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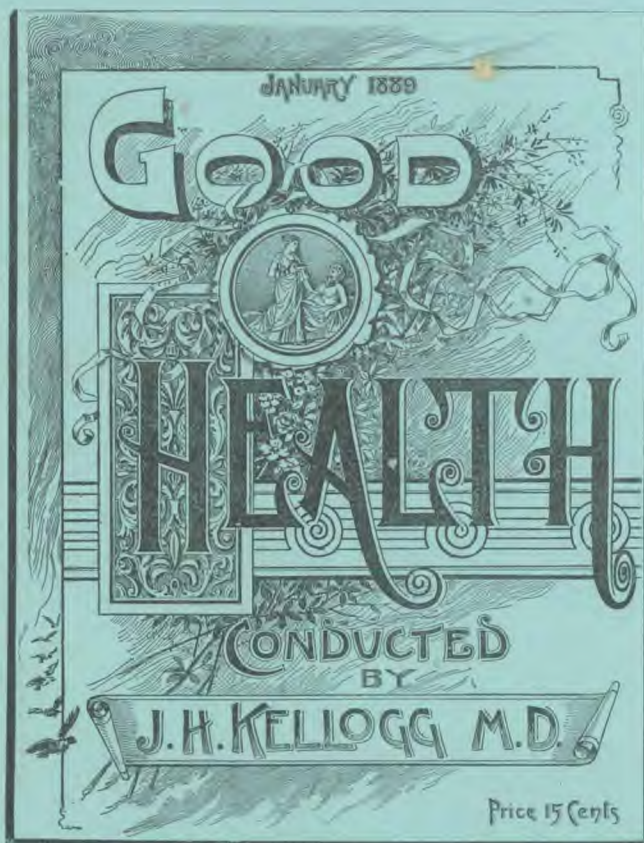
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\$1.25
A YEAR.

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Good Health
Publishing
Company,

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MICHIGAN.

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43 BOND STREET,
NEW YORK.

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48 PATERNOSTER ROW,
LONDON ENGLAND.





THE LITTLE WOOD-CARRIER.



BATTLE CREEK MICHIGAN

DECEMBER, 1888.

THE STIMULANT DELUSION.

BY FELIX L. OSWALD, M. D.

Author of "Physical Education," "Household Remedies," etc.

III.

THE ALCOHOL HABIT (*Continued*).

POPULAR fallacies die hard, but their obstinacy is, after all, less surprising than the slowness of the progress from special to general truth. Chinese historians claim that in the eastern provinces of the Celestial Empire, gunpowder was used for fire-works more than three thousand years ago, and it seems almost incredible that human beings should have manufactured fire-works, and witnessed the force of their explosions, for at least twenty-five centuries, without ever having conceived the idea of utilizing that force for military purposes. But the Chinese, in their turn, might taunt us with the humiliating fact that the infamy of enslaving fellow-citizens was recognized by the countrymen of Pericles; *i. e.*, more than two thousand years before William Wilberforce at last arrived at the logical conclusion that all slavery is wrong; and they might add the equally amazing circumstance, that two hundred years ago the physicians of Great Britain and Holland had clearly recognized the baneful effects of French high-wines, but continued to recommend fermented alcoholics as "wholesome family-drinks."

Brandy, rum, and hard cider are nowadays rarely recommended on hygienic principles. Even port-wine and punch are not often drunk to the "health" of an intelligent guest. Absinthe has been abandoned to French *roues*. But how few, even of our progressive North American countrymen, have as yet arrived at the logical inference that alcohol, in any form, under any *disguise* whatever, is, under all circumstances, a life-blighting poison, as unfit for any general or special purposes of a wholesome beverage, as oil of vitriol or the *aqua toffana* of mediæval poison-mongers! Millions of educated Germans who have banished brandy from their tables, still fuddle their children with beer soup. Patriotic Frenchmen propose to prevent the spread of the absinthe habit by removing the tax on lager-beer. Many American sympathizers of the temperance cause hope to limit the demand for rum, by introducing "cheap California country-wine." The charge of conscious insincerity would be indignantly, and perhaps justly, repelled by the advocates of such compromise measures; but inconsistency and short-sightedness could, indeed, hardly go further. A few weeks ago a Western paper mentioned the eccentricities of a "mountain evangelist," who delivered a rousing sermon on the "Cussedness of Colorado Curses." "If you *must* swear," he addressed his miner audience, "why don't you use the ordinary, cur-

rent oaths of your countrymen and forefathers. On a cold morning, if you slip on a gulch-trail, an expression of that sort *does* warm a fellow like a good drink; but, I declare, I do not see the necessity for the use of those frightful complicated blasphemies that our boys are cracking off on every trifling occasion."

That argument may really have answered its local purpose; but what would we say of an enlightened moralist who should harangue his disciples on the wickedness of train-robbery, and, *en lieu*, recommend the quiet, discreet pursuit of a professional pickpocket? "Train-robbers," the orator might argue, "almost invariably come to a speedy, violent end. The perpetrators of nine out of ten of such outrages are captured within a month; many even meet their death in the mere attempt of stopping a train; while pickpockets, on the other hand, risk neither life nor limb in the pursuit of their vocation; and we have known instances of their absolute impunity during a full year of constant enterprise." Yet that logic would be precisely analogous to the arguments of the "mild stimulant" philosophers. They recommend as "safe" and "wholesome," beverages whose effects are *less immediately ruinous* than those of rectified alcohol. The attempt to swallow a pint of Spanish rum would convulse the organism of a beginner in a way impossible to mistake for the effect of a healthful tonic, and might end his life within twenty-four hours. Mere nausea would prevent an incipient lager-beer drinker from carrying his mistake to that length; but like all other poison-habits, the beer-vice is infallibly progressive, and nine out of ten of the "steady" lager-beer drinkers come to swallow their tipples in a daily quantum containing an aggregate of considerably more than a pint of sheer alcohol. The comparative temporary impunity of their habit leads them to ascribe its ultimate effects to quite different causes. An inveterate beer-drinker attributes his corpulence and loss of memory to the approach of old age. Wine-drinkers blame the climate for their gout and lung affections. The tardiness of retribution tempts them to deny the correlation of cause and effect.

In the case of medicated drugs, that mistake is encouraged by the peculiar circumstance that the human organism is rarely affected by the symptoms of *more than one disease at a time*. Intermittent fevers subside, if the patient happen to contract the contagion of small-pox. But after the new disorder has run its course, the fever is very apt to re-appear. Sick-headaches, for similar reasons, give way to a violent toothache, but the penalty of the surfeit that caused the first-named trouble is by no means remitted; and after the extraction of the aching tooth, the headache gradually resumes its work of torture. Neuralgia, or chronic headaches of a specially malignant kind, however, may now and then refuse to yield their prestige to any tooth affection whatever, and during their paroxysms the patient might drink cup after cup of over-sweetened hot tea, or belabor his teeth with hot pincers without being able to produce anything like a protracted toothache. "One at a time," is nature's almost invariable rule in such cases.

That arrangement, however, has led to the quite unintended result of encouraging practitioners of what Dr. Bigelow would call the "artificial school," to drench their patients with drastic stimulants. In the crisis of a burning fever, alcohol may be administered, without any directly baneful effects, in quantities that would stagger the toughest toper; but after the fury of the fever has subsided, the patient has to bear the consequences of complicating the afflictions of the organism; and the eventual result of the interference is a considerable postponement of complete recovery.

Not one teaspoonful of alcohol can ever be swallowed with absolute impunity. "It seems to have been the common impression," says Dr. Isaac Jennings, "that alcohol circulates through the body, excites the action of the heart and arteries, and then passes off and leaves no trace of its visitation, when used within reasonable bounds—or at most, nothing but a temporary loss of power, which is soon restored. This is a great and fundamental error. Every drop of alcohol that enters the stomach inflicts an injury that will continue

as long as the old stock lasts, and reach even to the young sprouts. It may not be stamped on them in precisely the same shape, but it will affect essentially the same parts. All injuries done to the body, by whatever agents or instruments, reach far forward in life. The body will be made over anew frequently, every part and particle of it, yet the scar of the wound remains. Parts that have been injured, although they may appear as sound as they were before, never heal as readily again after subsequent wounds as they did the first time, and they are always more liable to give out under the same degree of exhaustion of power than before; and each repetition of the injuries increases the difficulty in direct proportion to the force and frequency of the repetitions. All this holds true of injuries inflicted by alcohol."

