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DIETETIC CURIOSITIES.

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LOVE of health or fear of sickness (which differ as ancient from modern civilization) has always made the question of diet one of primary interest; yet there is certainly none about which doctors disagree more widely. It is amusing to compare the different food-theories which have been cherished like plans of salvation since the fighting of un-nature first became a science. If contradictory tenets imply error, we surely are further from unitary truth here than anywhere except in the Babel of speculative theology; and even there only dogmatic assertion, but not inconsistency, could ever go further. Just compare the gospel of Pythagoras with that of Dr. Brown, the Berwick prophet. Abstinence from wine—alcoholic stimulants, we would say at present—and from all animal food, is the keystone of the Pythagorean system, which also denounced the shedding of blood, and recommended the use of "food which needs no cooking"—fruit, nuts, honey, milk, and the like.

Is there a greater antagonism in all the *toto-cælo* distance from Odin to Mother Ann Lee? If either was right, the other must have been portentously wrong; yet the school of Berwick, not less than that of Samos, counted its disciples by tens of thousands. Again, is there a hygienic tenet which seems more incontrovertible to us than the propriety of the three daily meals? Yet the Romans of the ante-Cæsarean era, who as physical beings were so strangely superior to us, restricted themselves to a single meal in the twenty-four hours, for which they chose the very time when we dread repletion most—the end of the day, the hour between sunset and darkness.

Moses transmits from the lips of Jehovah his by-laws against pork and rabbit-flesh, and we know how many of his followers preferred death to the obnoxious diet, but our Saxon forefathers exalted the pigs' feet of Valhalla as the supreme reward of heroic virtue, and, dying, the Baresark could grin through his tortures at the thought of celestial spare-ribs. Charlemagne, when informed that his life depended on a change of *régime*, declared that if he could purchase immortality by absenting himself from the customary tri-weekly barbecues, he would think the price too high. He may have doubted the efficacy of the sacrifice, but the Mingrelian ambassadors, after receiving Abu-Hassan's stern ultimatum, "Islam or the sword!" informed him that, however willing they might be to propitiate the wrath of Allah, the national assembly preferred war and pork to peace without it.

Thales considered water as the *summum bonum*, and many of his teachings seem to anticipate the hydropathic school and our temperance dogmas; but Paracelsus proclaimed to the world that he had found the true panacea and the elixir of life by the discovery of alcohol, and seems to have been only too successful in his propaganda. "He finds believers who himself believes;" and Paracelsus certainly proved personal confidence in his doctrine by

swallowing (in the city of Salzburg, 1541), as the "grand quintessence of life," a five-pint bottle of alcohol, which it had taken him two months to distill. The funeral was very impressive, as the Salzburg chronicle thinks it necessary to observe. We know that our North American Indians are purely carnivorous, and persistently neglect all opportunities of enlarging their *menu;* also, that white men who voluntarily or otherwise shared their fortune and potluck for a few years, refused to rejoin Caucasia afterward. The Lotophagi (lotus-eaters), of ancient Greece, a people of peculiar habits, boasted that any stranger living among them for a little while would rather resign kinsmen and country than leave them again, only with this difference: the magnetism and the name of the Lotophagi were derived from their diet of lotus-leaves—they were strict vegetarians.

Joseph Kolnicker, born 1809 in Passau, Southern Germany, who served as a private soldier for a couple of years, had to be discharged before the expiration of his term on account of his appalling appetite. He would devour raw potatoes, horse-turnips, cabbages in the garden, could empty basketfuls of eggs in a few minutes, and, in spite of all precautions, gained admittance to an officer's pantry or the commissary store-rooms now and then, and with most deplorable results. He, too, converted his expensive talent into a source of profit by public exhibitions, and won so many incredible bets that, much to his regret, his renown eventually spread like that of the athlete Milo, and nobody dared to challenge him.

But no modern virtuoso can emulate the giants of antiquity. Claudius, Caligula, Domitian, and Heliogabalus, the imperial gluttons, almost exhausted the resources of the Orbis Romanus by their monstrous voracity. Cicero compares the scene after a Roman banquet to a battle-field; and many of the wealthiest patricians were ruined by one or two of those entertainments, to which the above-named potentates had an unpleasant habit of inviting themselves.

The symposia of Apicius lasted from twenty to thirty hours, and his semi-annual state dinners even two days, during which host and guests were restricted to recesses of ten minutes, and etiquette required them to partake of every dish and drink, the quantity being optional, except in regard to certain spiced wines, of which a good-sized jug was *de rigueur*—a rule which could only be circumvented by liberal libations to the gods. Yet even excess itself was exceeded by the mania of Vitellius, who wasted the yearly revenue of a province on a single banquet, gorged himself for hour after hour without intermission, and, in the words of Tacitus, "unadmonished by the eruptive protests of nature, never thought of yielding while he could see and hear"! He and some of his successors on the throne of gluttony probably owed their immunity to the virtues of a long lineage of frugal ancestors. Italy, truly, is the land of contrasts, of extremes in virtue as well as in vice. The resources wasted on a single day at one of those saturnalia of intemperance would probably have fed a village for a century of the early republican era, and for at least twenty years in our present time of poverty-born frugality. Frugal, in its original sense, meant literally subsisting on fruit in distinction to carnivorous habits, which were thought extravagant.

Cyrus, King of Persia, according to Xenophon, was brought up on a diet of water, bread, and cresses, till up to his fifteenth year, when honey and raisins were added; and the family names of the Fabii and Lentuli were derived from their customary and possibly exclusive diet. Eggs and apples, with a little bread, were for centuries the alpha and omega of a Roman dinner; and, in earlier times, even bread and turnips, if not turnips alone, which the patriot Cincinnatus thought sufficient for his wants.

It is singular that our temperance societies direct their efforts only against the fluid part of our vicious diet; a league of temperate eaters would certainly find a large field for reform. But in Italy the thing was attempted by Luigi de Cornaro, a Venetian nobleman of the fifteenth century, who restricted himself to a daily allowance of ten ounces of solid food and six ounces of wine, and prolonged his life to one hundred and two years. Though he did not organize his followers into a sect, his example and his voluminous writings influenced the manners of his country for many years. Cornaro would not have gained

many converts in Russia and Germany; but throughout Southern Europe frugality, in the truest old Latin sense, is by no means rare. Lacour, a Marseilles 'longshoreman, earned from ten to twenty francs a day, loaned money on interest and gave alms, but slept at night in his basket, and subsisted on fourteen onions a day, which preserved him in excellent health and humor, but got him the nickname of *quatorze oignons*.

A pound of bread with six ounces of poor cheese, and such berries as the roadside may offer, constitute the daily ration of the Turkish soldier on the march, and the followers of Don Carlos contented themselves with even less. A correspondent of the "Daily News" was served with a dish of radishes in a Catalan tavern, and ventured the remark that radishes were taken after meals in Northern Europe. "You can get some more after finishing these," was the reply. The radishes constituted the dinner.

Not that men *should*, but that they *can*, live on bread alone, is abundantly proved by the records of Old-World prisons. Silvio Pellico, the Italian patriot and martyr, subsisted for seven years on coarse rye-bread and water, which experience had taught him to prefer to the putrid pork-soup of his Austrian bastile. The prisoners of the Khedive were fed on rice and Indian corn, till the prayers of the French residents and his American officers induced him to sweeten their bitter lot by a weekly bottle of sakarra, or diluted molasses; and I learn from an article in a French journal that some of these unfortunates, who had passed long years without any hint of sakarra, were forced by chronic bowel complaints to return to their old dry fare.

Fedor Darapski, born 1774 in Karskod near Praga, eastern Poland, was brought to the government of Novgorod in his twenty-second year as a conscript to the Russian army, and was soon after sentenced to death for mutiny and assault with intent to kill. The Empress Catharine, acting on a recommendation of the Governor of Novgorod, commuted his sentence to imprisonment for life, but ordered that on every anniversary of the deed (an attempt to kill his colonel) the convict should receive forty lashes and be kept on half rations for a week after; the full ration being two pounds of black bread and a jug of cold water. On these terms Darapski was boarded at the fortress of Kirilov till 1863, when at the approach of his ninetieth birthday he was again recommended to mercy and liberated by order of the present Czar.

Corsican farmers live all winter on dried fruit and *polenta* (chestnut-meal), and the Moors of mediæval Spain used to provision their fortified cities with chestnuts and olive-oil. During the siege of Lucknow the native soldiers asked that the little rice left be given to their British comrades; as for themselves, they could do with the *soup*, i. e., the water in which the rice had been boiled!

But the *ne plus ultra* of abstinence combined with robust strength is furnished in the record of Shamyl, the heroic Circassian, who for the last two years of the war that ended with his capture had nothing but water for his drink and roasted beechnuts for his food, and yet month after month defied the power of the Russian empire in his native mountains, and repeatedly cut his way through the ranks of his would-be captors with the arm of a Hercules.

The philosophers of antiquity prided themselves on their frugal habits, which ranked next to godliness in their estimation, as expressed in the famous aphorism, "God needs nothing, and he is next to Him who can do with next to nothing"—whose material needs are the smallest. Primitive habits are certainly favorable to independence, especially in a genial climate, where a man is above the fear of tyranny and all social obligations, who like Shamyl can subsist on the spontaneous gifts of his mother Earth. "Do you know," Cyrus asked the ambassador of a luxurious potentate, "how invincible men are who can live on herbs and acorns?" If the Saracens had persisted in the simplicity of their fathers, the nineteenth century might see Moorish kingdoms in Southern Europe, and Arabian science and fruit-gardens in the place of deserts and monkish besottedness. Cato needed no prophetic inspiration to predict the downfall of a city where a small fish could fetch a higher price than a fattened ox.

Lycurgus, the Spartan, makes the diet of his countrymen the subject of careful legislation, but seems to have feared excesses in qual-

ity rather than in quantity. As long as the black soup and other national dishes remained orthodox in regard to the prescribed simple ingredients, free indulgence of the most exacting appetites was not only permitted but encouraged. At the philosophic reunions of the Lyceum the bill of fare permitted a choice between dried figs and honey-water in addition to the wheat-bread, which could not be refused, and Greece was the model of early Roman institutions in this as well as in other respects. Fruit and bread-cakes, spiced with Attic salt and music, entertained the friends of Plato at those suppers of the gods of three or four hours, which Aristotle preferred to so many years on the throne of Persia; but the very next generation witnessed the drunken riots of Babylon and the general introduction of Persian manners and luxuries.

The ancients undoubtedly were our superiors in hygienic insight, but among the many judicious restrictions of their dietary regimens there are some that we must attribute to prejudice or leave utterly unaccounted for. The Mosaic interdiction of rabbit-flesh, wild swan, and finless fishes has been very learnedly explained as a necessary consequence of general laws, which had to include those animals for the sake of consistency; but what on earth or below earth could induce Pythagoras, the great philosopher, to prohibit the use of *beans*—nay, even denounce any contact with the shell, the leaves, or the roots of the poor plant as a dreadful pollution? Such was the stigma he had attached to the violation of this rule, we are told, that a body of soldiers from Magna Græcia, who all belonged to the Pythagorean sect, permitted themselves to be cut to pieces or captured rather than save themselves by crossing a bean-field!

The old proverb *de gustibus* can hardly prevent astonishment at the diversity of tastes. What would Pythagoras have said about our national dish of pork and beans, or what shall we say to explain the Japanese prejudice against milk, the Papuan's partiality for fat white caterpillars, or the *gliraria* that were attached to every decent household of imperial Rome? Athenæus describes a glirarium as a large brick structure, divided by wire partitions into small cells, from five hundred to two thousand of them; every cell the receptacle of a captive rat, which was fattened on husks, rotten fish, and other offal, till a further increase in bulk would make it difficult to extract the animal through the narrow door of its cage. The perfect specimens were then collected, stuffed with crushed figs, and served in a sauce of olive-oil at the banquets of wealthy patriots who preferred domestic delicacies to colonial imports.

The Digger Indians of our Pacific slope rejoiced in the great locust-swarms of 1875 as in a gracious dispensation of the Great Spirit, and laid in a store of dried locust powder for years to come. Even mineral substances and strong mineral poisons have their votaries. Mithridates, King of Pontus, could take a large dose of arsenic with impunity, and the mountaineers of Savoy and Southern Switzerland use arsenic habitually as a safeguard against pulmonic affections. The poor Norsemen often mix their daily bread with a whitish mineral powder, more from necessity than a vitiated taste, we hope; but a similar substance is employed by the natives of Brazil and other parts of tropical America without any such excuse. The name of Panama is derived from *panamante* (originally *pan-de-monte*, mountain-bread), a substance which the Indians of Central America prepared from a mealy gypsum-powder, found here and there in the Sierra. Humboldt describes a tribe of Indians in Northern Brazil who had been addicted to the use of panamante for generations, and were distinguished by a monstrous protuberance and induration of the upper abdomen. When the French were masters of St. Domingo their negro slaves had contracted a similar passion, and could only be restrained by barbarous punishments from indulging it to excess.

The Turks shudder at seeing a Frank swallow oysters, and even in the cities of Europe and North America we find individuals with similar antipathies; and I know an old professor who passed half a century in St. Petersburg, and suffered grievously from an unconquerable aversion to caviare. Caviare is the salted or pickled roe of the sturgeon—not quite so bad as Schnepfendreck, a North German delicacy, which consists chiefly of the feces of the common woodcock.

