved, electrotypes edition. The demand for the book has been greater than was expected, so that a new edition is already needed. We want a few active men to engage in the work of canvassing at once. Experienced agents will find this a lucrative as well as useful occupation in which to engage for the winter.

We shall have ready in a few days a special edition of the Annual, which will be a really elegant affair, just the thing for hotels, reading rooms, libraries, and other public places. The retail price of the special edition is 15 cents. We will send, post-paid, ten copies for \$1.00; and will sell in quantities, at 60 per cent. discount.

Healthful Cookery;

A HAND-BOOK OF

Food and Diet;

— OR, —

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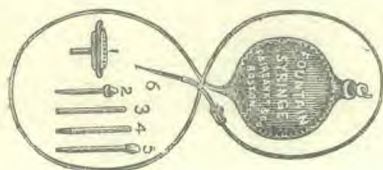
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