The Asiatic votaries of opium claim that their drug proves more fatal to foreigners than to children of the soil, who, taught by the experience of their forefathers, avoid fatal excesses by a sort of hereditary instinct of precaution. A similar instinct undoubtedly modifies the effects of alcoholic poisons in the ancient homes of the brandy-habit,—Scotland, Holland, and Scandinavia. But the ravages of opium among the foreign residents of the Asiatic sea-port towns, are hardly more fatal than the consequences of the alcohol epidemics, which, a few years after the first introduction of the insidious poison, have often raged among the aborigines of this continent with the destructiveness of the Black Death, depopulating whole wigwams and villages, in the course of a single generation.

And yet it is no paradox to say that the total amount of mischief wrought by brandy is a mere trifle compared with the baneful consequences of the "milder" alcoholics. Beer has torpidified the vital energies of millions of men of the noblest Caucasian races. It has abased their manhood; and the policy of their rulers who encourage its use among the inhabitants of their dominions, has its analogue in the plan of the tyrant Justinian, who interdicted the celebration of the Olympic festivals, to divert the attention of his

subjects from athletics to less invigorating pastimes, in the hope of thus weakening the stubbornness of their resistance to the encroachments of his despotism. Without beer, the victims of Austrian and South-German autocrats would not have brooked the tenth part of the outrages on personal liberty which their rulers have practiced with impunity for a long series of generations. Wine has broken the moral and physical backbone of the nation which once swayed the scepter of three continents. The vineyards of Italy have sapped her strength more effectually than her monasteries. Wine has turned the Gothic giants of old Spain into mere caricatures of their heroic forefathers, and it would be idle sophistry to ascribe that result to "climatic influences."

In the torrid climates of Africa and Arabia the abstemious followers of Mohammed have preserved the physical vigor of their earliest ancestors. In spite of famine, chronic droughts, and constant misgovernment, the abstemious subjects of the Sultan include more athletes than any equal number of modern men in the alcoholized districts of Western Europe and North America. The foreign merchants of Constantinople are frequently amazed at the exploits of the native porters, who shoulder a big dry-goods box as their Western colleagues would shoulder a small trunk.

A few years ago a family of Syrian refugees settled in the neighborhood of Maryville, Tennessee, and in the course of a few years two of their junior members, who had studied medicine both in Damascus and America, acquired an encouraging practice among the mountaineers of the Southern Alleghanies, and thus became thoroughly familiar with the ethnological characteristics of their adopted home. Dr. A., who had passed his boyhood in the uplands of the Lebanon Range, had to admit that the slopes of Mount Hermon could not compare in attractiveness with the magnificent forests of the Tennessee highlands, but expressed his constant surprise that the vigor of our virgin soil should have failed to exert a more appreciable influence on the physique of its inhabitants. "Intel-

lectually, our Syrian farmers are centuries behind the country-population of North America," said he, "and my friends in Beyroot would be astonished to learn that one can talk politics and religion with the poorest squatter of an Alleghany cloud-land cabin. But in physical efficiency those self-taught philosophers are mere children, compared with our Eastern mountaineers. I have seen girls in their teens carry a ten-gallon jar full of spring water *on their heads*, up a steep hill, for half a mile, without ever stopping to rest, and even without getting out of breath. On market days, you see women with a fat sheep on their shoulders walking about as unconcernedly as if they were carrying a few pounds of wool; and in the Taurus range there are hunters that will run down a wild boar on a rough mountain slope, and after killing him with a blow of a clumsy ax, carry his carcass home across bowlders and gullies, a distance of ten or twelve miles."

"Out-door life has a good deal to do with that?" I suggested.

"Yes, no doubt," said he, "but your Southern mountain men are out of doors, too, more than half of their time, and for domestic comforts are rather ahead of our natives, who often pass their nights in mere hovels, that your farmers would think unfit for a decent hound. I do not think physical training, in the gymnasium sense, has much to do with it either, for our Lebanon youngsters, grow up as neglected as puppies; and at twelve years of age the son of a Tennessee moonshiner, is, indeed, no whit inferior to the average Syrian mountain boy. But after that time alcohol seems to turn the scales. In spite of forest air and out-door work, the young moonshiner gets handicapped by his poison; and in spite of hardships and domestic squalor, the water-drinking Easterner continues to develop for twenty years more."

"Do they use no stimulants whatever?" I inquired.

"Well, a little smoking tobacco, now and then," said Dr. A., "but it's a Government revenue article, you know, and few of them can afford the price. As for coffee and tea,

not one in twenty can indulge in such luxuries. Their drink is water, not the best water either, for on the naked plateaus springs are apt to get brackish. Now and then they get a cup of milk, though they mostly prefer to make it into cheese, pressed and dried in a way to last a year. Dried fruit, dried raisins, durrha bread, maize, and boiled chestnuts make up the staple of their diet, with once a week, perhaps, a bit of honey or a pot full of venison."

The idea that hardships cannot be long endured without the sustaining aid of alcoholic stimulants was perhaps never more conclusively refuted than during the Russian campaign against the independent mountaineers of the Caucasus. After a ceaseless guerilla war of twenty-two years, the heroic highlanders were at last hemmed in from all sides; and during the last three years of their desperate resistance, were reduced, in the literal sense, to the spontaneous products of the wilderness, all the arable lands of the foot-hills having been seized by the remorseless invaders. But in spite of those disadvantages, the Mohammedan interdiction of alcohol maintained the "wild men of the rocks" in good health, as proved in many a hand-to-hand conflict with their aggressors; while the abundant provisions of the Russian camp did not prevent thousands from succumbing to the fatigues of the campaign, for those provisions included a liberal allowance of *vodka*, a tittle the Muscovite rustic considers an indispensable preliminary of a good day's work.

And still stranger, those abstemious Caucasus highlanders of unimpaired vigor, are no relatives of the ethnological "Caucasians," but tribes of the Turanian race—first cousins of the stunted Mongols; while their aggressors are descendants of the gigantic Scythians, who defeated their Persian invaders as easily as the Persians had defeated the wine-soaked natives of Mesopotamia.

"I am indebted to a gracious Providence for preservation in every unhealthy climate," says Sir W. F. Williams, the defender of Kars; "but I am satisfied that a resolution early formed and steadily persevered in, never to

take spirituous liquors, has been the means of my escaping diseases by which multitudes have fallen around me. Had not the Turkish army at Kars been literally a 'cold-water army,' I am persuaded that they would never have performed the achievements which crowned them with glory."

That experience has repeated itself in all climes and at all seasons. Alcohol aggravates the perils of an Arctic snow storm, as it intensifies the deadliness of a tropical fever swamp; and under all circumstances of social customs and political institutions, consistently abstinent nations have ever proved the physical superiors of their alcoholized neighbors.

(TO BE CONTINUED.)

DR. TALMAGE ON OVERWORK.

THE following extracts from one of Dr. Talmage's sermons is so full of practical truth and good sense that it deserves the careful attention and consideration of all:—

"We were on the lightning train for Cleveland. We had no time to spare. If we stopped for half an hour, we should be greeted by the anathema of a committee. We felt a sort of presentiment that we should be too late, when, to confirm it, the whistle blew, and the brakes fell, and the cry along the train was; 'What is the matter?' Answer: 'A hot axle.' The wheels had been making too many revolutions in a minute. The car was on fire. It was a very difficult thing to put it out; water, sand, and swabs were tried, and caused long detention, and a smoke that threatened flame down to the end of the journey.

"We thought then, and think now, This is what is the matter with people everywhere. In this swift 'express' American life, we go too fast for our endurance. We think ourselves getting along splendidly, when in the midst of our success we come to a dead halt. What is the matter? Nerves or muscles or brains give out. We have made too many revolutions in an hour. A hot axle!

"Men make the mistake of working according to their opportunities, and not according to their capacity of endurance. 'Can I run

this train from Springfield to Boston at the rate of fifty miles an hour?' says an engineer. —'Yes.' 'Then I will run it, reckless of consequences.' 'Can I be a merchant, and the president of a bank, and a director in a life-insurance company, and a school commissioner, and help edit a paper, and supervise the politics of our ward, and run for Congress'?'—'I can!' says the man to himself. The store drives him; the school drives him; politics drives him. He takes all the scoldings and frets and exasperations of each position. Some day, at the height of the business season, he does not come to the store; from the most important meetings of the bank directors he is absent; in the excitement of the political canvass he fails to be at the place appointed. What is the matter?—His health has broken down. The train halts long before it gets to the station. A hot axle!