In the use of hot spices, the Spaniards and

their South American kinsmen exceed every other nation. *Chilé colorado,* or red pepper, is one of the mildest condiments of a Peruvian kitchen. The *yerba blanca,* a whitish-green herb which is used raw with olive-oil on sandwiches, and enters into the composition of various ragouts, is described as resembling the *lapis infernalis* in its effect on a normal tongue. A Mexican can chew up a handful of red pepper as we would so much dried fruit, and eats onions, garlic, and salted radishes as a relief from more pungent tastes. I must believe it, on the testimony of the entire medical faculty of the city of Bremen, that a man who was treated in their city hospital for a most mysterious complaint settled the dispute of his physicians by confessing a weakness for *tan-water*—the fiery infusion of tan-bark, in which he had indulged rather to excess in the last year. The inhabitants of Southern Russia, especially of the Dnieper Delta, are all day long chewing the aromatic seeds of the sunflower and different kinds of pumpkin seeds, which appears to be less a stimulation than an idle habit, like the use of chewing gum in our boarding-schools.

Timour the Tartar celebrated his victories by solemn barbecues of broiled horseflesh and fermented mare's milk, or koumiss, which is still a favorite drink of his countrymen. Tartars also use a decoction of the poisonous fly-sponge as a stimulating beverage, and according to Vambéry have a national foible for morsels of superannuated meat, of an aroma which the French term of *haut-goût* would hardly begin to describe. Yet these same Tartars might shudder at being confronted with a dish of that Limburg delicacy which finds its way into the best hotels of Continental Europe. I cannot forget the emphatic protest of a Spanish officer who was invited to partake by a German admirer of the questionable dainty, in the cabin of an Havana steamer. "You think it unhealthy to eat that?" inquired the Hamburger, in polite astonishment. "Unhealthy?" exclaimed the Hidalgo, with a withering look and a gasp for a more adequate word—"no, sir! I think it an unnatural crime!"—*Popular Science Monthly.*

—The man who possesses good health is always rich.

THE PHYSICAL TYPE OF MANHOOD.

THE artist who studies man not as he is, broken and degenerated, but as he should be, in the enjoyment of all the powers which health and virtue can grant, will be our guide.

He discovers that in the perfect physical type of man there are certain definite proportions which constitute symmetry, and make up a harmony which reappears in every statue and painting of the highest class, and which the instinct of the artist appreciates more quickly than the tape line of the anatomist.

The details of this harmony will be interesting to note, as follows:—

The unit of the scale is the length of the nose measured from the inner corner of the eye downward.

Four times this unit equals the height of the head measured from the crown to a line horizontal with the point of the chin.

Eight times this unit equals the distance from the crown of the head to a line drawn around the chest at the level of the armpits.

Sixteen times the unit equals the distance from the crown to the junction of the lower limbs.

And thirty-one times the unit equals the total height from the sole of the foot to the crown of the head; and this again is equal to the distance from the extremity of the middle finger of one hand to that of the other when the arms are extended.

Very numerous and minuter measurements are given in works which treat of the rules of drawing and sculpture. The physician, with mind fixed on the attainment of life and health, naturally might expect this ideal physical type to coincide with that endowed with longest life and greatest strength. Singular to say, he would be in the wrong.

"The graceful shape and form of perfect symmetry" remarks an eminent army surgeon of large experience, "are seldom connected with power, activity, and that inexhaustible fund of endurance which supports toils and fatigues with constancy and firmness."

By what, then, can the capacity in a man for physical labor and endurance be judged?

This interesting question has been recently answered by a German physician, who has de-

voted much time to the study of the external conformation of the human body. He includes in his formula three factors, the height, the weight, and the circumference of the chest on a line with the nipple; and he decides that the greater the proportion of the latter to the former factors, the greater the physical capacity.

It was a familiar fact in our late war that neither very tall nor very short men supported the toils of field service as well as those of a medium stature. Nor is it common to observe either extreme in stature reach an advanced old age.

In one sense, the whole external form of a man is a commentary, and a disclosure of his nature, habits, and disposition. There is a physiognomy which is not confined to the face, but embraces the whole body. A gifted French surgeon, by close observation, became such an adept in this science, that he could, without fail, ascertain the profession to which a man belonged, by examining his body. As passion and indulgence leave their Cain-like brand upon the face, so occupation impresses its peculiarity on the muscles of the trunk and extremities.

The perfect physical type of manhood cannot be sought, therefore, amid the anxieties and toils of our marts and forums; it must not be expected in our gymnasia nor studios; it will not be found in struggling crowds; but we can expect it only where the wise ancients placed it, and where their works of art represent it—among the immortal gods.—*Napheys.*

THE FRUITS OF INTEMPERANCE.

THE punishment of vice and intemperance does not end with the vicious and intemperate, but the great human family is so constituted that one member cannot sin without pulling down others. Thus, in an appalling degree, are parents answerable for the weakness and vices of their children.

A man drinks moderately and steadily all his life, with no apparent harm to himself, but his daughters become nervous wrecks, his sons epileptics, libertines, or incurable drunkards; the hereditary tendency to crime having its pathology and unvaried laws, like scrofula, consumption, or any other purely physical disease. These are stale truths with medical men, but the majority of parents, even those of average intelligence and culture, are apparently either ignorant or wickedly regardless of them. When our people are brought to remove gin shops and gin sellers for the same reason that they would stagnant ponds or unclean sewers, there will be a chance of ridding our jails and almshouses of half their tenants.—*Sel.*

THE THERAPEUTIC USES OF COLD, COOL, TEMPERATE, AND TEPID WATER.

BY J. H. KELLOGG, M. D.

THE importance of water as a therapeutic agent has been recognized in all ages of the world, as we might easily show by reference to the writings of medical authors of various ages, from Hippocrates down. At no time, however, in the history of the world has this very common, yet none the less efficient, agent been held in so high esteem as now. We have not time to trace here the gradual development of this remedy, and the progressive stages by which it has passed from the hands of quacks and empirics into the armamentarium of the rational practitioner; but to every observing medical man it is a patent fact that the most progressive scientific physicians are daily giving to this agent more and more confidence as a remedy, and by extensive and careful experimentation are developing its therapeutic uses and properties in a manner most surprising to those who have never given the subject particular personal attention.

Whatever therapeutic value water possesses, it owes chiefly to its liquid and solvent qualities, and to its power to communicate or to abstract heat. It is the only diluent for the pabulum of the body, and as such is a most essential constituent of the blood. It is one of the most perfect and universal of solvents, and hence is well fitted to perform the offices of a detergent for the interior as well as the exterior of the body. It possesses a higher degree of specific heat than any other known substance, liquid or solid; and thus is eminently fitted for use in the regulation of the temperature of the body, and in producing

the various effects upon the body which may be produced by local or general modifications of temperature.

These remarks apply equally to water at all temperatures; but we must confine our further consideration of the subject to the limits already described. Applications of water may be classified, according to their temperature, into cold, cool, temperate, tepid, warm, and hot. The limits of temperature included in each of these classes are, respectively, as follows:—

Cold,	32° F.	to	60° F.
Cool,	60°	to	70°
Temperate,	70°	to	85°
Tepid,	85°	to	92°
Warm,	92°	to	98°
Hot,	98°	to	112°

As is now generally recognized with regard to drugs and other remedial agents, it is equally true of water, that a correct rationale of its therapeutic effects must be based on a careful study of its physiological effects. Let us then consider as briefly as possible the effects produced upon the body in a state of health, by applications of water of a temperature less than 92°.

First we will consider the effects resulting from applications of a temperature less than 85°, which include, cold, cool, and temperate applications. The effects produced are the same in kind whatever the exact temperature, within the limits named, differing only in degree:—

Cold or cool water, applied to any portion of the body, causes instant contraction of the small arteries of the part, through its influence upon the sympathetic or vasomotor system of nerves. So long as the application of the unusual temperature is continued, the vascular contraction is maintained, and the part seems nearly bloodless. If the cold is below 33° F., and is long continued, destruction of the tissues by freezing will result. If a moderately cool or cold temperature is maintained for some time, the blood-vessels of the part are more or less permanently contracted, and the blood supply thus lessened. If, on the other hand, the application is very brief, the contraction of the vessels is only momentary, and is followed by a proportionate degree of relaxation, and a corresponding increase in the supply of blood to the part. A very cold bath applied to any considerable portion of the body, and continued more than a very brief time, produces headache, dullness, sometimes nausea and vomiting, loss of sensibility, and other marked and unpleasant symptoms.

It is thus seen that the effects of cold are quite different—exactly opposite, in fact—as the application is a prolonged, or a brief one. The long application produces effects in some degree permanently sedative, while the brief application is followed by a momentary condition which may be termed shock, and which is usually followed very quickly by a reaction analogous to stimulation, when produced in any other manner.

Effect of Cold upon the Pulse.—Numerous experiments show conclusively that the cold bath has the uniform effect of diminishing the frequency of the heart's action from ten to twenty beats in a minute below the usual standard. Upon the first application of cold, there is a slight increase in the rate of pulsation; but this soon subsides, and is succeeded by a marked diminution. The ultimate effect is the same, whether the application is made at its maximum degree of severity or not; but if the application is first warm, being gradually reduced in temperature, the result is reached without the occurrence of the unpleasant shock, or feeling of chilliness, which attends the sudden application of cold, especially in persons of delicate nervous sensibilities. The amount and duration of the diminished rate of pulsation depends upon the temperature and duration of the bath. In health, it does not commonly extend beyond a few hours at most.

Effect of Cold upon Temperature.—The temperature of the body is reduced proportionately with the action of the heart, and experiments have shown that the reduction of temperature is not confined to the surface, but extends to the internal organs. The natural temperature, as shown by the thermometer placed in the axilla, is 98° F. During and after a cold bath, the thermometer applied to the same part, indicates from one-half a degree to five or six, or even more degrees diminution of temperature. In some cases

the temperature continues to fall after the bath. The real temperature is lessened, though the skin may glow and even seem to possess increased warmth. Cold and heat are, within certain limits, wholly relative terms to the nerves of sensibility. What is warm at one time may be cold at another, though the temperature remains the same. The same temperature may be warm to one hand and cool to the other. Temperature can only be *accurately* determined by the thermometer.

Rationale of Effects of the Cold Bath.—The manner in which the cold bath produces the sedative effects noted, is apparently simple. When applied locally, to a single organ or part, it diminishes the circulation in the part by occasioning contraction of the muscular coats of the arterioles, or small arteries. Their caliber being thus lessened, they of course allow the passage of less blood, and the circulation in the part is diminished. There are, then, four causes for the decrease of heat, viz:—

1. A portion of the heat of any part is brought to it by the blood; the supply of blood being lessened, the heat is diminished.

2. Heat is produced by vital or chemical changes which occur in the capillaries or their immediate vicinity. These depend largely upon the supply of oxygen, which, again, is regulated by the blood supply; and it being lessened with the blood, the amount of heat produced is diminished.

3. Again, it has long been known that all the vital activities of the body, which result in its growth, repair, and development, as well as all the functions peculiar to animal life, including animal heat, are due to the action of the protoplasmic elements of the body. It has also been long known that cold will restrain these activities. Every microscopist is familiar with the fact that in studying the movements of white blood corpuscles, or of other protoplasmic elements, it is necessary to maintain a temperature at least equal to that of the body. When the temperature falls, the amœboid movements cease; as the temperature is raised, they begin again. If the temperature is raised above that of the body, there is a wonderful and unnatural increase in the activity of the protoplasmic masses. In view of these well-known facts, are we not justified in the conclusion that the application of cold to the body, either locally or generally, may lessen the production of heat by lessening the vital activities, or protoplasmic movements by which animal heat is largely, if not wholly, maintained? It may be suggested in answer to this argument, that animal heat may be produced by chemical changes within the body analogous to combustion. To this we may rejoin that while the renowned Dr. Priestly, originally, and afterward Dr. Currie, and still later, the great chemist of Germany, Prof. Liebig, attributed the production of animal heat to the union of oxygen with hydrogen and carbon within the body, by a process of real combustion, later investigators have unanimously discarded the idea as unsupported by facts. The present view on this subject is that oxygen does not combine directly with the carbon, hydrogen, or any other of the elements of the tissues or of the blood, but that it is assimilated like other forms of food, while carbon di-oxide is excreted, like urea, cholesterine, and others of the effete matters of the body. Animal heat is one of the results of the various metamorphoses of the tissues by which these waste matters are produced. It seems to us that no more evidence is required to establish upon theoretical grounds the fact of the limitation of the production of heat by the application of cold.

4. The water in contact with the part, being of a lower temperature, abstracts heat from it as it would from any other body of a higher temperature than itself.

When the application of cold water is more general, being made to the whole body, or to a considerable portion of it, the same effects are produced on a larger scale. A large proportion of the small arteries of the body, being brought under the influence of cold, are made to contract, thus directly lessening the circulation, and so diminishing, also, the production of heat. Through the sympathetic system, the same effect produced upon the small arteries is produced also upon the heart, lessening the rapidity of its contractions. Again, it has been satisfactorily shown that the action of the heart is largely controlled by the action of the small arteries; so that we have abundant explanation of the decrease in the rate of pulsation.

Thus we see that water, when applied at a proper temperature, is one of the most powerful means of depressing the vital activities of the body, diminishing circulation and animal heat as will no other agent.