"Literary men have great opportunities opening in this day. If they take all that open, they are dead men or, worse, living men who ought to be dead. The pen runs so easily when you have good ink and smooth paper and an easy desk to write on, and the consciousness of an audience of one, two, or three hundred thousand readers. There are the religious newspapers through which you preach, and the musical journals through which you may sing, and the agricultural periodicals through which you may plow, and family newspapers in which you may romp with the whole household around the evening stand. There are the critiques to be written, and reviews to be indulged in, and poems to be chimed, and novels to be constructed. When out of a man's pen he can shake recreation, and friendship, and usefulness, and bread, he is apt to keep it shaking. So great are the invitations to literary work that the professional men of the day are overcome. They sit, faint and fagged out, on the verge of newspapers and books. Each one does the work of three, and these men sit up late nights, and choke down chunks of meat without mastication; and because of irritability scold their wives and maul innocent authors,

and run physical machinery with a liver miserably given out. The driving shaft has gone fifty times a second. They stop at no station. The steam chest is hot and swollen. The brain and the digestion begin to smoke. Stop, ye flying quills! 'Down brakes!' A hot axle!

"Our earthly life is a treasure to be guarded. It is an outrageous thing to die when we ought to live. People ought to know it is as much of a duty to take care of their health as to attend church and perform other religious duties.

"It is as much a sin to break a physical law as a moral law. Both were made by the same All-wise Being, and each have their penalties. It is as much a sin to commit suicide by overtaxing one's self and violating nature's laws, as to kill with a pistol.

"Most Americans do not take time for sufficient sleep, rest, and time to eat. Nerves that propel this great machinery must have rest. They must have brain and nerve food to supply the waste going on in the combat of life. The food must be in sufficient quantity and of right quality, and then properly digested. To do this, no organ should be overtaxed. The brain does not have perfect rest only while asleep, and not always then. Few realize these facts.

"How many fail to realize their condition and to halt in season to escape the penalties? How many, at this juncture, resort to stimulants, instead of rest and proper food! and how often they wake up to their condition when it is too late! How few realize what is necessary to keep up the steam, and when to put on the brakes! For this reason all should arouse to the importance of the subject, and study their own individual cases, and see if they, too, are not sinning away the day of grace; to look well to their locomotive, and see that it is not going too fast. 'Slow and sure' is the best motto for success. If we but look around us, we shall find many laid upon the shelf at the age of fifty years,—a failure in health, or financially,—leaving some one to repeat the same experience in their footsteps,—the latter starting out with full

determination to avoid the mistakes of the former, but before he knows it, he has on too much steam,—too many revolutions made, and a hot axle is the result.

"O, that some mighty hand could stay this herculean locomotive, and loose the burdens of overtaxed Americans!"

THE HYGIENE OF OLD AGE.*

BY H. C. WOOD, M. D.

WITHIN a few weeks the city of Philadelphia has been called upon to mourn the loss of the man who, although very far from intellectually the greatest within her borders, as a citizen was pre-eminently chief. Dying at the age of eighty or eighty-one years, he is universally spoken of as being gathered like a ripened sheaf; yet, within a week of his burial, he was full of mental and physical vigor, and his death at the time was as unnecessary and avoidable as though he had only reached three-score years. A very notable percentage of the deaths of persons who have been successful in life, and have attained beyond the seventieth year, could be, by proper care, long postponed. Failure in life, in a great proportion of cases, saps vitality, and the man who carries the load of self-knowledge of such failure lives under a persistent strain, whose effects, though usually not recognized, are none the less irresistible. In order to protract an advanced life, it is well to understand not only the dangers that beset such life, but the reason why old age has been attained.

The humorist is greatest when, underlying his rollicking, is the lesson of a great truth; but perhaps few readers, when they enjoyed the broad fun of the "One-Horse Shay," as portrayed by our inimitable Holmes, have recognized the fact that the man who reaches old age, does so largely because he has been constructed upon the principles of the famous vehicle "that ran for a hundred years and a day."

Barring accidental deaths from railroad collisions, typhoid fevers, lightning-strokes, and

* A paper read before the State Sanitary Convention.

other more or less preventable causes, the man who is so built that he is equally strong in all his parts, lives out his appointed days.

Excessive strength in one part is a veritable source of danger. The athlete perishes because his over-developed muscular system perpetually strains, and finally wears out a heart or a lung that was originally constructed for a muscular apparatus of half the power of that which he has artificially built up. The larger proportion of mankind die early on account of some local weakness. It ought to be generally recognized that human age is not to be counted by years, and that in some constitutions the general tissues are older at fifty than they are in other individuals at one hundred. Many of the cases of so-called neurasthenia, or nervous exhaustion,—of men and women suddenly or gradually breaking down at forty or fifty, ostensibly from overwork,—are really cases of premature old age, and are to be nursed and treated precisely as other individuals would be who had reached fourscore years. Moreover, a large proportion of early deaths are the result of some vital organ's being originally endowed with a longevity less than that of the rest of the organism.

The reason that consumption is so often utterly irremediable is to be found in the fact that in not a few cases the lung has reached its allotted term of days, and must die because its vitality is exhausted. If an eye, or other not vital part, fails from lack of vital power, the man exists; but if a lung dies, he perishes.

The result of these lucubrations is to lead us to this point; namely, that the individual who enjoys fair health at seventy-five years of age has probably been built upon the principle of the "One-Horse Shay," and that he should be treated as a wise man would treat such a venerable instrument of progression. He would certainly keep it off Philadelphia cobble stones, and allow it to be bowled only along some smooth turnpike; and especially would he avoid all jolts and jars which would throw an unexpected strain upon one part.

The principle involved in such case is that which is most vital in the treatment of the old,—protection, and especially protection from straining any one vital part. An old man exposes himself to inclement weather, and especially to a high wind, which suddenly drives the blood from the surface in upon the internal organs, and at the same time, by its very force, checks the enfeebled movements of respiration, which aid in forcing the blood out from those organs. As a result, the man perishes at once, because he has thrown too great a strain upon a weak heart, or, if able momentarily to resist the strain, dies in a few days, of pneumonia, due to congestion of the lungs. I have known the sudden shock of good news to strike the old man down, as fatally as the poleax fells the bullock, by causing the blood to rush with renewed force through the brain, and tear its way through the weakened walls of the blood vessels. Again, the violent emotion of sudden bad news may overwhelm a heart which, with care, would have sufficed for its duties for many years.

The young athlete in the boat-race pulls at his oar until he drops from heart-strain, and, if the heart-strain has not been too severe, recovers himself in a few weeks, because the vital elasticity of the heart-tissues is in highest vigor. But the enfeebled and brittle heart-muscles of the old man, strained in some hurried effort to catch a railroad train, or in some equally unreasonable procedure, has no power of recovery, and rests itself only in death. What is true in regard to the healthy ordinary conditions of the old man is more abundantly true in regard to the diseases of the old. Medicines that perturbate, measures that bring relief through violent local actions, cannot be borne, and are not to be employed. At the same time, when possible, it is most essential to arrest at once any incipient disorder in the aged. I knew an old doctor, renowned in all lands, who lived ten years beyond the period attained before by any one of his name, largely because, knowing himself thoroughly, every few weeks he ar-

rested in its inception an attack, which, in a few hours might have gathered fatal force.

* * * * *

"The first question is in regard to food. The teeth in old age are, of course, lost, and they should, unless under exceptional circumstances, be replaced by artificial teeth, for the thorough chewing of food is even more necessary in the old man than in the young, because in the old the digestive powers are apt to fail. With the best artificial teeth, mastication is apt to be imperfectly performed; hence, the food of the aged should be soft and readily comminuted, and especially should it be of easy digestion. Very few old people need stimulating diet; very many are injured by an excess of nitrogenous food. The kidneys, like all other organs, are feeble; and, if meats and other rich foods are used in excess, they greatly increase the strain upon these organs. Milk and milk products, or preparations of breadstuffs cooked with milk, should form a very large proportion of the food of the ordinary aged individual; but individual peculiarities differ so much that personal medical counsel should in all cases be taken, so that the diet may be regulated to the needs of the individual case. Very many old people are hurt by the use of food in excessive quantity; but little exercise can be taken, all growth has ceased, and the bodily furnaces which make heat are able to destroy but very little of food fuel.

* * * * *

It is, perhaps, not universally recognized that in numerous cases of various character, death finally is due, in greater or less measure, to cold, and to an absolute failure on the part of the body to keep itself warm. In the old the heat-making functions are exceedingly low. It is especially important, therefore, that an abundance of clothes be worn by old people; but the very weight of the clothes oppresses, so that it is important that lightness of material should be combined with warmth. There is no ordinary garment which compares, in heat-preserving powers, to the buckskin jacket: and, in our climate, every man who passes the seventieth year should furnish him-

self with such covering. At first the jacket should be worn only when going out-of-doors; but in very advanced age it should form a part of the habitual underwear. The jacket should be high up in the neck and long in the sleeves, and should be of such a length as to thoroughly cover the abdomen. If worn as an under-jacket, it should be perforated so as to allow the escape of the vaporous emanations from the body.

Whenever there is any tendency to abdominal weakness, in addition to the jacket and the ordinary warm underclothes, an abdominal flannel bandage should be worn. It ought not to be forgotten that the mass of blood of the human body is in the abdominal organs, and that this is especially so when the circulation is sluggish. It is affirmed by authority that after death all the blood in the body can be put in the relaxed abdominal vessels; hence, the importance of maintaining the abdominal warmth, and, also, the good effect in feeble people with pendulous bellies, of the bandage, which helps to sustain the relaxed vessels, and thereby maintain the general circulation.

QUACK ADVERTISEMENTS.

A WRITER in a contemporary journal, offers the following forcible thoughts respecting the advertising of quack nostrums:—

"A sensitive conscience faithfully heeded is a most valuable desideratum in the Christian life. How it keeps one in the path of duty, and saves from serious lapses! If some of our religious papers had a little more conscience in the matter of quack-medicine advertisements, they would accomplish far less evil and far more good. For a temperance and religious sheet to place before its readers, in glowing language, such as usually characterizes a quack advertisement, the virtues of a patent compound containing from 15 to 45 per cent of alcohol, is shameful and disgraceful; and to put it in the form of ordinary reading matter, and oftentimes on the editorial page, is an imposition over which a subscriber has a right to wax indignant.

"It is a very lame apology to say that the

managers of newspapers have no means of knowing that the so-called remedy is an intoxicating compound. Analyses have been made of a score or so of remedies that have been and are advertised in scores of our religious papers, and have shown them to be pernicious drugs.

"The fact that these are largely shams and frauds as well as intoxicants, should preclude their admission into the religious press; but if any church paper has not yet reached the standard which rigidly excludes them, for conscience' sake, do not add insult to injury by putting them with ordinary reading matter in ordinary reading type. Do not deceive an innocent soul by leading him on, a half-column, with the idea that he is on the track of some scientific or physiological facts, only to suddenly run against some patent humbug. Such experiences are not calculated to develop the Christian virtues. Let us call a halt on demoralizing advertisements, as well as on demoralizing news-matter!"

Diphtheria from Birds and Other Animals.—

It has been known for some years that birds and poultry are subject to a disease which corresponds to what in the human being is known as diphtheria. Several foreign observers have gone a step further, and have endeavored to show that the disease is capable of transmission from animals to human beings. Last year Dr. Turner drew up an interesting report for the Local Government Board, bearing on this alleged transmissibility, and he adduced a large number of observations which seemed to indicate a connection between a diphtheritic affection, not only in fowls, but in rabbits and cats, and a similar affection in man.

The report comprised several instances in which the "strangles" in horses appeared to give rise to a like train of symptoms. In a thesis by Dr. Menzie, the transmission of the disease from animals to man is attributed to the dejections of the former. Diphtheritic affections among fowls are very common in Italy, and he quotes an instance in which four out of the five children of a medical man were

attacked and died. In this case he incriminates the thatched roof, which was inhabited by colonies of fowls, geese, pigeons, etc. The dejections of these animals, washed off by the rain, found their way into the cistern or well from which the supply of drinking-water was drawn.—*Medical Press and Circular.*

—The *Sanitary Era* says that Paris has 219,270 houses without any windows. All light and air enters through a hole in the door, which must be stopped in wet or cold weather. Thirty thousand habitations consist of a single room. Many thousands live in houses with no means of warming them. One block of eighteen hundred people has no water-supply whatever. With such a state of things Paris is spoken of as a model city.

—*Mistress* (to applicant). "Yes; I have advertised for a nurse. Are you competent to take care of young children?"

Applicant. "O, yis, mum."

Mistress. "You never give them paregoric to quiet them?"

Applicant. "Niver, mum. I allers prefers lodnum."—*New York Sun.*

—Bath-rooms should always be well ventilated. Recently an English gentleman was found dead in a warm bath. The investigation showed that he probably died from syncope, or fainting, as the result of breathing warm, stale air.

—A Chinese croup cure consists of spiders' nests, in two of which there should be spiders. These are mixed with alum, and, when cooked, given to the patient through a bamboo pipe.

—The brain of Prof. Olney, of Michigan, weighed over fifty seven ounces. The mammoth brain of Cuvier, the naturalist, was but one ounce larger.

—An eminent French physician reports the successful treatment of sciatica by the application of cold to the opposite limb.



DRESS.

A LECTURE. *

UP to within a very few years, it was thought that a man breathed one way, and that a woman breathed another. A civilized woman usually does breathe differently than a man. It was maintained that this peculiar breathing by woman was natural, and we have had scientists and physiologists tell us that there were two types of respiration, the male and the female. When I was in California, I asked a Chinese doctor if Chinese men and women breathed alike, and he said no; that the respiration of a man traveled through his mouth, along the backbone, and then up through the stomach, and out at the nose. In a woman, the breath came in through the mouth, down one side of the backbone, and up the other side; down one side of the stomach, and up the other side, and then out through the nose! Before going to California, I had made up my mind that I would find out by observation, if possible, whether or not Chinese women breathed like Chinese men. I had noticed here that women who had not very much respect for fashion, breathed a great deal like men; and that girls breathed like boys until they got to be fifteen or sixteen years old. Physiologists said that the reason a change took place at this period was that then the girl became fully developed into a woman.

About nine years ago, I wrote something

on this subject, in which I claimed that women who had a chance to breathe naturally, breathed just like men. Recently, I have had constructed an instrument called a "pneumograph," for recording respiratory movements. It puts its record upon paper, so that there is no mistake about it. When applied to the lungs, this little instrument causes a recording style to move up and down with every breath. By its use, it is possible to tell exactly how a person breathes, whether with the upper or the lower part of the chest. With this instrument, I tested the breathing of a number of Chinese women in California, and I found in every instance that Chinese women breathe just as men breathe.

Here are some of the tracings made with this instrument, which I have had enlarged, so that you can see them easily. The first one records the breathing of a man. The



Costal. Abdominal.

Fig. 1. Man.

first half of the tracing was made by the upper part of the chest, and the second half by the lower part of the chest. Each of these curves represents a breath. The height of a curve indicates the extent of the breathing movements which it represents. Men, in breathing, use chiefly the lower part of the chest and the diaphragm; while women, from

*Delivered by Dr. J. H. Kellogg, Monday evening, Oct. 13, 1888, in the Gymnasium of the Sanitarium, Battle Creek, Mich.

their mode of dress, are unable to use the lower part of their lungs, to any extent, and consequently use chiefly the upper part of the chest.

This tracing (fig. 2) illustrates the way in



Fig. 2. Civilized Woman (Unmarried, age 33 years.)

which a civilized woman breathes. The beginning of the tracing represents the movements of the upper portion of the chest; and the second part denotes the movements of the lower portion of the chest. Please observe that this tracing is just the reverse of the preceding.

The third tracing illustrates the breathing



Fig. 3. Chinese Woman.

of a Chinese woman, which I recorded lately in Colorado. She knew nothing about the purposes of the instrument, and breathed naturally. You observe the record is like the first one shown; that is, like that of a man.

Here are some tracings made by Indian women. I went to Arizona and New Mexico for the express purpose of visiting a tribe of Indians who are very primitive in their habits. Their style of dress does not differ much from that which Eve wore. Their dress consists of a very simple apron and a bustle. The action of their lungs is perfectly unobstructed. They breathe as men do.

This tracing (fig. 4) was made by a Chick-



Fig. 4. Indian Woman (Chickasaw).

asaw Indian girl, and is precisely like that of the male type. The civilized woman is the

only one who breathes with the upper part of her chest. I visited a little colony of Mexican Indians, where the women wore loose dresses, without tight bands or corsets, and



Fig. 5. Mexican Woman.

here I found men and women breathing just alike, as you see by this breathing of a Mexican woman (fig. 5).

This is from a Chippewa Indian woman



Fig. 6. Chippewa Indian Woman.

(fig. 6) brought up in a wild state. I found her in a Catholic school in Denver. She wore the civilized dress, all but the corset which she firmly refused to put on. She would not tolerate the pressure of tight bands.



Fig. 7. A Scotch Woman, who has never worn a corset (age 45, unmarried).

Here is a tracing I obtained from a Scotch woman who never wore a corset. You see we have here an example of one civilized woman breathing like a savage.



Fig. 8. Male Dog.

I applied the instrument to some dogs,—a male dog and a female dog,—and as you see (figs. 8 and 9), there is no difference. Both have the "male type" of respiration.



Fig. 9. Female Dog.

(TO BE CONTINUED.)

CARE OF THE HEALTH OF SCHOOL-CHILDREN.