Tepid and warm baths occasion similar effects, and quite different from those produced by applications of a lower temperature. The effect of the tepid bath is uniformly to diminish the frequency of the pulse and of respiration, and to decrease animal heat. Its effects are the same as those of the cool or cold bath, in this respect, but they differ in several other particulars. Unlike the cold bath, the warm bath is not accompanied by an unpleasant shock, or chill, and, hence, is not followed by reaction. It promotes the action of the skin in a very marked degree, increasing both perspiration and absorption. When continued for an hour or two, the weight is appreciably increased by the absorption of water. Its general effects are very mild and soothing, often inclining the patient to sleep. This bath seems to produce its effects not so much by exciting the vital energies to abnormal action or resistance, as by supplying the most favorable conditions for the performance of the natural and usual functions. This is doubtless on account of its close approximation to the temperature of the body. In this respect, if this supposition be true, it differs from baths of a temperature either much above or greatly below the normal temperature of the body.

Respecting the physiological effects of the diluent properties of water, Prof. Liebig showed by careful experiments, conducted many years ago, that the free use of water as a drink not only greatly increases the volume of the excretions, especially that of the urine, but also increases very materially the solid constituents of the excreta. The urine contained more urea in twenty-four hours, and the other excretory products were proportionably increased.

The rationale of this effect is certainly very simple. The excretory elements are washed from the tissues where they are formed by the serum of the blood. When the fluid part of the blood becomes saturated, of course it cannot continue to cleanse the tissues, and the excretory products must accumulate. The nearer the condition of the serum approaches to saturation, the less its value as a cleansing agent. So also, the more abundant the serum, within reasonable limits, and the less complete its saturation, the more perfect will be the elimination of waste matters.

Another effect which is the consequent result of that just mentioned, the increased metamorphosis of the tissues, and increased elimination of waste products, is a corresponding increase of the nutritive processes. Assimilation is quickened, as well as disintegration, and often in increased degree, owing to the more highly vitalized state of the tissues secured by the more perfect elimination. This, too, was observed by Prof. Liebig, and I have often confirmed the same by personal observation.

Before passing on to consider the therapeutic effects of water applications, we should note the fact that there is little room for doubt that many of the effects of the various kinds of water applications are wholly of a sympathetic character. All portions of the body are intimately associated together by a system of nerves called the sympathetic system from their peculiar functions. Certain portions, as the skin and mucous membrane, are particularly related. The large number of sensitive nerves which connect the skin with the brain bring it in peculiarly close relation to that organ, and give additional potency to any agent applied to so extensive a surface. The well-known fact that burns of the skin are often the occasion of fatal ulceration of the mucous membrane of the intestines sufficiently attests the intimate relation between these two tissues; while the effects of mental emotions upon the skin, as of shame and fear, are conclusive evidence of the peculiar closeness of relation between the cerebral and cutaneous organs. The condition of the mind has much to do with the effect of a bath.

(*Concluded in June Number.*)

—Every man, woman and child in the United States consumes on an average, each year, thirty pounds of cane sugar, two gallons of sirup and molasses, besides considerable quantities of maple sugar, honey, and other sweets.

DANGER FROM MATCHES.

No one needs to be informed of the unwholesomeness of the old-fashioned sulphur match. It is also as disagreeable as unhealthful. The suffocating, irritating fumes of burning sulphur are among the most injurious of gaseous poisons. The difficulty is in some degree avoided by holding the match high above the head after igniting, until the sulphur is burned off; but still the evil is not by any means fully remedied.

Match manufacturers have sought in various ways to remedy this evil, and one of the most effectual ways in which it has been done, is by the use of other materials, as in the parlor match. These matches contain no sulphur, and are very easy to light; but they are open to another most serious objection. While they are the most convenient, they are at the same time the most dangerous matches in use. Concerning their dangers we cannot do better than to quote the following from the *American Agriculturalist*:—

"It should be borne in mind, that as the facility with which we can strike a light is increased, so is the danger increased. With these matches the merest light stroke gives us a light; so a similar stroke made accidentally upon a carelessly dropped match may cause a conflagration. These matches should be kept as carefully as you would keep gunpowder. Have no matches lying about; in each room where they are to be used have a metallic match-safe. Excellent ones of cast-iron may be had cheaply; elegant ones of bronze, for finer rooms, are also made. But let there be fixed places where matches are to be kept, and insist that they shall be kept nowhere else. Have common matches in the kitchen, and equally well protected. Teach, by example and precept, that they are a great blessing, and a source of great danger. Have them out of reach of children and of rats.

"Many a building has been burned by a rat gnawing a match. Rats will carry off parlor matches to their holes; perhaps they are tempted to do this by the smell of paraffine, with which the ends are coated before the explosive mixture is put on. We saw a year or two ago, a quart at least of parlor matches that were taken from a rat's nest in a country hotel not far from where we live; the rats had gathered these from the bar and other parts of the house, and taken them to their nest, and a single bite at one, or any rough usage, would have set the house on fire, and "the work of an incendiary," would have been the verdict.

"We have not the least desire to speak ill of these matches, for we use no other, but we think it best that their dangerous possibilities should be known. When every one knows that they are dangerous, then their danger will disappear. In this case, as in others, it is not "folly to be wise." Sometimes, though not often, the matches happen to be of poor wood, and the blow given to strike a light, simply breaks off the match near the end. Don't take another and another until one is found to light, and think no more about it, but hunt for those match ends, lest they be swept up and go with the rubbish. The rubbish heap in winter is often under a shed, until it can be disposed of in spring. Look out that no match ends make a burning on their own account.

"Occasionally we get a lot of matches which go off with an explosion, and scatter small burning particles. We buy our matches by wholesale, and once had a large lot, in which, owing to carelessness in mixing the compound with which they were tipped, every match was a small torpedo, sometimes throwing minute particles of burning matter for a foot or more. Even with ordinary lots a match will sometimes go off with a bang. One of these fiery bits upon the eye will cause intense pain—we have known it to do so by hitting the face—if not irreparable damage. Therefore never draw a match towards you; always draw it *from you*, and this, in case of an explosion, will incline the particles away from the face."

To the last remark we would add that not long since a man lost his life by one of these matches. A small bit of burning phosphorus was thrown under a finger-nail, and caused such a sudden and extensive inflammation and swelling that even amputation of the arm was not sufficient to save his life.

While agreeing with our honored contemporary in regard to the dangers which arise from the use of parlor matches, and in the suggestions made to those who use them,

still we cannot at all coincide with the advice to continue using them. In our opinion, it is not prudent to place in the hands of children and careless servants a thing which is "as dangerous as gunpowder," and even more dangerous, since gunpowder will not set a house on fire unless itself exposed to fire. It is well enough to educate children in the careful use of matches of all kinds; but it seems to us rather imprudent to run the risk of burning up the house and perhaps the children in it, before the little ones have learned to appreciate the importance of care. Such an occurrence would undoubtedly be a very impressive lesson to the survivors, but a somewhat too expensive one.

We have not the slightest hesitation in saying to all, Discard "parlor matches"—that is, those which ignite with an explosion and do not contain sulphur—altogether. Do not tolerate one in the house. The only really safe match is that known as the "Swedish safety match," which will not ignite unless rubbed on a piece of prepared paper. These are less convenient, but are perfectly safe. We use no other. J. H. K.

A Drunkard's Body after Death.—A *post-mortem* examination of nearly seventy persons who had died from the excessive use of ardent spirits showed the following facts:—

1. Congestion of the scalp and of the membranes of the brain, with much serous (watery) effusion; the substance of the brain white and firm, as if it had lain in alcohol for one or two hours.

2. The lungs not always, but frequently, congested or inflamed.

3. The heart flabby, enlarged, dilated and loaded with fat on the outside; the blood in it of a cherry-red color, and with no tendency to coagulate.

4. The stomach perfectly white, and thickened in some cases; in others, having patches of chronic inflammation. In the worst cases, the larger portion of the stomach covered with that species of inflammation which causes the blood to be poured from the minute veins.

5. The liver enlarged,—in old drunkards weighing from six to twelve pounds.

6. The omentum—a sort of apron which immediately covers the abdomen in front—loaded with a gray, slushy fat.

7. The kidneys enlarged, flabby and infiltrated in numerous spots with a whitish matter.

8. The small intestines filled with bile and coated with tenacious mucus.

9. The blood in a very fluid condition, having but little fibrine, but much albumen and fat.

10. The whole body, except the brain, decomposing very rapidly.

Is it a wonder that a drunkard "hath woes"?

Popular Errors.—To think that the more a man eats the fatter and stronger he will become. To believe that the more hours children study the faster they will learn. To conclude that, if exercise is good, the more violent it is the more good is done. To imagine that every hour taken from sleep is an hour gained. To act on the presumption that the smallest room in the house is large enough to sleep in. To argue that whatever remedy causes one to feel immediately better is good for the system, without regard to more ulterior effects. To eat without an appetite, or to continue to eat after it has been satisfied, merely to gratify the taste. To eat a hearty supper for the pleasure experienced during the brief time it is passing down the throat, at the expense of a whole night of disturbed sleep and a weary waking in the morning.

Dangerous Houses.—Houses that have been empty may become fever-breeders when they come to be re-occupied. An English sanitary officer alleges that he has observed typhoid, diptheria, or other zymotic affections to arise under these circumstances. The cause is supposed to be in the disuse of cisterns, pipes, and drains, the process of putrefaction going on in the impure air in them, the unobstructed access of this air to the house, while the closure of windows and doors effectually shuts out fresh air. Carbolic acid used freely in the cellar is a good and cheap disinfectant.

—Cleanliness is the elegance of the poor.

LITERARY MISCELLANY.

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

THE WATER-MILL.

LISTEN to the water-mill
Through the livelong day;
How the clanking of the wheels
Wears the hours away.
Languidly the autumn wind
Stirs the greenwood leaves,
From the fields the reapers sing,
Binding up the sheaves.
And a proverb haunts my mind,—
Like a spell is cast:
"The mill will never grind
With the water that has passed."

Take the lesson to thyself,
Loving heart and true;
Golden years are fleeting by,
Youth is passing, too.
Learn to make the most of life,
Lose no happy day;
Time will never bring thee back
Chances swept away.
Leave no tender word unsaid,
Love while life shall last:
"The mill will never grind
With the water that has passed."

Work while yet the daylight shines,
Men of strength and will;
Never does the streamlet glide
Useless by the mill.
Wait not till to-morrow's sun
Beams upon the way;
All that thou canst call thine own
Lies in thy to-day.
Power, intellect, and wealth
May not always last:
"The mill will never grind
With the water that has passed."

Oh, the wasted hours of life
That have drifted by!
Oh, the good we might have done,
Lost without a sigh!
Love, that once we might have saved
By a single word!
Thoughts conceived, but never penned,
Perishing unheard!
Take this proverb to thine heart,
Take, and hold it fast:
"The mill will never grind
With the water that has passed."

—In this world one is likely to get what he gives. Men's hearts are like a whispering gallery to you. If you speak softly, a gentle whisper comes back; if you scold you will get scolded. With the measure you mete it is measured to you again.

MORE ABOUT EDUCATION.

"MY daughter graduates next month, and, thank Heaven, will then have finished her education," remarked a fond mother a few days ago, as her darling came in from school, laden with books, and, to all appearance, tired out with the short walk from the Institute.

"Finished her education?" I repeated, "How old *is* the child?"

"Don't let her hear you call her a child;" laughed her mother. "Why, Flory is a full-fledged woman, seventeen years and three months old. Oh! the way that girl has studied night and day to keep at the head of her class, is something incredible. You see the fact is, she never cared for Latin or mathematics, and at first was rather dull, but when she found that her education would not be complete without them, she went to work in earnest, and, of course, she conquered.

"What's the matter Flory, don't you feel well?" continued the mother, noticing for the first time her daughter's lassitude.

"I am worried, mother, that's all," replied Miss Flory. "I know I shan't enjoy Nilsson at all to-night, on account of these dreadful lessons. These problems will take me an hour each besides this long translation. Perhaps if I study until it is time to go, I may be able to get some of them off my mind."

"How many lessons have you?" I asked, curious as usual to ascertain what kind of treatment this young mind and delicate body were receiving.

"Oh, I don't know," she replied wearily. "Sometimes I fear more than I have got brains for. I shall be very glad, indeed I shall, when I have finished my education," and the first thing I knew the tired child was sobbing.

"Why, Flory dear, how nervous you are!" said her mother. "Now go right down stairs like a good girl, and ask Ann to make you a nice cup of tea; you'll find some cake and chocolate drops in the basket. That will brace you up a little."

"Cake, and chocolate drops! Cup of tea! Brace her up a little!" I regarded that woman with the most undisguised astonishment, and was n't at all surprised when she asked me what in the world I was thinking about. The desire to reply by asking her why she did not order a dish of ratsbane and a tumbler of lemonade with a slight sprinkling of strychnine in it, was almost uncontrollable; but fearing that might not be considered exactly polite, I said instead:—

"Excuse me, but I do not think Flory's nerves need any more bracing up just at present. She is overworked, and should have immediate and utter relaxation. Let her lie on the sofa and rest until it is time to go to the concert. The music will then do her good, but how in the world can she enjoy anything while in this exhausted state?"

"Oh, if I only *could* shut up my eyes, and rest; but I must learn my lessons, indeed I must. So far, I have never failed once," sobbed the young lady.

"Your studies are of more consequence than the concert, Flory, had n't you better remain at home this evening, and then you will have plenty of time to rest, and learn your lessons, too," suggested her mother.

To my mind, this was adding insult to injury; and I could not understand how a woman of ordinary intelligence, could be so blind to the physical needs of her own daughter. I found, after a little, that Flory never could be prevailed upon to eat any breakfast, a cup of strong coffee being the only "nutriment" partaken of until lunch time, which on account of the distance was always eaten in the library of the Institute. This luncheon was usually composed of *cake and pickles*, a trifle less indigestible to be sure than corks and vitriol, but only a trifle. Sometimes this was varied with biscuit and cheese. She usually got home from school at four, sometimes, though not often, allowing herself time for a promenade, then resumed her studying, and kept at it often until long after the family had retired. This was finishing her education with a vengeance! and as I looked at the delicate form, already crooked with poring over volumes which she should never have been allowed to look into, I wondered if she would n't finish up in the grave before the time arrived for her graduation at the Institute. "Do you study physiology, Flory?" I next asked.

"No!" interrupted Mrs. Hammond. "Her teacher told me the other day that it would be time enough for Flory to read up in physiology when she left school, and that one reason why the scholars were not allowed to study it at the Institute was because there were so many immodest and disgusting details connected with the lectures and explanations, and that these some way seemed to compromise the teachers engaged in it, weakening their influence over their pupils. It will be quite time for Flory to study physiology when she is married."

"If when she has finished her education, as you term it, there is enough vitality left to exist with, to say nothing of marrying, I shall be very happily disappointed!" I could not help saying, although fully aware that it would have no effect, so far as the mother of that child was concerned.

Just think of an Institute for young ladies where physiology cannot be taught on account of its immodest and disgusting details. Just think of a young, sensitive, and growing brain crammed with dead languages, mathematics, chemistry, and logic, to the utter disregard of the taste of its owner, or the ability to digest such heavy intellectual pabulum. Just think of a mother in this enlightened nineteenth century allowing her daughter to study night and day, subsisting in the meantime on cake and pickles! To me it was like hitching a pony to a baggage wagon, and then whipping the tender beast up hill. What kind of an animal will this be if it survives the climbing? Either spavined, balky, or hopelessly demoralized. A man with such an animal to sell, cannot excuse his pranks to the merchant who wants a good horse, by representing him as "nervous," and "*so* sensitive." But mothers angle for rich and respectable husbands for their crooked-backed, unmarried, and highly educated and "graduated" girls, and sometimes succeed in palming them off on men intelligent enough, one would suppose, to know better. Sensitive and nervous, they understand to mean, susceptible, imaginative, keenly alive to the beautiful in nature and art! Marriage is a wonderful eye opener. Nervous is translated

nervous, after a few months trial, and not unfrequently "*fidgety*," when in reality it is nothing more nor less than disease.

Under the most favorable circumstances, as to health, ability, etc., the education of a young girl is a very ticklish piece of business. In the first place, no child should be sent to school until she is at least eight years old.

Young ladies are often put through peculiar courses of study, because they are expected to be fitted for teachers. Teachers are born, not made! and the faculty for imparting, if it comes at all, comes as naturally as the breath we draw. One-half the teachers in our public schools have no business there. They are badly born, badly reared, forced into blossoming by a hot-house development, which is of no service when they come to be transplanted into the hardier soil of the schoolroom. They are irritable, tired, sick, and their pupils hate them. What wonder? Show me a teacher that the boys have found a nickname for, and the story is told, at least as much of it as I need to know. She may make them obey by sharp tones, imperative gestures, and a frequent use of the rod, but obedience when it is the result of fear, although to be preferred to open revolt, is nevertheless of small value.

There is a great reform needed in the matter of education. Parents should look carefully after the health of their daughters, and never allow them to be crowded with intellectual labor. They should be exceedingly watchful, too, of their tastes and inclinations, not only consulting their own conscience and good sense, as to what is best fitted for them, but allowing the girls a voice in the matter.

Mothers, look out that your daughters develop harmoniously, and if you find that the exacting duties of a public school or seminary are interfering with this harmony, don't stop to talk about it, but remove them immediately; and do see to it that they are physiologically posted, before they are driven into the perils and cares of maternity.—*Household Magazine.*

—When you have had success and prosperity and social consideration, if your success is turned into defeat, and your prosperity departs, and your social relations are broken off, learn how to stand sufficient in yourself without these things. Learn first how to be a man by sympathy, and then learn how to be a man without sympathy.

CHINESE POLITENESS.

THE following description of Chinese politeness, if it were not vouched for by the reputation of an eminent author, might be considered as a burlesque on some of the customs too well understood in American high life:—

It is quite the custom in China to give the most pressing invitations, but only on condition that they shall be refused; to accept them would be to show that you had had a very bad education.

During the time when we were at our Northern Mission, we were witnesses of a most curious fact, which was wonderfully characteristic of the Chinese. It was one of our festival days, and we were to celebrate the Holy Office at the house of the First Catechist, where there was a tolerably large chapel, to which the Christians of the neighboring villages were in the habit of coming in great numbers. After the ceremony the master of the house posted himself in the middle of the court, and began to call to the Christians who were leaving the chapel: "Don't let anybody go away. To-day I invite every one to eat rice in my house;" and then he ran from one group to another urging them to stay. But every one alleged some reason or other for going, and went. The courteous host appeared quite distressed; at last he spied a cousin of his, who had almost reached the door, and rushed toward him, saying, "What, cousin! are you going, too? Impossible! this is a holiday, and you really must stop." "No," said the other, "do not press me, I have business at home that I must attend to." "Business! what, to-day, a day of rest! Absolutely you shall stop, I won't let you go;" and he seized the cousin's robe and tried to bring him back by main force, while the desired guest struggled as well as he could, and sought to prove that his business was too pressing to allow of his remaining. "Well," said the host at last, "since you positively cannot stay to eat rice, we must at least drink a few glasses of wine together. I should be quite ashamed if my cousin went

away from my house without taking anything." "Well," replied the cousin, "it don't take much time to drink a glass of wine," and he turned back; they re-entered the house and sat down in the company room. The master then called in a loud voice, though without appearing to address any one in particular: "Heat some wine, and fry two eggs!"

In the mean time, till the hot wine and fried eggs should arrive, the two lighted their pipes and began to gossip, and then they lit and smoked again, but the wine and eggs did not make their appearance.

The cousin, who most likely really had some business, at last ventured to inquire of his hospitable entertainer, how long he thought it would be before the wine was ready.

"Wine!" replied the host, "wine! Have we got any wine here? Don't you know very well that I never drink wine? It hurts my stomach."

"In that case," said the cousin, "surely you might have let me go. Why did you press me to stay?"

Hereupon the master of the mansion rose, and assumed an attitude of lofty indignation.

"Upon my word," said he, "anybody might know what country you come from! What! I have the politeness to invite you to drink wine, and you have not even the politeness to refuse! Where in the world have you learned your rites? Among the Mongols, I should think." And the poor cousin, understanding that he had been guilty of a terrible solecism, stammered some words of apology, and filling his pipe once more, departed.

We were ourselves present at this delightful little scene; and as soon as the cousin was gone, the least we could do was to have a good laugh; but the master of the house did not laugh; he was indignant. He asked us whether we had ever seen such an ignorant, stupid, absurd man as his cousin, and he returned always to his grand principle, that is to say, that a well bred man will always render politeness for politeness, and that one ought kindly to refuse what another kindly offers; "otherwise," he cried, "what would become of us?" We listened without deciding the question for or against him; for in what depends upon the customs of nations, it is very difficult to have one sure and certain rule applicable to all; and in looking closely at the matter, we thought we could make out their peculiar views of politeness. Both parties by this means obtain at small cost the satisfaction of appearing generous and obliging to everybody, and, on the other hand, everybody can obtain the satisfaction of knowing that he receives a great many kind invitations, and yet has the delicacy to refuse them. Yet, after all, it must be owned this is mere *Chinesery.—Journey through China.*

THE MUTATIONS OF MODERN BELIEF.

THE following graphic picture of the successive changes in belief through which many persons pass, is given by the *N. Y. World*, and we think is not overdrawn:—

Nine years of age—An attentive Sunday-school scholar.

Ten—Had committed to memory 2,000 verses of Scripture.

Eleven—Joins a church.

Twelve—Model boy.

Thirteen—Sent away to boarding-school.

Fourteen—Not so model. Learns to smoke.

Eighteen—Begins to be "liberal."

Twenty—More liberal.

Twenty-one—Slightly skeptical as to the Bible.

Twenty-two—Doubts Noah's flood, Joshua's sun, and Jonah's whale.

Twenty-three—Renews Bible belief and becomes Episcopal Low-church.

Twenty-four—Becomes Episcopal High-church, and drinks lager.

Twenty-six—Joins a scientific debating society, and becomes a close student of geology.

Twenty-seven—Orthodox religious belief quite wrecked on the "testimony of the rocks."

Twenty-eight—Becomes a Unitarian.

Twenty-nine—Becomes a Universalist.

Thirty—Attends a course of secret parlor lectures. Very radical on all subjects. Starts a community of congenial spirits, who quarrel, bark, bite, and scratch at each other like cats and dogs, after six weeks' communion. Leaves. Law-suit and scandal.

Thirty-one—Throws the Bible overboard and laughs it to scorn. Is enraged at the least mention of Moses, Aaron, and the Apostles. Slanders Abraham, David, and Solomon. Very proud of speaking out and announcing his "principles" in public. Declares his scorn of people who dare not.

Thirty-two—Is turned, neck and crop, out of the Universalist Church. Falls through everlasting moral space into nowhere. Begins to think it does not pay to speak out so openly in meeting.

Thirty-three—Becomes a secret rapping, tipping Spiritualist.

Thirty-four—Becomes a piano-lifting, flower-growing, invisible-voiced, and body-lifting Spiritualist, and hunts for Kidd's money under spirit direction.

Thirty-five—Becomes an apparitional, materializing Spiritualist. Communes with Captain Kidd and Shakspeare.

Thirty-six—Detects a fraud. Renounces Spiritualism.

Thirty-seven—Joins the Liberal Club, and combats everything.

Thirty-eight—Leaves Liberal Club, and becomes a Theosophist. Grants premium to ancient wisdom, and communes with the "elementaries."

Thirty-nine—Believes in total annihilation for a year, and determines to get all the fun possible out of this life.

Forty—Writes a book on "Pure Nothingism."

Forty-one—Renounces Nothingism and joins the Scientists. Worships mathematically and praises in rhomboids, cubes, triangles, and chemical formulas. Reduces emotion and sentiment to vegetable and mineral constituents.

Forty-two—Reads Darwin, and ciphers his genealogy down to a clam.

Forty-three—Shakes off Darwin. Takes to Swedenborgianism for a rest. Advertises for some new faith.

Forty-four—Thinks of joining the Catholic Church. Not that he can believe anything at present, but the Church, as he remarks, will "save him the trouble of thinking." Temporary *finis*.

—Ignorance is a subject for pity, not laughter.

Buried Cities in Asia.—From recent researches made on the borders of the great desert of Cobi, in Central Asia, it appears that cities of great importance once occupied the place now covered by barren wastes of sand. The desert sands swept onward and onward till, as in Egypt, everything disappeared beneath their ever increasing accumulation. The inhabitants of the cities fled before the resistless invader, and now, after many centuries have elapsed, our explorers are discovering the ruins of past glories—gold and silver ornaments, coins, glass, china, pottery, copper, vases, and other treasures, which show that not only people inhabited those cities, but that they were also acquainted with the arts. In some cases it would seem that the inhabitants failed to escape in time, for their skeletons have been found in unearthed houses, with their apparel and furniture intact and uninjured. The "Dunes," formed by the drifting sand, are in places more than one hundred feet in height, and the sands are moving onward to make fresh conquests.—*Sel.*

Train the Boys for Business.—The following excellent article we clip from a Canadian exchange:—

"There is one element in the home instruction of boys, to which, says a Boston paper, too little importance has been given, and that is, the cultivation of habits of punctuality, system, order, and responsibility. In too many households, boys from twelve to seventeen years are too much administered to by loving mothers or other female members of the family. Boys' lives during those years are the halcyon days of their existence. Up in the morning just in season for breakfast; nothing to do but to start off early enough not to be late; looking upon an errand as taking so much time and memory away from enjoyment; little thought of personal appearance except when reminded by mother to 'spruce up' a little; finding his wardrobe always where mother puts it—in fact, having nothing to do but enjoy himself.

"Thus his life goes on until school ends. Then he is ready for business. He goes into an office where everything is system, order, precision. He is expected to keep things

neat and orderly, sometimes kindle fires, file letters, do errands—in short, become a part of a nicely regulated machine, where everything moves in systematic grooves, and each one is responsible for correctness in his department, and where, in place of ministers to his comfort, he finds task-masters, more or less lenient, to be sure, and everything in marked contrast to his previous life.

"In many instances the change is too great. Errors become numerous; blunders, overlooked at first, get to be a matter of serious moment; then patience is overtasked, and the boy is told his services are no longer wanted. This is his first blow, and sometimes he never rallies from it. Then comes the surprise to the parents, who too often never know the real cause, nor where they have failed in the training of their children.