DR. E. M. HUNT, Secretary of the New Jersey State Board of Health, in a most valuable circular on "School and Health," offers the following suggestions to parents and guardians respecting the care of children in attendance upon school, which are especially important at this season of the year:—

"Have clean, thin flannel for *clothing* next to the skin, with such additional outside garments as may be necessary for warmth, and shoes and stockings that will protect the feet from dampness. A dry pair of socks and a clean handkerchief are not amiss in the satchel. Let no child start for school with damp clothing; when active, we can bear dampness awhile, but to sit in wet clothing is always a risk. Tell the child, if damp or chilly, to let the teacher know it.

"A good, plain, *unhurried breakfast* is always important to the school-child. The young are better off without coffee or tea; but in cold weather, some may need a warm drink for breakfast, such as sweetened water, sugar and milk, or water or milk flavored with cocoa. If the child will not be at home to dinner within five hours after the close of breakfast, have him carry a small and easily-digested lunch to eat at recess, or at an appointed time at school. It should be light bread and butter, with fruit or jelly, and not over-large, if there is to be a meal at home by two o'clock. Have the child chew before swallowing, as it cannot chew after swallowing, as cows do. Let every boy know that *tobacco* in any form is so injurious to growth and vigor as to make its use by him a breach of school law and of good sense.

"See that the child gets plenty of good *sleep*, in a well-aired room, and does not go to bed just from the book, when tired and anxious about a lesson.

"When the child is really unwell, do not send him to school just for the name of being punctual. The parent should judge and decide wisely, mindful that headache, pain, or weariness, in a child, always calls for rest. If

your child is sick, or if there is sickness in the family, have the judgment of your doctor as to the time of staying at home."

THE USE OF STAYS.

At the recent meeting of the British Association held at Bath, a paper was read in the Physiological Section, upon the use of stays. The joint authors, Professor Roy and one of his colleagues in the University of Cambridge, were enthusiastic in praise of corsets, alleging that, worn in the day-time during the principal hours of exertion, these "strange disguisements," as an old writer once called them, are beneficial; and that "reasonably tight lacing" increases mental and physical activity, by causing a more liberal supply of blood to the brain, muscles, and nerves. At the same time, they condemned the practice of extremely tight lacing.

The theory of the professor and his colleague sounds logical at the first; but, upon closer investigation, it will be seen that they assumed much more than they proved. Admitting, for argument's sake, that nature has been so remiss in her arrangements that it is necessary to resort to some means of increasing the flow of blood to the head, etc., by robbing the abdominal viscera—is the practice of compression the most sensible? Blood is forced from the abdominal and thoracic viscera to the head and to the surface of the body, by firm pressure; but is this an unmixed benefit to the wearer of tight stays?

On the contrary, the gradually reddening nose, the headache, and frequent peevish irritability ("increased mental activity"! the laborious respiration, and the inability either to assume an easy position, or to move about with grace and freedom (how about increased physical activity"?), too plainly demonstrate that "reasonably tight lacing" is fraught with discomfort and danger. So long as women are to be found, who, to gratify personal vanity, or to conform with fashionable notions, will submit cheerfully to any inconvenience, it is little short of folly to advocate "reasonably tight lacing." Who shall decide, too, what constitutes this condition? Besides, if a

woman, through physical weakness, needs some kind of support for the back and chest, it should be supplied by the use of some sort of soft material, and not of unyielding corsets, rendered hard by metallic or other inelastic substances.—*Diet and Hygiene.*

Consumption One of the Deadly Penalties of Tight Lacing.—The unnatural and most injurious habit of contracting the waist and chest by stays, in a vice-like grip, interferes with the functions of all the abdominal, pelvic, and thoracic organs. The circulation and proper function of the liver and spleen are greatly interfered with, digestion and chylification are impaired, the pelvic organs are depressed below their normal level, the diaphragm is prevented from proper play, and the ribs cannot expand the chest walls; and the inevitable consequence is deficient respiration and aeration of the blood [and *consumption*].

Under five years of age, the census of 1870 and 1880 show more deaths of males than females, from this disease. They also show a gradual increase of females after that age, to ten years; and after that to fifteen, the increase is quite rapid, so that at the latter age the census of 1870 gives deaths of males, five hundred and one, and of females, one thousand and fifty-six; and for 1880 the disproportion is still greater. Between the ages of fifteen and twenty, it is considerably more than double. This is the tribute females pay to fashion at that age. Females continue to hold the ascendancy till thirty-five years, in the census of 1870, and to the fortieth year in that of 1880, when the males again come to the front, and lead the list the balance of life.—*St. Louis Courier of Medicine.*

—A physician of eminence, upon making a *post-mortem* examination of a woman who had worn heavy skirts suspended from her waist for many years, beginning the practice in early childhood, found the liver dragged down into the pelvis, and entirely cut in two, the separate portions being only held together by a fibrous cord.

The Proper Way to Dress.—We quote the following excellent remarks from an article on dress recently published in the *Independent*:—

“The real art of bearing the clothing is to divide it between the shoulders and the hips, and so divide it, not only that each shall bear part of the weight, but that during motion they shall supplement and relieve each other. The theoretical garment for such a purpose is some elastic material made in the shape of the vest worn by men, with enough of stiffness to keep in shape, and with the clothing below the waist suspended therefrom.

“The only design of any waist-band or girdle should be to equalize the weight, and to keep the central garment from which the others are suspended enough in place to adjust it, and yet such as not to constrict or confine the body. Thus only can the hips and the shoulders do their part in bearing weight, and act interchangeably, as our motions may make desirable.”

Ear-Rings.—The wearing of ear-rings is a relic of barbarism which one who has a true sense of beauty will certainly refuse to submit to, even if dictated by the autocrats of fashion. It is encouraging to see that even France, the home of fashion, has an opponent to this absurd custom, in Dr. Morin, an eminent French physician, who has recently shown that they are not infrequently a cause of disease.

—*The Woman's Journal* reports a case of sudden death from tight lacing, which occurred recently in Philadelphia. The young lady fainted in a theater, and died the following day. It was testified at the coroner's inquest that she had thought her waist not slender enough, and had laced very tightly. This occasioned heart failure, and death.

—Not one woman in a thousand can breathe naturally. The lungs are intended to operate like bellows, the lower points of the sides serving as handles. A fashionable woman's breathing is like trying to use a bellows with the handles tied together.

THE HAPPY FIRESIDE

DEVOTED TO TEMPERANCE MENTAL AND MORAL CULTURE
 & HOME CULTURE, NATURAL HISTORY AND
 OTHER INTERESTING TOPICS
 CONDUCTED BY MRS. E. E. KELLOGG A.M.

THE BEST THING IN THE WORLD.

WHAT'S the best thing in the world?
 June-rose by May-dew impared;
 Sweet south-wind that means no rain;
 Truth, not cruel to a friend;
 Pleasure not in haste to end;
 Beauty not self-decked and curled
 Till its pride is over-plain;
 Light that never makes you wink;
 Memory, that gives no pain;
 Love, when, so, you're loved again.
 What's the best thing in the world?
 —Something out of it, I think.

—Mrs. Browning.

A DEAR EXPERIENCE.

BY S. ISADORE MINER.

(CONTINUED.)

GEORGE NORTON scarcely waited to hear the last swish of her dress before he seized his hat, and hurried out another way, to avoid her sarcastic shrug at his anxiety; for he knew that, as she herself said, his mother never could endure sentiment. He hailed a passing Herald, and was soon at home.

He let himself in with his latch-key, and went immediately to the nursery,—an alcoved snuggerly, half sitting-room, half nursery, where Amy loved to pass her time. He found her in her accustomed seat, a low sewing-chair by the baby's cradle. She had not heard him coming, and he stepped behind the curtained door-way, that he might better discover the change his mother deemed so apparent.

And, thanks to Mrs. Norton, the frowning

glance and frigid nod bestowed on her in the park, had wrought a perceptible change in Amy's usually serene, unclouded face. Her tender heart had been racked and her mind perplexed to discover what new cause of grievance she had given George's mother, and to tell the truth, she was tired, for the first time in months; for in her perplexity she had unthinkingly walked on and on, till she found herself in the farthest corner of the park. By the time she had retraced her steps, still reviewing her many disagreements, real and fancied, with her mother-in-law, she was weary in both mind and body, and it was a very tired, homesick little mother that sat by the crib of her sleeping darling, almost wishing she were a child again in the warm home nest, with her mother's arms about her. No wonder she looked pale and dejected, and that at these thoughts of home two great tears rolled down her cheeks and splashed on the white hands in her lap. At sight of these, George was at her side, and had her folded in his strong arms.

"Amy, my pet, what is it? You are ill, and haven't told me," cried he, terrified at the passionate burst of tears that threatened to ruin his coat collar completely.

At the mention of being ill, a series of negative shakes of the head resulted, but George, whose faith in his mother's discernment was rapidly rising as much above par as it had formerly been below it, persisted in his queries.

"You certainly are going to be seriously ill, Amy, if you are not already. You must let me send for the doctor." At this such a vigorous head-shaking ensued, that he was quite dumb from wonder.

Poor little mother-bird! It was only the surcharged heart overflowing at the first loving, sympathetic words. After this outburst, Amy sat upright on his knee, dashed the tears from her eyes, and looked as sweet and smiling as April after a shower. Yet tokens of the storm still remained.

"But Amy," said George, determined not to let so favorable an occasion pass unimproved, "if you are not sick, you are at least tired, and that is almost as bad. Now I will wager that you have been out a good share of the afternoon giving baby her airing, and this is the result."

This, of course, Amy could not deny, yet she tried to explain it all the best she could, without exposing his mother's conduct; for she was a loyal little soul, who would scorn to speak aversely of her husband's friends, and even chided herself for her occasional feelings of resentment.

George was not to be easily put off, however. Amy's strange behavior had done more to convince him of the correctness of his mother's observations, than all the latter's words, and he would not have considered himself as discharging his duty as a husband and father, had he not acted as he did.

"My dear," said he, after a little pause, during which he had been revolving different ways of putting the matter uppermost in his mind, "you have tried your way for eight months, now suppose you try mine for a while. It won't be more than fair, since I have never objected to your plans as long as they did not interfere with your health. Don't say a word against it," he added, seeing Amy was about to object, "for I have set my heart upon it. Of course, I don't mean you should give up the care of Dottie entirely, but have a good stout girl just to lift and carry her, take her out for her airings, and such tiring work. I think I'll go down to an intelligence office this very evening,"

said he, looking at his watch with an air of determination, something like a man who having a disagreeable task to perform, goes about it immediately.

Amy saw at once that further remonstrance was useless; for George Norton had a little of his mother's strong will. So she yielded the point as gracefully as possible, although she inwardly rebelled, and indulged in a little "liquid reasoning" when he had gone on his errand.

"Well, I shall have baby to myself, anyway, when she is not taking her airing, which is one comfort. That seems to be George's great objection, so I am sure that when she can walk, he will admit that I can manage her alone. In the meantime, I will look up some of my neglected accomplishments, for I must be capable of teaching Dottie myself till she is quite a girl. Folks never can tell what ignorant servants will do or say to their children when they are not by. I am sure I would much rather give up what people call 'society pleasures,' than to have my children brought up as I have seen some here," and Amy sighed while she soliloquized, as if she were the mother of a dozen. "I almost hope he can't find a nurse. No, I do n't either. I do want him to try it awhile; for I should like to prove to him that my way is best. I am almost sure he will repent of his bargain." And he did.

But he secured a nurse-girl without any difficulty, and she was promptly installed in her new position. She was not a very intelligent-looking girl, and she was "just over;" but her rosy English face gave her the recommendation of being at least healthy and honest,—a desirable, though unusual, combination of qualities in a nurse-girl, by the way.

The next morning Amy carefully instructed Ellen in the lesser duties of the nursery. She taught her how to keep the room in order and well aired, and gave into her hands the care of Miss Dottie's wardrobe. Her bathing and dressing she would trust to no less experienced or loving hands than her own. All the little personal offices that required the handling of the dainty treasure, she preferred to

do herself. Indeed, her friends had often chided her for her scrupulous attention to details in the nursery. The temperature of the room was kept as nearly as possible at 70°, and Dottie's daily morning bath must always be at just the proper heat, 98°. And then such a variety of nursery articles,—soft flannel bath-aprons in which to receive the dear little dripping baby, that the chill of cotton might not touch her; long white linen ones for every-day wear; numerous changes of soft flannel wash-cloths, that they might be spared for thorough cleansing in the regular wash. All the dainty brushes and toilet accessories were looked after with cleanly nicety. Some of these duties she now delegated to Ellen, although under her own supervision. She also showed her where to find the supply of health and nursery magazines always kept on file, and suggested that during her spare time it would be much to her advantage to read them, and thus keep informed on the many points pertinent to her occupation. Imagine her surprise to find that Ellen could neither read nor write.

“And these are the kind of girls to whom mothers who call themselves Christian are willing to commit their children!” exclaimed Amy, indignantly. “When all our greatest educators and missionaries in foreign countries ask is permission to influence and mold the minds of the young children, Christian mothers will concede that privilege to the ignorant and unrefined, if not to the vicious. If there is one class more than another who should be educated and refined, it is that with whom little children, from the cradle up, are brought in daily contact. Will the time ever come when fashionable mothers will arouse themselves to the wrong thus done their children, and wage war against this household evil? Until they do, and require these qualifications in their nurse-maids, the standard will never be raised; for their demands are the only ones recognized, and what are the few against the many? I wash my hands clear of all responsibility in installing this innovation in our home, and trust it will be of short duration.”

In the afternoon Amy went with her new acquisition, or rather George's, for she would not lay claim to her in any way, to the park, to initiate her in the delightful mysteries of baby's airing. As the day was windy, she showed Ellen how to adjust a light scarf of thin silk veiling around the cab top in such a manner as to completely protect Dottie from sudden gusts and her eyes from whirling dust, yet without interfering in the least with her sight. This arrangement Amy found of service in winter, protecting baby from sleet and snow, when if worn in the usual manner as a face veil, it would have become wet with her breath, and, freezing, been a source of much discomfort.

Ellen was willing and handy, and soon became adept in guiding that somewhat fractious vehicle, the perambulator, although once she almost collided with an absent-minded pedestrian, which she excused on the ground that she was a little “nigh-heyed.” But, taking it altogether, she behaved quite admirably, so that George met with no serious opposition next day when he insisted that she should be allowed to give baby her accustomed exercise alone.

Still it was with many misgivings that Amy watched them disappear from sight, after giving Ellen many parting injunctions to watch out for carriages when crossing streets, and to be careful not to run against any one.

Ellen, however, went on her way without any forebodings. She was quite favorably impressed with her new mistress, though she thought she was a “little bit daft” over the baby. “To be sure,” she concluded good-naturedly, “it's a likely child, almost as fine as I've seen in Hengland.”

The air was fresh and cool,—the coolness that betokens rain,—and the park with its bright sward, sparkling fountains, and winding drives, was well patronized. It seemed as if every nurse-maid in the city must have been there with their little charges that afternoon. Groups of three or four had collected under almost every tree, dandling the tiny ones in their arms, while the older ones ran about at their own free will, a prey to care-

less coachmen, cross dogs, and every contagious disease going the rounds.

Ellen's mind was so taken up with sight-seeing that she really allowed what her mistress had especially warned her against—a collision. But as it was only another perambulator, and not "any one," she judged that she had obeyed the spirit, if not the letter, of her mistress's injunction, especially as its late occupant was at present seated on an afghan under an adjacent tree.

The noise of the collision aroused a sleepy-eyed nurse-maid on the other side the tree, who craned out a long neck, and asked with a strongly marked Hiberian accent, "What be ye affther doing?"

Ellen presented the necessary apologies, and the Hiberian, somewhat mollified, condescendingly remarked that it was "no matther at all, so long as it did n't break any of the cray-chur's rollers."

Thus introduced, the two began a characteristic conversation, and as Dottie was quite fascinated by the little stranger on the afghan, who was reaching its tiny hands to her and cooing in the most seductive way, Ellen was bidden to "lift the choild down, and let them take care of theirselves," which she did, despite the fact that either child was thus laid liable to any disease with which the other might be afflicted.

A pretty picture they made seated together on the scarlet afghan,—the two little girls so nearly alike in looks, age, and size that the passer-by would easily have taken them for twins, dressed all in white, with the regulation white cap with wide flapping border, always the destroyer of baby comfort, if not of sight, and the producer of cross-eyes innumerable.

The conversation between Ellen and her new acquaintance proved interesting, since it was discovered that they came over about the same time, and promised to be lengthy, had not the storm that the fresh breeze heralded, come up so suddenly that even before they could hastily catch up the happy infants and stow them snugly away in their cabs, a few big drops fell. They had not even time for

a parting word, and neither had learned the name or stopping-place of the other, but waving a mutual good-by, they hurried home as fast as feet could carry them.

The storm came unawares upon Amy also. She had been sorting over a collection of music, selecting some favorites to repractice. A low rumble of thunder first admonished her of the storm-king's presence. Her first thought was of the absent ones, and she hurried to the porch just as George came up the steps.

"O George!" she cried, "I am so worried about baby. I am afraid she will get wet."