"What is wanted is for every boy to have something special to do; to have some duty at a definite hour, and to learn to watch for that hour to come; to be answerable for a certain portion of the routine of the household; to be trained to anticipate the time when he may enter the ranks of business, and be fortified with habits of energy, accuracy, and application, often of more importance than superficial book learning."

Depth of American Lakes.—There is a mystery about the American lakes. Lake Erie is only 60 to 70 feet deep; but Lake Ontario is 592 feet deep, 230 feet below the tide level of the ocean, or as low as most parts of the Gulf of St. Lawrence; and the bottom of Lakes Huron, Michigan, and Superior, although the surface is much higher, are all, from their vast depths, on a level with the bottom of Ontario. Now, as the discharge through the river Detroit, after allowing for the probable portion carried off by evaporation, does not appear by any means equal to the quantity of water which the three upper lakes receive, it has been conjectured that a subterranean river may run from Lake Superior, by the Huron, to Lake Ontario. This conjecture is not impossible, and accounts for the singular fact that salmon and herring are caught in all the lakes communicating with the St. Lawrence, but no others. As the falls of Niagara must have always existed, it would puzzle the naturalist to say how these fish got into the upper lakes, without some subterranean river; moreover, any periodical obstruction of the river would furnish a not improbable solution of the mysterious flux and reflux of the lakes.—*Sel.*

At the Top.—An exchange says that there is one place in the world where neither potatoes, meat, nor even eggs, can be cooked by boiling. It is on the high table-lands between two chains of mountains in South America, the Cordilleras and the Andes. It is from 10,000 to 14,000 feet above the sea level, and the air is so rarefied that water boils before it is hot enough to cook. If one wants a hot meal, he must bake or roast it. How would you like to live there?

Woman-Selling in America.—According to an exchange, the Chinese of this country bring with them the inhuman practice of selling and trading their wives. Ah Chew, a commercial Mongolian in San Francisco, is anxious to get rid of his wife—the reason he assigns is his inability to keep an unproductive luxury on hand—and declares that he will sell her for $350 to anybody, unless some of her relatives promptly furnish that amount. A Chinese woman will not command such a price for any honest purpose, and the unfortunate creature, fearing the fate she is threatened with, has appealed to an American family to buy her, promising to render domestic service for the advance. It is said that the Chinese sell their wives in every town and city on the Pacific slope (their own race being the purchasers) where they have gained a foothold, as soon as they grow tired of them or want to raise money. Many of the California newspapers are justly clamoring for the abolition of this Chinese slave trade.

Immense Stones.—In the erection of the Pyramids of Egypt, the immense stones used were obtained from the quarries in the Arabian hills, and were carried over the river by a bridge of boats. They were then brought by means of a causeway, which of itself took ten years to construct, and which is said to have been a fine work, with its polished stones and figures of animals engraved on

them. One hundred thousand men were employed at a time, and these were relieved by the same number at the end of three months. A long time was spent in leveling off the rock on which the edifice stands, and twenty years for the edifice itself. The stones were raised, step by step, by means of a machine made of short pieces of wood; and, last of all, commencing from the top, the stones were cemented together by layers of cement not thicker than a strip of paper, the strength of which is proved by the age of these enormous materials.—*Sel.*

Spelling Reform.—An enthusiastic advocate of the spelling reform asserts that the sound of *sh* in *shall* occurs in over 3,000 English words, and is represented in twenty-two different ways. A record kept in a Wisconsin post-office disclosed eighteen different spellings for Chicago.

Prof. March says that we throw away $15,000,000 a year in "paying teachers for addling the brains of our children with bad spelling, and at least $100,000,000 more in paying printers and publishers for sprinkling our books and newspapers with silent letters."

Another professor asserts that twenty-three per cent of the letters used in spelling are useless, which entails a cost for books of at least one-fifth more than would be required with the new style of spelling. This is not quite so bad as the orthography of some Eastern nations, which provides as many as 8,000 characters for 500 syllabic sounds. The interest in spelling reform seems to be increasing. It would certainly greatly facilitate the acquirement of the art of spelling.

POPULAR SCIENCE.

Another Marvelous Invention.—A Frenchman has recently invented an apparatus by means of which it is possible to send by telegraph to any distance not only photographs and pictures of all sorts, but simply the image formed by a camera obscura or a lens. By means of this instrument it will be possible to inspect at pleasure any object at any distance, having secured the proper arrangements. For instance, it would be possible for people in America to see an eclipse of the sun in Europe, or to behold any other remarkable or interesting phenomena exhibited on other parts of the globe.

What more can we ask for in the line of invention? Photography enables us to fix indelibly upon paper anything which pleases the eye. Even the flying feet of a race-horse are pictured in their ever varying positions as accurately as though they were stationary. The phonograph secures an equally faithful and permanent representation of sound. The finest efforts of a soprano soloist in New York can thus be produced for the benefit of the Celestials in Hong Kong. The *megaphone* enables people whose ears are deaf to all ordinary sounds to hear the faintest whisper. The *telephone* places it in the power of any person to converse with a friend a hundred miles away as freely as though he were within as many feet, or nearer. The *microphone* makes audible the tramping of a fly a mile away. And now the *telectroscope* promises to show us the wonders of the world without our going abroad. What more do we need?

The Motograph.—One of the most marvelous of Mr. Edison's discoveries, the motograph, has never received much attention from the press or from scientists. In the course of a series of experiments conducted a number of years ago for the purpose of perfecting an automatic telegraph apparatus, he observed that a piece of paper, when saturated with a certain chemical solution, while causing considerable friction upon the point of a needle drawn over it when in its ordinary condition, as soon as an electric current was passed through it, it allowed the needle to pass over its surface as easily as though it had been greased. Further experiments led him to the discovery that this property could be utilized in telegraphy, and he actually constructed a telegraph apparatus in which this newly discovered property was utilized in place of the ordinary, and hitherto indispensable, electro-magnet.

Mr. Edison has recently made further improvements in the adaptation of the principle, and has within a month produced a new telephone which is much more sensitive and vastly more powerful than any heretofore invented.

We witnessed the first public exhibition of the apparatus a few evenings since by Prof. Johnson who has been associated with Mr. Edison as an assistant for several years.

Etheric Force.—A few years ago we had the pleasure of spending an afternoon with Mr. Edison at his laboratory, then at Newark, New Jersey. We found him engaged in a series of curious experiments which he thought indicated the existence of a new force which possessed some of the properties of electricity, and yet persisted in violating nearly all of the best established laws of that well-known agent. The principal of these experiments he kindly repeated for our benefit, besides trying other experiments suggested by our friend, Dr. Geo. M. Beard, who accompanied us. The results were certainly marvelous, and seemed wholly incompatible with the nature of electricity.

After his experiments were made public by the lectures and writings of Dr. Beard and others, several well-known electricians attempted to explain the phenomena by some of the curious, yet known, laws of electricity, and as many thought, satisfactorily. Mr. Edison still holds to the new-force theory, however, and he may be right. Perhaps future developments will settle the question.

The Pedo-Motor.—An ingenious inventor has constructed what he terms a "pedo-motor," as a substitute for the bicycle and the velocipede, and an aid to pedestrianism.

"The instrument is a modification of the parlor-skate, with its frame fitted and strapped to the shoe, and its four small, rubber-tired, wooden wheels coming up on either side, instead of being kept under the shoe, as in the skate. The two forward wheels being half an inch smaller in diameter than the three-inch rear ones, give a slight pitch, which aids the forward impulse; and a metallic wheel at the heel helps the walker to guide and stop himself. The gain in speed is got by the forward motion still continuing while the feet are alternately raised, and, so far as can be known, the walker can cover at least double the distance of ordinary striding without any appreciably greater effort. It is tolerably evident that, as the necessities for swifter transfer between homes and places of business increase, mechanical ingenuity will direct itself toward what may be called personal rapid transit—or every man his own rapid motor."

Another Perpetual Motion.—The ignominious failure of every perpetual-motion maniac who has ever wasted his substance and made a wreck of his brain in the attempt to accomplish a patent impossibility, in no degree dampens the ardor of other wild experimentors in this direction. Every few months the achievement of this much-sought object is announced, but no more is heard of the wonderful invention, which is always found at the last moment to have "a screw loose" or a wheel out, or some other slight defect, just sufficient to make it useless.

Just now we have another pretended discovery of this sort, under the name of the "Gary magnetic-motor," the inventor of which claims to have constructed a machine which will produce an unlimited amount of power without more cost than the original expense of the machine itself, a mere trifle. The apparatus is said to depend for its power upon permanent magnets. The inventor claims that his machine is based upon the discovery of a neutral line in the magnetic field of a magnet. Good judges pronounce the thing a a fraud.

Tenacity of Metals.—Metals are more capable of sustaining weights without breaking in the form of wire than in any other. The different metals stand in the following order in regard to their tenacity: "Steel, iron, copper, platinum, silver, gold, zinc, tin, lead. Cast iron varies from coarse grained bars which requires only 20,400 lbs. to pull one square inch asunder, to some German cast iron, which requires 68,295 lbs.

—In the same church where Galileo was forced to utter a recantation and repudiation of his marvelous astronomical discoveries, which afforded the first proof of the modern doctrine of astronomy, a splendid statue is now erected to his memory, together with the magnificent marble tomb which contains his remains.

GOOD HEALTH.

BATTLE CREEK, MICH., MAY, 1879.

J. H. KELLOGG, M. D., EDITOR. TERMS, $1.00 A YEAR.

GERMAN LAWS AGAINST SMOKING.

EVERY medical man who has observed closely is aware of the damaging effect of smoking upon those who begin it at an early age. The evils of early smoking are admitted even by those who do not oppose its use by adults.

According to the *Medical Press and Circular*, the German Government has taken in hand the matter of early smoking, the habit being practiced in great excess by the youth of that country, so that it has been considered to have damaged their constitution, and incapacitated them for the defense of their country. In certain towns in Germany, the police have had orders to forbid all lads under sixteen years of age to smoke in the streets, and to punish the offense by fine or imprisonment. Moreover, a Belgian physician has found, during a journey of observation and inquiry, made at the request of the Belgian Government, that the too general and excessive use of tobacco is the main cause of color blindness, an affection which is occasioning increasing anxiety both in Belgium and Germany, from its influence upon railway and other accidents, and also upon military inefficiency. This is not the first time we have noticed this subject, for, in our opinion, the evil might be greatly moderated were the profession to impress upon parents the importance of their peremptorily forbidding their sons smoking until they had reached a certain age.

We have no question that the German youth have been greatly injured by the use of tobacco; but the query in our minds is, what is the "certain age" after which tobacco ceases to do harm? According to our experience, tobacco is harmful, and only harmful, in all quantities, to all persons, and at all ages. The action of the German Government, so far as it goes, is certainly wise, and must be productive of great good. A similar, though not so thorough-going measure, has been taken by the French Government in prohibiting the use of tobacco by students in attendance at any of the public schools. For our own part, we see no reason why a similar law should not be enacted in this country, though it seems so strange as to be almost incredible that rational human beings should insist in the indulgence of a vice so evidently damaging, enervating, and destructive to both mind and body, so tenaciously as to require prohibitory legislation. We have prohibitory liquor laws; why not prohibitory tobacco laws as well? One is as much needed as the other.

GOSPEL TEMPERANCE.

AT the invitation of our friend Mr. James Campbell, a publisher in Boston, we visited, a short time since, a "Gospel Temperance Meeting." The place of meeting was a hall on the first floor in an unpretentious building on Shawmut Avenue. A large placard on the door announced the fact that a gospel temperance meeting was being held within. As we entered, we found the hall already well filled and the meeting in progress. The leader politely invited us forward, and we improved the advantage offered by our position to observe the character of the audience, which we found to be made up, almost exclusively of white and colored people from the lowly ranks of life. Laborers, sailors, servant girls, bakers, butchers, and a few loafers, constituted the audience. Conspicuous among the rest, both from his appearance and his position, was a fine-looking, white-haired old gentleman, who was pointed

out to us by our friend as John C. McClure, the once famous abolitionist lecturer, and more recently the enthusiastic labor reformer.

The meeting was a free one. Everybody had a chance to speak, and we were delighted to see that the time was well filled up with recitals of experience by those who had once been addicted to drink, but had abandoned it and signed the pledge. It was interesting to note how many connected with their reform from the use of liquor, the discontinuance of numerous other bad habits as well, as profanity, dissipation, and tobacco-using. We were particularly struck with the fact that not a few spoke as earnestly and as gratefully of their deliverance from the appetite for tobacco as from the thralldom of drink.

Upon being called upon for remarks, we dwelt particularly upon the baneful influence of tobacco and its effect in inducing liquor drunkenness, when we were still more surprised to hear the constantly repeated and hearty responses indicating the entire assent of the audience.

Upon subsequent inquiry, we were delighted to learn that the pledge signed by members of their organization required abstinence from the use of tobacco as well as liquor. With few exceptions, the members had been large users of the weed, and all had abandoned it, and testified to the good results of so doing.

The leader of the meeting, a fine looking specimen of health, stated that he had inherited a very feeble constitution, which he attributed to the excessive use of tobacco by his father. For years he was expected to live but a short time; and he still further injured himself by the habit of smoking. By the abandonment of this habit, however, together with that of beer drinking, and attention to his health, he had attained a fair degree of strength and vigor, and now called himself well.