"Well, she is neither sugar nor salt, and a few drops won't hurt her," he replied consolingly. "I haven't a doubt but what Ellen knows enough to come in out of the weather when it rains. I am afraid our daughter will never grow up;" then as he caught her half-startled expression, he added, "for you will always make a baby of her. Look!" he said a moment later, "Was n't I right? There comes Ellen now, and it has scarcely rained a drop. You see how easily you are worried, and I presume half your many worries are as foolish and useless. Here! don't you go down to lug her up these steps. I can do it just as well," and he stayed her as she was about to rush down. Remember, she had not been separated from baby one little hour before.

Baby lay snug and dry under her robe, for after the first few drops, the dark clouds rolling together and the distant voice of the thunder were the only signs of the storm that burst in awful fury in a short half-hour. Ellen had hastened with her charge, but cuddled down in her warm nest like a cozy kitten, the gentle motion of the perambulator had lulled her to sleep.

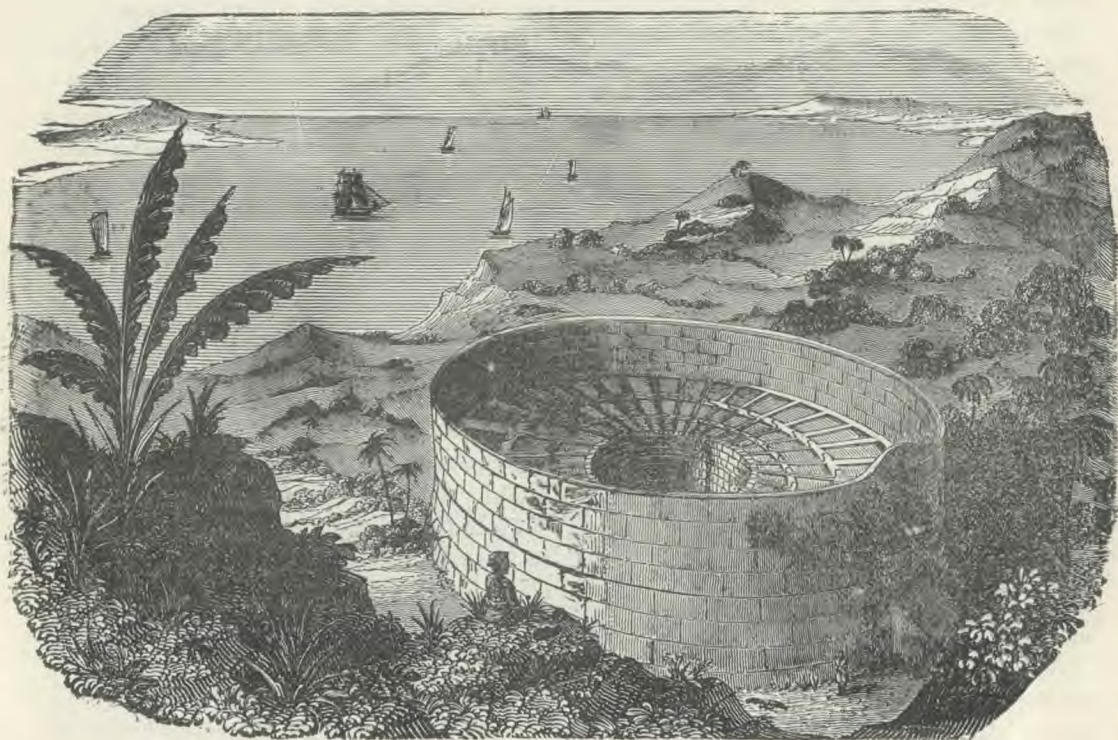
George lifted her gently out, and bidding Amy run into the house, he followed her. He placed baby in her arms, and she tenderly began removing the light wraps. The room was dark from the gathering storm, so it was not till the gas was lighted that she made a startling and heart-rending discovery.

THE PARSEES OF BOMBAY.

THE Parsees, or fire-worshippers, originally came from Persia. When that country was conquered by Caliph Comes, in 651, those who would not accept the religion of Mohammed were driven out. They fled to India, and finally settled in Bombay, which city is now their head-quarters.

In manners and civilization, the Parsees

not defile the earth by burying their dead, nor pollute the water by casting them into the sea. Fire is too sacred to permit of cremation, so their method of disposing of their dead is to expose the bodies on the tops of high buildings called "Towers of Silence," to be devoured by the birds of the air. Outside the city there are several of these Towers of Silence, inclosed by high walls to keep ob-



A TOWER OF SILENCE.

rank next to Europeans, but their religious prejudices are very peculiar. Morning and evening they worship the rising and setting sun, and at least sixteen times a day does a good Parsee say his prayers, with his face turned toward the sacred fire, which is always kept burning by the priests, in the many fire-temples which adorn the city of Bombay. These prayers are learned by rote, and are not in the language in which the Parsee converses.

According to the Parsee religion, the earth, the sea, and fire are all holy; hence they must

not defile the earth by burying their dead, nor pollute the water by casting them into the sea. Fire is too sacred to permit of cremation, so their method of disposing of their dead is to expose the bodies on the tops of high buildings called "Towers of Silence," to be devoured by the birds of the air. Outside the city there are several of these Towers of Silence, inclosed by high walls to keep ob-

servers at a distance. When a Parsee dies, his body is conveyed to the gates, and there received by the priests, by whom, after being divested of its clothing, it is exposed on gratings constructed for the purpose. When the bones have been stripped of flesh, they are swept into a deep pit, which forms the center of the tower, where they are left to mingle with common clay. When this pit is full, another tower is built.

The Parsees are a thrifty people, and pauperism is unknown among them. They have schools of their own, but the wealthier families

usually employ a governess to teach their children at home.

They do not use gas or matches, and their fires for cooking purposes are never allowed to go out. If such an accident happen, it is necessary to borrow fire from some other Parsee. They illuminate their dwellings by means of tumblers of oil, with short wicks. One of these must be kept burning all day, to light the others by at night. They never blow out a light; fire is too sacred to be polluted by human breath.

Unlike the majority of people in India, they do not offer their daughters in marriage until they are grown, often not until they are eighteen or twenty years of age.

Their religion prescribes the kind of clothing to be worn. Young and old, male and female, all wear the suddra, or sacred shirt. This garment must never be left off for a single moment during the lifetime. It is made of muslin or lace, and is usually embroidered. Little girls wear a round cap, both indoors and out. When they are grown, the cap is changed for a white cloth, which is bound around the head, entirely concealing the hair, as it is believed that evil spirits will seize them by the hair, if it is left uncovered. The boys and men wear the round cap at all times, which they conceal under a turban when they are on the streets or at their places of business.

When the Parsee goes to make a call, he keeps his head covered, but takes off his shoes; if he is stylish, and wears stockings, he removes his shoes at the door, and makes his call in his stocking-feet.

The Parsees are the only Orientals who do not smoke.

—Good manners are the blossoms of good sense, and, it may be added, of good feeling; for if the law of kindness be written in the heart, it will lead to that disinterestedness in little as well as great things—that desire to oblige, and attention to the gratification of others—which is the foundation of good manners.

IF I WERE A BOY AGAIN.

MR. JAMES T. FIELDS, in the *Journal of Education*, offers the following retrospective thoughts, which are so full of good advice that we quote them for our youthful readers:—

“If I were a boy again, I would look on the cheerful side of everything, for almost everything has a cheerful side. Life is very much like a mirror; if you smile upon it, it smiles back again on you; but if you frown and look doubtful upon it, you will be sure to get a similar look in return. I once heard it said of a grumbling, unthankful person, ‘He would have made an uncommonly fine sour apple, if he had happened to be born in that station of life!’ Inner sunshine warms not only the heart of the owner, but all who come in contact with it. Indifference begets indifference. ‘Who shuts love out, in turn shall be shut out from love.’

“If I were a boy again, I would school myself to say ‘No’ oftener. I might write pages on the importance of learning very early in life to gain that point where a young man can stand erect, and decline doing an unworthy thing because it is unworthy; but the whole subject is so admirably treated by dear old President James Walker, who was once the head of Harvard College, that I beg you to get his volume of discourses, and read what he has to tell you about saying ‘no’ on every proper occasion. Dr. Walker had that supreme art of ‘putting things’ which is now so rare among instructors of youth or age; and what he has left for mankind to read is written in permanent ink.

“If I were a boy again, I would demand of myself more courtesy toward my companions and friends. Indeed, I would rigorously exact it of myself toward strangers as well. The smallest courtesies, interspersed along the rough roads of life, are like the little English sparrows now singing to us all winter long, and making that season of ice and snow more endurable to everybody.

“Instead of trying so hard as some of us do to be happy, as if that were the sole purpose of life, I would, if I were a boy again, try still harder to deserve happiness.”

Temperance Notes.

—The Supreme Court of Nebraska has decided that a woman may sue for and recover money her husband has squandered for liquor.

—Four thousand three hundred and forty accidental deaths per week, or six hundred and twenty per day, as partial results of strong drink, are recorded for England and Wales alone.