The Liquor Tax in Connecticut.—The Connecticut Legislature collects a tax on every glass of beer and whisky sold, by means of a bell punch, which gives an income of $1,072,444 annually, at the rate of 2½ cents a glass for strong liquors, and half a cent for beer.

SCHOOL DISEASES.

In the opinion of many eminent physicians, a large share of some of the most common and obstinate of the diseases which affect the young of both sexes originate in defects in the course of training and discipline to which they are subjected at our schools. One physician asserts that at least ninety per cent of the cases of lateral curvature are due to malpositions assumed by the student in writing and studying.

Many cases of pulmonary consumption originate in the bad air of school-rooms, the effect of which is greatly augmented by sedentary habits and bad positions assumed in study.

It is equally certain that the cramming, crowding, and generally perverting methods pursued in schools are in great measure responsible for the nervousness, hysteria, neuralgia, and other nervous derangements which are the terror of so large a share of the young ladies of the present day.

Myopia, or short-sight, is another difficulty which is alarmingly prevalent among students. It is observed that the number of cases increases in proportion to the length of time students have been in school. At one large college fifty-three per cent of the members of the junior class were found to be affected with myopia.

In view of these facts—and many more of equal gravity might be adduced—there is evidently a crying need of the introduction of hygiene into our educational institutions. If our educators would devote as much time to the study and application of the principles of school hygiene as they do to the introduction of correct methods of teaching writing, drawing, mathematics, etc., the rising generation would be not only healthier but more learned. The increased vital activity secured by improved ventilation and the proper intermingling of healthful and restful physical recreation with mental exercise will enable students to accomplish more work in less time and with less injury to the system than under the present state of things. If all our educational institutions could be induced to conduct the training of their students in accordance with hygienic principles, we should soon cease to hear of young men and women who

ruined their health by overstudy, ostensibly, but were really killed by bad air, bad diet, bad training, and sedentary habits; who always stood at the head of their classes, but graduated into the grave.

YELLOW FEVER IN COFFEE.

It is now very generally conceded that the use of coffee is in no way conducive to health, yet it is probably not generally known that there is any connection between its use and the spread of yellow fever. This seems to be the case, however, according to an article from the pen of a prominent physician which has recently appeared in a Texas paper.

The doctor cites two instances in which the infection of yellow fever has been traced directly to the use of coffee. One instance occurred at the time when the yellow fever was prevailing at Galveston. A steamer left the city and proceeded up the river to a city of some size, but, as strict quarantine measures were enforced, objection was made to its landing. The captain asked to be allowed to deposit a sack of coffee on the bank of the river, and upon receiving permission, did so, and immediately returned down the river.

The sack of coffee was carried into the city and opened at the store of a dealer. In a few days he was taken sick with the yellow fever, being quickly followed by his family and hired help. The disease then rapidly spread over the whole city.

In another instance, during the same epidemic, a man was sent to a city fifteen miles distant where the disease was prevailing, to purchase coffee for a number of persons living in an uninfected district. According to previous arrangement, he purchased the coffee and carried it to a certain tree, where he divided it among a number of small sacks which had been deposited in the tree tops, and then went away. After twenty-four hours, the individuals for whom the different sacks were intended visited the tree and took the coffee home. The result was that every family which received the coffee suffered with the fever, while all other families in the district escaped. In both instances it would seem that the infection was communicated by the coffee.

Of course this danger does not apply to all coffee, nor to any coffee during the cold season of the year; but that it really has some weight is apparent when we consider that a large share of the coffee used in the United States is imported from Brazil, where this fever prevails annually to a considerable extent.

NOT A NEW DISCOVERY.

A Dr. Leared, of London, has recently called the attention of the profession to the fact that many cases of dyspepsia are due to deficient muscular activity of the stomach. It is well understood, but too often forgotten, that the churning process to which the food is subjected by a healthy stomach is as essential for perfect digestion as the secretion of the digestive juices; but in the treatment of the disease this fact is usually forgotten. Dr. Leared is the first foreign writer who has called attention to the importance of regarding the fact in treatment; but one of the most successful modes of treating dyspepsia, which has been long in use in this country and some parts of Europe, especially in Sweden, is based on a knowledge of the importance of muscular activity as an aid to digestion. This mode of treatment is known as the Swedish movements. We have employed it in many cases, and often with most remarkable success. A very simple mode of applying this principle in treatment, is slapping and kneading of the abdomen. In not a few cases we have seen great relief given by this remedy alone. A few minutes after each meal, apply to the region of the stomach and bowels vigorous percussions and kneading, continuing the slapping and rubbing for ten to twenty minutes. At first, the operation will be somewhat tedious, but by degrees the patient will become accustomed to it, and will rather enjoy the exercise than otherwise. A quack who flourished in New York many years ago cured large numbers of dyspeptics by this method, keeping it a profound secret.

—"Whisky is your greatest enemy," said a minister to Deacon Jones. "But," said the deacon, "do n't the Bible say that we are to love our enemies!" "Oh, yes! Deacon, but it does not say we are to swallow them."

A LARGE TEMPERANCE MEETING.

A FEW days ago we had the pleasure of listening to the renowned Joseph Cook, at one of his Monday lectures, delivered in Tremont Temple, Boston. The immense structure was crowded with attentive listeners, it having been announced the week before that the subject would be the "Effect of Alcohol on the Brain."

As an introduction to the lecture, a series of views were thrown upon a large screen by means of a stereopticon, illustrating the effect of alcohol upon the blood, especially upon those delicate structures found in the blood, known as the corpuscles. The specimens were exhibited by a physician who has devoted many years to the study of the influence of alcohol upon the blood, and were selected from more than five hundred cases examined by him for the purpose, the subjects being selected from persons addicted to drink. The damaging effects of this destructive agent were very apparent; and the lesson taught to the great multitude who witnessed the exhibition must have been a very impressive one. What people see with their own eyes they are more willing to believe, and are more certain to remember, than what is merely recited to them.

After his usual prelude, Mr. Cook entered upon his lecture, in which he endeavored to still further impress upon the audience the significance of the specimens exhibited to them, and by illustrative experiments to demonstrate the fact that alcohol has a destructive effect upon the albuminoid tissues of the body, and through its hardening influence occasions much of the injury resulting from its use.

No new facts were developed by the lecturer, and few points were touched upon in his discourse; but the few facts presented were well impressed, and undoubtedly great good was done by the enlightenment of so many people upon one of the fundamental principles of temperance reform. We have long been thoroughly convinced that the only way to secure a thorough temperance reformation is by instructing the people in respect to the physical effects of alcohol upon the human body. If men and women can be made to believe that alcohol is really a dangerous poison; that it hardens the brain, corrodes the stomach, burns out the liver, consumes the blood corpuscles, and works general mischief in the vital domain; that when used as a beverage its effects are evil and only evil,—we shall have laid the foundation for a temperance reformation that will be lasting.

COOKS AND DOCTORS.

No one will doubt that cooks are in a great degree responsible for a large share of the ills from which human stomachs suffer, and which make the employment of doctors a necessity. In a very poor sense, then, the cook is a valuable ally of the doctor. A recent medical journal tells a curious story of a certain "Philip Hecquet, a French doctor, who lived in the seventeenth century, and when calling on his wealthy patients, used often to go into the kitchen and pantry, embrace the cooks and butlers, and exhort them to do their duty well. 'I owe you so much gratitude, my dear friends,' he would say; 'you are so useful to us doctors, for if you did not keep on poisoning the people, we should all have to go to the poor-house.'"

Cooked Air.—This is the name which a writer in the Philadelphia *Ledger* gives to the indoor air which most city people breathe during the cold season of the year. He very forcibly remarks that "the lower down the thermometer goes, the higher the burning coal is piled; all the chinks and cracks are stopped that would let any fresh air in, and its main chance, indeed, is when the front door opens for twenty seconds, or when the beds are made in the sleeping-rooms. In the living-rooms of the family there is no occasion, many people think, to ever raise the windows, except to wash them on periodical cleaning days, or to close the shutters. So carpets and furniture and people, lungs and skin, are dried and baked in the hot, dry rooms, until ingenious persons can bring out electric sparks from their finger ends by skating rapidly up and down the room in their woolen slippers.

"These breathers of cooked air are often extremely particular about wearing their own clothes, and would by no means consent to take the cast-off garments of a neighbor; yet

one and all of them are perfectly comfortable to breathe over and over again the cast-off and soiled air from each other's lungs, when it is cooked, especially; for in summer they do insist on a change of it, and do get their houses ventilated. Janitors of public buildings, in a short-sighted economy of fuel, will shut up all the apertures by which fresh air might get in, lest they should suffer some heat to escape thereby; and are rewarded by sleepy audiences, especially when the gas burners are at work, also draining the cooked air of what little life it has. There are some people—many, it is to be hoped—who open their bedroom windows an inch or two every night to insure a modicum of fresh air to sleep by. But these do not in the least care to have fresh air to be awake in, it seems, for they are content to have their furnace draw all its supplies from the tightly sealed cellar, and from the stale atmosphere of the ash boxes and vegetable bins in that subterranean apartment. And these breathers of cooked, soiled, devitalized, and debilitating air, wonder why it is they take cold so easily!"

Adulteration of Sugar in the West.—Many people have an idea that since the thorough exposure of the fraud there is less ground for complaint of the sale of chemical sirups, manufactured from starch by means of sulphuric acid. From the recent examination of a number of samples of sirup, we are convinced that this is a mistake. Of ten specimens which we analyzed, all were spurious but one.

Heretofore, most of this nefarious business has been done in the large Eastern cities; but very recently, according to the papers, a large manufacturing company, of Brooklyn, N. Y., known as the King's County Sugar Refinery, has gone to Illinois. According to the report, this company "has been for about four years engaged in the manufacture of sugar sirup from Indian corn, the staple being brought wholly from the West, and the works have been removed to save enormous freightage on bringing it East to be manufactured."

It must be a very singular refining process that will convert Indian corn into sugar sirup! The firm spoken of is simply a fraudulent concern which makes a villainous compound out of corn and oil of vitriol, and palms it off on the ignorant public for sugar sirup. Why do not our civil authorities put a stop to this nefarious business?

Mystery of the Blood.—Those curious little bodies found in the blood, known as white blood corpuscles, have been the subject of much scientific study. At various times the announcement has been made that some curious investigator had discovered a means of diagnosticating disease by simple microscopical examination of the white blood corpuscles. It has been affirmed that various constitutional disorders could be detected in this manner with unerring certainty. All the claims of this sort have thus far proved to be unreliable; but Dr. Heitzman of New York now claims to be able to determine a person's constitutional power, his pathological tendencies, whether he has had sufficient sleep, and various other points of greater or lesser importance.

Whether this new theory will stand the test of thorough examination, remains to be seen; but it appears very plausible, at least. It is based on a discovery of Dr. H., made some years ago, that the white blood corpuscle has a structure, being made up of fine strands of tissue woven together, the meshes being filled with a fluid in which are numerous minute granules. It is chiefly by means of the granules that the Doctor determines the points mentioned.

Cause of Colds in Children.—An English physician calls attention to the fact that breathing through the mouth is a frequent cause of colds in children, especially those who are addicted to crying and moaning a great deal. The natural mode of respiration is through the nose. This gives time for the inspired air, which is cool or cold in winter, to be warmed before it enters the delicate lungs, by passing over the nasal surfaces. When the cold air is inhaled through the mouth, it enters the lungs suddenly, chills these exceedingly delicate organs, as well as the blood which passes through them, and gives rise, in consequence, to a subsequent congestion, which may result in pneumonia, capillary bronchitis, or any one of a number of pulmonary diseases

to which children are especially susceptible.

To avoid danger to young children from this source, teach them early to breathe through the nose. See that the nose is kept clear, if they already have a cold which "stuffs" the nasal passages. If obliged to expose them to cold air, throw a handkerchief or some thicker fabric over the face to prevent too sudden access of cold air to the lungs.

When a child gets a cold, there is nothing like the warm blanket pack to relieve it. This remedy works like magic in almost every case. Strip the little patient in a warm room. Wrap it in a blanket folded double and wrung out of water as warm as the child can bear. Envelop it entirely in the blanket, leaving only the head uncovered. If it is very restless, leave one or both arms outside the wet blanket, bringing the blanket well up on the chest. Cover with two or three more blankets to keep it warm. Cool the head with tepid water. In many cases the child will cry at first, but will soon become quiet, and will be very likely to go to sleep.

Wipe off quickly with the hand wet in tepid water when removing from the pack at the end of fifteen minutes to an hour; dry quickly, cover up warm in bed, allow it to inhale the vapor of warm water, and see how comfortable the little creature will be.

A Perpetual Chewer.—We have seen people who had formed so inveterate a habit of chewing gum that they could not be contented for a moment without a quid, so that they were almost continually chewing. A young lady in Kentucky has been severely punished for this pernicious habit. She has chewed so incessantly that she has entirely lost control of her jaws, and they continue to chew whether a quid is present in the mouth or not.

Sensible Birds.—The feathered denizens of the air have somewhat the advantage of us in the readiness with which they can change their habitat when their surroundings become unsanitary or for any reason undesirable. It is curious to note how quickly they become aware of dangers which man with all his sagacity and learning often overlooks. For instance, there are certain facts which render it probable that "birds in some manner become aware of cholera infection in the air. Recent German journals state that at Munich, where several cases of cholera have occurred, the rooks and crows, which flew about the steeples and through the trees of the public promenades, have all emigrated; and the same thing happened during the cholera seasons of 1736 and 1854. According to Sir Samuel W. Baker, the same phenomenon occurred at Mauritius, where the martins, which exist in immense numbers the year round, wholly disappeared during the prevalence of cholera."

Postural Treatment of Colic.—A Mississippi physician describes a new mode of treatment for colic, which certainly has the advantage of being harmless, if not useful, which cannot be said of all remedies. We quote from the London *Medical Record*, as follows:—

"The treatment consists in simply supporting the patient in an inverted position; in other words, in standing him on his head. In some instances, cases that have for hours or days resisted all ordinary treatment, have by this simple means been relieved and permanently cured in from one to five minutes. Cases attended with most intense pain, vomiting, and other phenomena of so-called "bilious colic," have been thus cured. Relief is sometimes obtained by the knee-breast position, or by suspending the body by means of the thighs and legs extended across a high bed or table, the arms and hands being free to assist in giving support to the head. But complete inversion is the most sure and prompt remedy. The majority of cases of colic result from mechanical influences, and it is but reasonable to seek relief in mechanical counter-influences. Several very distressing cases are remembered as being instantly cured in the inverted position, solely, as the patient averred, by the escape per *anum* of a single small bubble of gas, without explosive noise. Other cases of most agonizing character have been instantly and permanently cured by a change of position of gas in the bowel, effected so quickly as barely to be noticed by the patient. Often the pain vanishes the instant the vertical position is assumed, and

does not return so long as this posture is maintained. But relief is not usually permanent unless some movement of gas be felt."

Consumption Curable.—It is by many persons supposed that when real disease of the lungs is once fairly developed, recovery is next to impossible, if not quite so. There is no doubt that this is one of the most formidable of all diseases; nevertheless, the experience of many able physicians, our personal experience, and especially certain interesting observations made by Dr. Bennett, of Edinburgh, show that many persons may recover from the first stages of this disease, formidable though it is, by adopting a rational plan of treatment. Prof. Bennett found unquestionable proofs of consumption having previously existed, and of its having been arrested or cured, in a large number of *post mortem* examinations.

"In some of the cases there were shrinking and puckering of the lung substance, and on making sections of such parts, scars were brought into view, which showed that portions of the lung had been destroyed, and that the cavities thus formed had healed by contraction and adhesion of their walls. In other cases the disease had been arrested in the first stage, the products of inflammation having shrunk and undergone chalky degeneration, the mass of morbid products being shut off from the healthy lung substance by a capsule of fibrous tissue formed around it."

Fatality among Inebriates During Epidemics.—Says the *Quarterly Journal of Inebriety*, a journal which has done much for the temperance cause by exposing the physical evils of intemperance:—

"The recent outbreak of cholera in Asia with its extreme fatality, recalls the distinctive mortality among inebriates which has characterized the march of this and other epidemics in modern times. We select illustrative statistics of the cholera epidemics in 1832. In St. Petersburg, out of 10,000 deaths only 145 were known to be temperate; in Moscow, only 2 out of 6,000 cases were temperate. This fact so alarmed the citizens that nearly all the population ceased to use alcohol; of 30,000 victims in Paris, nearly every one used alcohol, in some form, to excess; nine-tenths of those who died in Poland were of this class. In some towns *every* inebriate was swept away. In Tifflis *every* drunkard died. In the Park Hospital of New York City, only 4 persons were temperate in 200 fatal cases. In Albany, there were only 7 out of 326 fatal cases who were not inebriates. In the late epidemic of yellow fever in the South, the percentage of victims among inebriates was nearly as large. These are not extraordinary facts, but follow, naturally, the degeneration produced by alcohol, and are readily explained by the low vitality and lessened power of resistance to toxic forces and agents present in every inebriate. Most unfortunately, this condition is not realized by either the patient or friends until it is too late. The continued use of alcohol keeps up the delusion of strength and vigor; but with the onset of disease all is thrown off, and only the physician and surgeon can realize their hopeless condition."

Bogus Butter.—Although little is now said on the subject, compared with the general agitation three or four years ago, yet from developments recently made by a prominent agricultural paper, the fraud still continues to an extent which is little known, and which is undoubtedly increasing. We warn all butter-eaters to be sure of the quality and origin of the oleaginous substance which they eat under that name. Notwithstanding the crying need of prohibitory legislation on this subject, it may be a generation yet before our law makers will get time to consider so practical a question as this.

The Human Race.—A statistician in England, in studying a generation of a million of people from birth to death, finds that one-fourth of them die before they reach five years; less than one twenty-eighth between five and ten years; in the next five years the mortality is lower than at any other period; in the next five years an increase, especially among women—the influence of dangerous occupations begins to be seen in the death-rate. Eight times as many men as women die violent deaths. This is perceptible for twenty years. Consumption is prevalent, and

accounts for one-half of the deaths from twenty to forty-five. From thirty-five to forty-five the effect of the wear and tear of the system are seen. At forty-five, the million is lessened to four hundred and twenty-one thousand, one hundred and fifteen—death-rate increasing rapidly. About one-sixth of the million is left at seventy-five; at eighty-five only thirty-eight thousand, five hundred and sixty-five are left; and at one hundred, two hundred and two are left. At fifty-three, men and women surviving are about equal in number; and from fifty-five and outward, the women exceed the men.—*Ex.*

How to Purify the Air.—Dr. Golden, of London, describes the following excellent plan for purifying rooms in which the air is foul from respiration or decomposition, when the object cannot be satisfactorily accomplished by ventilation:—

"Take a drachm of nitrate of lead, and dissolve it in a pailful of soft water (rain water or distilled), and take a drachm of common salt, which dissolve in a jug of soft water, and when the solutions are mixed it is ready for use. Dip a towel into it and hang it up in the offensive room. The strength might be very much increased, but for ordinary purposes this quantity is quite sufficient; and if not, more may be made with very little trouble."

Potato Blight and Diphtheria.—Dr. Alfred Carpenter, the eminent English physiologist, thinks he has discovered a relation between potato blight, dry rot, and diphtheria. All three, he thinks, are produced by fungi, which require similar conditions for their development. How close an analogy and relation exist, must be determined by extensive observation.

Danger of Kissing.—The Boston scientists are claiming that kissing is dangerous, being a means of communicating serious disease. This objection is undoubtedly well-grounded, since numerous instances have occurred in which most loathsome diseases have been unconsciously communicated or contracted by the act of kissing on the lips. There is also no doubt that diphtheria is frequently propagated in this way. In view of these facts, we see no propriety in the assertion of a contemporary that the interdiction referred to should give occasion for an outraged and indignant people to rise and destroy the race of health scientists from the face of the earth.

Interesting for Eastern Meat-Eaters.—It may be interesting to Eastern consumers of flesh to know that in Peoria, Terre Haute, and Vincennes, there are large establishments devoted to the business of fattening cattle on slop-feed for the Eastern markets.

The newspapers are now publishing an interesting item about pork, from which it appears that in some of the European ports no American pork is allowed to pass without a microscopical examination of each piece for the detection of trichinæ. Yet thousands of Americans make this same dangerous pork a staple article of food. Would it not be well to take a hint from our foreign relatives?

Bathing.—Everybody ought to bathe; and sufficiently often to keep the skin clean and active. The right kind of baths, those of a temperature less than that of the body, are tonic in character, and are as much superior to all the bitters, tonics, and other compounds ever invented as light is superior to darkness. Don't be afraid to bathe.

Danger from Castor-Beans.—A fact not generally known is brought to light by an account given by a California journal, according to which a gentleman was severely poisoned by the fumes arising from castor-beans.

—A French physician has been making a study of drunkards' dreams, and has discovered the curious fact that they almost always dream of rats, mice, snakes, and other small reptiles. Several able physicians are trying to find out why; but no one is yet prepared to tell why a drunkard does not occasionally dream of dogs and cats. He never gets so high up as those animals.

—It is asserted that the Chinese never bathe. We wonder if this accounts for their tawny complexion.

FARM AND HOUSEHOLD.

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

STRAWBERRY CULTURE.

PERHAPS no branch of gardening needs more careful attention, to insure success, than the cultivation of strawberries, and none more frequently proves a failure, from mismanagement; the plants are allowed to run at will, while weeds occupy space upon the beds, and little or no care is exercised in regard to fertilizing. Strawberries should never be planted in fresh plowed sod ground, for the white grub worm usually found in sod,—and sometimes very destructive,—may do much damage to the plants, if it does not entirely destroy them.

Side hills with an eastern or southern exposure will produce strawberries a week or two in advance of those planted on level ground.

For setting the plants, a moderately rich ground should be prepared by deep spading and raking; the rows should be at least two and one-half feet apart, and the plants about eight or ten inches apart in the row; this will give room for the hoe and cultivator, which should be used freely through the summer, keeping the soil well stirred. The beds should be kept free from weeds and grass, and the runners cut off regularly as soon as they make their appearance.

In fertilizing, care should be taken not to seed the bed with weeds, and to obviate this, bone dust or some reliable commercial fertilizer is perhaps preferable.

The strawberry blight, which has of late years injured so many vines, and which has been generally supposed to be caused wholly by a fungus attacking the leaf, is now believed to be the result of infestation at the roots by a small bluish parasite. It has also been noted that the "blight" is worse when we have a fine March and April and the plants start out finely, and are checked suddenly by a cold spell in May. In favorable seasons, when everything is conducive to the continuous growth of the plant, the parasite has no opportunity to gain advantage over them; but if the weather becomes too cold or too dry, the parasites increase and rapidly suck all the life out of the young rootlets, thus weakening the plant and giving the fungus or any other disease a chance to affect the leaf.

Notwithstanding the difficulties attending their culture, this excellent fruit well repays all the trouble taken to produce it, and it ought to be more generally cultivated.

THINGS TO BE REMEMBERED.

THE following valuable hints are from the pen of Mrs. Henry Ward Beecher, and are well worth remembering by every one.

"Remember to shake off and remove all dust from a black garment every time it is worn. Nothing sooner defaces a black silk, poplin, or woolen than to wear it shopping, riding, or even for the day in the house, and then hang it up without removing the dust. The gritty motes with which the air is filled, particularly in regions where coal is constantly used, grind and wear out any fabric. First shake both skirt and overdress faithfully. A back window is a good place to shake them from. Then take a soft old handkerchief and brush the dress with that instead of a clothes brush. See that all the dust that settles in folds or pleats is removed. Stand by an open window and shake the dust off the handkerchief out of the window every little while.

"Remember that lemons can be kept sweet and fresh for months by putting them in a clean, tight cask or jar, and covering with cold water. The water must be changed as often as every other day, and the cask kept in a cool place.

"Remember that mirrors should never be hung where the sun shines directly upon them. They soon look misty, grow rough or granulated, and no longer give back a correct picture. The amalgam, or union of tin-foil with mercury, which is spread on glass to

form a looking-glass, is easily ruined by the direct, continued exposure to the solar rays.

"Remember that one can have the hands in soap-suds with soft soap, without injury to the skin, if the hands are dipped in vinegar or lemon juice immediately after. The acid destroys the corrosive effects of the alkali and makes the hands soft and white. Indian meal and vinegar or lemon juice used on the hands when roughened by cold or labor, will heal and soften them. Rub the hands in this, then wash off thoroughly and rub in glycerine.

"Remember never to leave clothes-lines out week after week, but take them down and wind them on the reel, as soon as the clothes are dry. With this care, a clothes-line will last years. But if left out, wind and rain will mildew and rot the line, and it will soon become worthless. Added to this, the clothes will be colored from the line, and dirty streaks almost impossible to remove will be seen where they rested on it.

"Remember that if brooms are dipped for a minute or two into a kettle of boiling suds once a week they will last much longer. It makes them tough, but pliable, and a carpet is not worn half so much by sweeping with a broom so cared for. A good housekeeper will see that her brooms are all thus scalded.

"Remember that a fine paste for scrap books can be made from alum water and flour. Dissolve a teaspoonful and a half of pounded alum in enough cold water to make a pint of paste. Pour the water, when the alum is all dissolved, on to enough flour to thicken it as stiff as common paste, bring it to a boil, stirring all the time, and when done, add a few drops of the oil of cloves. The alum prevents fermentation, and the oil of cloves will prevent or destroy all vegetable mold.

"Remember that old newspapers will put the finishing touch to newly cleaned silver, knives and forks, and tin ware, better than anything else. Rub them well, and make perfectly dry. They are also excellent to polish stoves that have not been blackened for some length of time."

To Clean Silver.—Table silver should be cleaned at least once or twice each week, and can easily be kept bright in this way: Have your dish-pan half full of boiling water; place the silver in, so that it may become warm; then with a soft cloth dipped in the hot water, soaped and sprinkled with a little powdered borax, scour the silver well; afterward rinse in clear cold water and dry with a clean dry cloth.

Poor Light.—Very often the trouble with poor light, so frequent in the use of kerosene lamps, arises from the wick being full of sediment which comes from the oil, thus impeding the free passage of the oil through the wick. This may easily be avoided by frequently changing the wick, or, if not too short, by washing it in strong, hot soap-suds, with some ammonia in the rinsing water.

To Preserve Timber.—Timber placed in contact with stone can be kept from decay by the insertion of a thin plate of iron between the wood and the stone. The hard crust formed on the wood by its contact with the iron prevents its decay.

To Make Mucilage.—Put into a cup ten cents' worth of gum arabic and a piece of alum about the size of a large hickory nut, and fill the cup with soft water; put it on the stove and let it be kept just warm. Add water to make one-half pint.

Sponges.—If, after having been used for a week, the sponge is put away to thoroughly dry, it will recover its texture; if thus treated as often as it becomes soft and flabby, it will outlast three ordinary sponges.

To Clean Brass.—Whiting wet with aqua-ammonia will clean stains from brass, and is an excellent polish for brass or silver faucets and door knobs.

To Restore Ivory-Handled Knives.—Yellow ivory-handled knives may be restored to their original whiteness by being rubbed with sand-paper and emery.

—An excellent fertilizer for house plants can be made with common glue in the proportion of an ounce of glue to a gallon of water.

NEWS AND MISCELLANY.

—Boston has 400 miles of street lights.

—The English language is spoken by 87,000,000 people.

—There are sixty-nine places in France called St. Etienne.

—Boston has one hundred and twenty Chinese residents.

—The entire length of the boundary of Texas is 4,630 miles.

—The pilgrims to Mecca last season numbered over 80,000.

—The Paris Exposition was visited by over sixteen million people.

During the year 1878 some 5,000 books were published in England.

—Francis A. Walker has been confirmed Superintendent of the Census.

—Extensive deposits of gold are said to have been discovered in Patagonia.

—The slight shock of an earthquake was felt, April 5, at Cadiz, Spain.

—Garibaldi is very ill in Rome at the home of his son, Melnotte Garibaldi.

—Sounds are distinct at twice the distance on water that they are on land.

—A new bell cast for one of the great churches in Moscow weighs twenty-six tons.

—The Albanians, it is reported, will resist by force the annexation of their country to Greece.

—Of the 4,400 deaths occurring in Cincinnati last year, all but 1,100 were in tenement houses.

—There are 100 medical colleges in the United States, and a physician to each 563 of its population.

—The name Lent is derived from the Saxon word signifying spring, the season of the year when it occurs.

—The cost to humanity in the deaths of persons killed in battle, since 1852, amounts to 1,748,000 lives.

—There are over one hundred Chinamen in Chicago, and one-fourth of this number have become Christians.

—There are over 25,000 flour mills in this country, and about 50,000,000 barrels of flour are manufactured annually.

The Liverpool Chamber of Commerce has declared in favor of an international agreement for the remonetization of silver.

—Small-pox and famine have reduced the population of Ceara, a province in Brazil, from 900,000 to 400,000 during the past year.

—On a recent Sunday, all the saloons and rumshops in Richmond, Va., were closed for the first time in the history of the city.

—Mr. Cyrus W. Field has secured the permission to lay a sub-marine cable to the Sandwich Islands. This is the only scheme which has been wanting, to the carrying out of the plan to lay an ocean cable across the Pacific, from San Francisco to the Orient, thus completing the circuit of the entire globe.

—Frankfort-on-the-Main, now containing a population of about 100,000, is reputed to be the richest city of its size in the whole world.

The legislature of Pennsylvania is still fighting over the question of the payment of damages for the losses occasioned by the Pittsburg riots.

—It is reported that the Sultan has sent portions of his plate and jewelry to be converted into coin for the use of the Treasury, which is empty.

—The Hon. Elihu Burritt, better known as the "Learned Blacksmith," died at New Britain, Conn., March 7, where he was born Dec. 8, 1811.

—The United States signal station at Pike's Peak is the highest signal station in the world; it is also the highest inhabited portion of the globe.

—The alphabet of the Sandwich Islanders contains only twelve letters, the fewest in any language; the Ethiopic contains 202 letters, which is the highest number.

—An international congress has been appointed at Paris, May 15, to discuss the proposed canal across Central America, to connect the Atlantic and Pacific Oceans.

—The fact that marine shells occur in the sand intermediate between the Azof and Caspian Seas, appears to prove that at some time these two bodies have been connected.

—The annual product of coal from Pennsylvania is valued at fifty million dollars. The first coal mined in this State was sold in Philadelphia in 1813, for twenty-one dollars a ton.

—Andrew D. White, late President of Cornell University, is to take the place of the late Bayard Taylor as Minister to Germany, and C. A. Logan has been confirmed minister to Central America.

—There are nineteen Senators over sixty years of age. Nine were Union officers, and twelve, officers in the Confederate army during the late war. Fourteen have been Governors, and one Vice-president.

—New York has three hundred and fifteen charitable organizations; in the year 1877, six million dollars were expended in various ways for the relief of the destitute and the improvement of the vicious classes.

—It is stated that France and the United States will soon establish a comparison of the longitude of Paris and Washington by cable, which will lead to a determination of the velocity of propagation of electric waves.

—Large numbers of the negro population of the South are emigrating to Kansas and other parts of the West, much to the discomfiture of the cotton planters, who fear it will seriously interfere with all the agricultural interests of the South.

—It is proposed to commemorate, in November next, the eighteenth century since the destruction of Pompeii and Herculaneum, which will be completed at that time. Some of the most eminent of Italian archæologists have already been invited to participate in the ceremonies.

LITERARY NOTICES.

TEMPERANCE AND ANTI-TOBACCO TRACTS. By Geo. Trask. H. L. Hastings, 342 Washington St., Boston.

We are exceedingly gratified to notice that the work so nobly begun, and carried on for twenty-five years by the Rev. Geo. Trask, the well-known temperance anti-tobacco reformer, is still being brought to the attention of the public. Mr. Trask struggled on for many years with little encouragement, and almost single-handed in his unremunerative work. The amount of good accomplished by his philanthropic efforts cannot well be estimated. He made himself heard and felt in every part of the land, in his vigorous assaults upon the twin evils, intemperance and tobacco-using; in his lucid exposition of the evils resulting from the continued use of alcohol and tobacco; in his convincing arguments from the financial and social standpoints; in his pathetic appeals to the common sense, the conscience, the manhood of those who are enslaved by these monster evils.

We felt extremely sorry to learn of the death of this energetic worker in reform, and feared that it would result in the cessation of the strong efforts in that direction which had just begun to attract much attention in all parts of the country. It seems, however, that his faithful wife has endeavored to carry on the work begun by her husband, and now we are still more gratified to see that the well-known publisher, H. L. Hastings, of Boston, has undertaken the work of publishing the valuable series of publications, leaflets, etc., prepared and published by the late Mr. Trask. We feel assured that the effort will be the means of accomplishing much good, and we sincerely hope that it will receive a hearty support from all the friends of true reform.

TO THE ROCKIES AND BEYOND, By R. E. Straham, Omaha.

This pamphlet is a racy description of the popular health and pleasure resorts of Nebraska, Dakota, Wyoming, Colorado, New Mexico, Utah, Montana, and Idaho, with descriptions of the Black Hills, Big Horn and San Juan Regions, with much other very interesting and instructive matter. The pamphlet is very well written. The writer takes the reader along with him, and by his graphic pen-pictures makes him see the grand scenery which abounds in the "New West" almost as vividly as though he were privileged to behold it with his own eyes.

Each year an increasingly large number of people visit the West for health and pleasure. The opportunities afforded in our own country for seeing superb natural scenery are now generally admitted to be scarcely excelled in any country of the globe. And for health resorts, we see no reason why any person should seek abroad, since it is undoubtedly true that we have within our own borders a variety of climates sufficient to meet the wants of all classes of invalids.

NATURE AND DIAGNOSIS OF NEURASTHENIA. By Geo. Beard, M. D. D. Appleton & Co., N. Y.

This pamphlet is a reprint of a paper read before the New York Neurological Society a few weeks ago. It calls attention to one of the most common of all nervous disorders, and one which has, until quite recently, been little noticed as a distinct morbid condition, and little understood. Dr. Beard was one of the first to name and describe this disease, hence the present paper is an unusually valuable one, since it contains the results of rich personal experience and careful investigation, together with a concise summary of the results of other workers in the same field.

Dr. Beard is a lucid writer, and his description of the disease and careful discrimination of its symptoms from those of other nervous diseases and morbid states of the system, makes the work by all odds the most valuable of anything which has yet appeared on this subject.

CAUSES OF SUDDEN DEATH OF PUERPERAL WOMEN, By Prof. E. W. Jenks, M. D., Detroit, Mich.

This excellent paper is a reprint from the Transactions of the American Medical Association. It embodies a careful digest of all the knowledge of the subject treated which has accrued during the present century, together with valuable additions by the learned author of the paper, who had the honor to preside as chairman of the Obstetrical Section of the American Medical Association at its last meeting. The paper is a very valuable one, and will undoubtedly be received with great pleasure by the profession.

THE WESTERN RURAL.

In a recent issue of *The Western Rural* published at Chicago, we examined with interest some microscopic illustrations showing the differference between butter and oleomargarine, with a scientific description, showing also the difference between genuine butter and the patent stuff, in startling contrast. Upon the authority of *The Rural*, we find that in the large cities already millions of pounds of animal fats are converted into "butter" and sold in the market as creamery or dairy product, thus not only threatening the very existence of the legitimate dairy interest, but also the health of the consumer, as it is found that living organisms are developed in the patent article. *The Rural* demands the passage of a law in every State compelling the manufacturer and vender to brand the name on every package, as a guide to the consumer.

Publishers' Page.

☞ A blue cross before this paragraph indicates that your subscription expires with this number. We would be pleased to receive your renewal. Please notify us at once, that your name may not be removed from our list.

☞ To accommodate many of the friends of the Sanitarium, the anniversary of the dedication has been postponed to an early day next week.

☞ Boston subscribers who prefer to do so can send their remittances through Mr. James Campbell, publisher, 17 Franklin St., Boston, Mass. Mr. Campbell is our authorized agent for Boston and vicinity, and will receive orders for any of our works.

☞ To several correspondents who have made inquiries on the subject, we will say that the institution formerly known as the "Hygeio-Therapeutic College" is no longer in existence, the founder being dead, and the building itself burned. The only institution devoted to the study of hygiene, is the School of Hygiene located in this city.

☞ With the coming of spring and its pleasant weather, all who are interested in the inculcation of reformatory ideas on health are afforded an excellent opportunity to engage in this most noble work; and the inducements offered to canvassers are such as to make this kind of work pecuniarily profitable to those engaged in it, as well as beneficial to those who receive information through this channel.

☞ By arrangements recently made with the American News Co. of New York, and the Union News Co. of Philadelphia, this journal can now be obtained monthly at the principal news depots in the United States. Subscriptions will also be taken at the news offices from both old and new subscribers. Orders will also be received at these offices for any of the works on health subjects published at this Office.

☞ The American Health and Temperance Association held its fifth meeting in the mammoth tabernacle in this place, Wednesday evening, April 16. There was a large audience in attendance, and the meeting was an interesting and profitable one. The time was chiefly occupied with remarks by delegates from various States, who were present on the occasion, and reported favorably for the work in their several sections.

The interest in this organization is constantly growing, and it is destined to become a strong influence in promoting the interests of health and temperance.

The President exhibited a sketch of the proposed certificate, which seemed to be received with general favor. The design being now decided upon, the certificate will be speedily completed and sent to all who are entitled to it.

Twenty-two names were added to the list of members, the whole membership now being 400, of whom all but about forty have signed the teetotal pledge.

Our New Work on Diphtheria.—It is very amusing to notice the variety of opinions offered by the medical journals respecting our new work on diphtheria. Many give it a hearty commendation, speaking highly of it as an attempt to popularize medical knowledge on a very important subject. But now and then one looks askance at the work, from its narrow professional corner, discounting its utility on account of the very object for which it was written, viz., the instruction of the people on a subject of growing importance to every household. One calls it "doubtful," another, "dangerous," another attempts to cast doubt upon it on account of the success claimed in a large number of cases; another thinks to detract from its value by stating that the treatment proposed is "not novel."

All of these criticisms have a common animus, and are what we expected from a certain class of the medical press. The disposition to keep medical knowledge wholly within the ranks of the fraternity, has been a prominent trait in the medical profession from the earliest ages down. Happily, the broadening effect of modern culture is having a powerful influence in inducing reform in this direction, and there is good reason to hope that before many years the prevailing sentiment will undergo great change. Already some of the best members of the profession advocate the popularizing of medical knowledge respecting the management of disease, as well as its prevention. Several eminent men in the profession have prepared "Family Physicians," taking great pains to make them "up to the times." There are those who look upon these efforts as highly dangerous, regarding it unsafe for the people to know the why and wherefore of the treatment of disease. We know it is the custom of this class of physicians to require their patients to receive implicitly whatever is offered them. Pills, powders, pellets, syrups, confections, capsules, oils, extracts and tinctures, mixtures bitter or aromatic, nauseating or exhilarating, must be swallowed without any questioning on the part of the patient as to the nature of the remedy he is taking, the intent of the physician in giving it, or the rationale upon which the hope of a cure is based.

It seems to us that the best way to elevate the standing of the profession in the eyes of the intelligent portion of community—the predominating part, in this country, at least—is to say less against efforts to make the people intelligent on the subject of most vital interest to them, and to say a good deal more against the growing evil of superficial medical education by which the land is being flooded with half educated, inexperienced, and utterly incompetent physicians, whose diplomas place in their hands a fearful array of sharp and deadly weapons with full liberty to use them at discretion, or rather *indiscretion*, and that without allowing the patient to know whether he is being saved or sacrificed. Against such an evil we shall ever raise our voice, and shall continue to work with our utmost ability.