—M. Chevreul, whose one hundred and second birthday was recently celebrated, is not addicted to the use of tobacco. France has another non-smoking centenarian,—M. Renandin, who is one hundred and five years old.

—A traveler in Africa says the liquor now chiefly exported to Africa from many of the shipping-ports of Germany is a poisonous distillation produced chiefly from the potato, which chemists state contains more fusel oil than any other known spirit. The natives have given it the appropriate name of "Death."

—The English nation spent an average of £2,350,000 17s. 6d. per week for intoxicants in 1880. At £8 7s. and 6d., the price of an ordinary suit of clothes there, they might have furnished each week 696,324 of their poor men a suit for this money; and who can calculate the gain in health, real comfort, and appearance?

—The following, from Dr. Post, a returned missionary from Beyrout, Africa, in a speech before the International Centenary Conference in London, is worthy to be urged upon the attention of all civilized people: "In our warfare against intemperance we have to begin," he said, "with the tables of our own clergy, of our Christian laity, and in our Christian homes, before we can dare lift up our voices against this enemy of the heathen world."

—Statistics give the average amount per capita, of liquors used annually in Canada, at .28 litres (a litre is one pint, fifteen oz.); in Finland, 3.3 litres; in Norway, 3.9; while in the United States it is 4.79 litres of spirits and 31.3 litres of beer; in the United Kingdom, 5.37 litres of spirits and 14.3 of beer; in Austro-Hungary, 5.5 litres of spirits and 22.4 of wine; in Sweden, 8.14 litres of spirits and 11 litres of beer; in Bavaria, 4.31 litres of spirits and 26.2 of beer; in France, 7.28 litres of spirits, 119.2 of wine, and 21.1

of beer. Thus the facts are fatal to the theory that people in cold climates *require* liquor to keep them warm, since those of the coldest countries in the list use the least.

—Through an official address by the bishops of the M. E. Church to their General Conference, their principles as a church are stated thus tersely: "The liquor traffic is so pernicious in all its bearings, so inimical to the interest of honest trade, so repugnant to the moral sense, so injurious to the peace and order of society, so hurtful to the homes, to the church, and to the body politic, and so utterly antagonistic to all that is precious in life, that the only proper attitude toward it for Christians, is that of relentless hostility. It can never be legalized without sin. No temporary device for regulating it can become a substitute for prohibition. License, high or low, is vicious in principle, and powerless as a remedy."

—Dr. B. F. Davenport, chemist to the State Board of Health of Massachusetts, in a recent analysis of forty-seven tonics and bitters, found all but one to contain a large percentage of alcohol. Parker's Tonic, which claims to be a purely vegetable extract, and to stimulate the body without intoxicating, was found to contain 41.6 per cent of alcohol. Hoofland's German Bitters, which is said to be free from alcoholic stimulants, contains 35.6 per cent of alcohol. Hostetter's Stomach Bitters contains 44.3 per cent. Even whisky and brandy contain but 50 per cent of alcohol; hence, when a person takes the usual "dose" of these bitters and tonics, he averages but little less alcohol than would be obtained in the same amount of pure whisky. There are a great many people who would on no account drink beer, wine, or brandy as such, but yet use these "tonics" and "bitters" freely and regularly.

—The following vigorous prohibition sentiments are from the *Rockford Monitor*: "If ever high license had a chance for trial, it has had it here. If ever it is to prove a success, it should be in a city of schools, like Rockford. With a large number of total abstainers, with vigorous and aggressive temperance organizations, with more than a score of churches, large and influential, a large and active Y. M. C. Association, a fine public library, and other organizations, all seeking in effect to counteract the saloon and its work, still saloons are increasing in number, and evidences are on every hand, to show that little or no restraint is put upon the traffic. Surely, in such a field, . . . if there is any virtue in high license, it should be apparent by this time. On the contrary, there is an evident increase of drunkenness. . . . We denounce high license. . . . We protest, in the name of suffering humanity against the continuance of this iniquitous system."

Popular Science.

Diamonds in Meteors.—A Russian scientist has recently discovered small diamonds in meteoric stones which fell in a province of Russia two years ago.

—Hard wood is now prepared from soft wood, by subjecting it to compression in a powerful hydraulic press. The wood thus treated is made very dense and uniform, and so close grained that it is equally as good as the more expensive hard woods for manufacturing purposes."

Salt Mountains.—At the south end of the Dead Sea is situated a remarkable mountain range, some six miles in length, with an average width of three-fourths of a mile, and a height of not far from six hundred feet, the mass of which is composed of solid rock salt, some of which is as clear as crystal. Most of the salt used in the surrounding cities and country is obtained from this ridge of mountains.

To Thaw Frozen Gas Pipes.—A writer in a recent number of the *Scientific American* offers the following as an easy method to draw the frost from earth above gas pipes. He says:—

"I took off from over the pipe some four or five inches, just a crust, of earth, and then put two bushels of lime in the space, poured water over it, and slacked it, and then put canvas over that, and rocks on the canvas, so as to keep the wind from getting underneath. Next morning, on returning there, I found that the frost had been drawn out from the ground for nearly three feet. You can appreciate what an advantage that was, for picking through frozen ground, with the thermometer below zero, is no joke. Since then we have tried it several times. It is an excellent plan, if you have time enough to let the lime work."

Fresh Water from the Bottom of the Sea.—One of the hottest regions on earth is along the Persian Gulf, where little or no rain falls. "At Bahrin the arid shore has no fresh water, yet a comparatively numerous population contrive to live there—thanks to the copious springs which break forth from the bottom of the sea. The fresh water is got by diving. The diver, sitting in his boat, winds a great goat-skin bag around his left arm, the hand grasping its mouth; he then takes in his right hand a heavy stone, to which is attached a strong line, and thus equipped, he plunges in and quickly reaches the bottom. Instantly opening the bag over the strong jet of fresh water, he springs up the ascending current, at the same time closing the bag, and is helped aboard. The stone is then hauled up, and the diver, after taking a breath, plunges again. The source of copi-

ous submarine springs is thought to be in the green hills of Osman, some five or six hundred miles distant.

Whistling Jugs.—Among the burial places of Peru, are sometimes found some most ingenious specimens of clay handiwork called silvadors, or musical jugs. One of these, belonging to the Wm. S. Vaux collection at Philadelphia, is thus described by *The Clay Worker*: "It consists of two vases, whose bodies are joined one to the other, with a hole, or opening, between them. The neck of one of these vases is closed, with the exception of a small opening in which a clay pipe is inserted, leading to the body of the whistle. When a liquid is poured into the open-necked vase, the air is compressed into the other, and in escaping through the narrow opening is forced into the whistle, the vibrations producing sounds. Many of these sounds represent the notes of birds; one in the Clay collection of Philadelphia, Pennsylvania, imitates the notes of the robin or some other member of the thrush tribe peculiar to Peru. The closed neck of this double vase is modeled into a representation of a bird's head, which is thrush-like in character. Another water-vase in the same collection, representing a llama, imitates the disgusting habit which this animal possesses, of ejecting its saliva when enraged. The hissing sound which accompanies this action is admirably imitated."

An Amusing Experiment.—A very amusing experiment may be performed, claims the *Popular Science News*, by taking a saturated solution of nitrate of potash (saltpeter), and, with a quill pen or fine brush, drawing any picture, design, or words upon a piece of white absorbent paper. The lines should be kept away from each other; and the entire subject coarsely drawn in outline. When dry, the lines will be nearly invisible; but if one of them be touched with the glowing end of an extinguished match, a spark of fire will run through the paper, following the lines already traced, and cutting out the design as if with an invisible knife.

This experiment is explained by the chemical constitution of the saltpeter. This salt contains a large amount of oxygen, so loosely combined that it readily leaves the nitrogen and potash, and unites with the carbon of the paper, when heated to the point of ignition. The heat developed by the combustion is not sufficient to ignite the paper, except where it has been saturated with the oxygen-giving salt; and so the spark of fire, which is really only an indication of a violent chemical reaction, follows the lines previously traced. If an actual flame were brought in contact with the paper, of course the whole would be consumed; but the heat of the glowing charcoal is just sufficient to start the combustion, by the aid of the oxygen in the saltpeter.



"Blessed are the Pure in Heart."

MISS WILLARD ON SOCIAL PURITY.

AT the last annual meeting of the National W. C. T. U. the gifted President, Miss Francis E. Willard, gave utterance to the following noble sentiments respecting the social purity work of that organization:—

Of all the specialists on earth, the mother brings the poorest training to her immortal task. As the country grows richer, the average mother becomes engrossed with society; and in the homes that pride themselves upon their opportunities, such a spectacle as I witnessed in one, grows frequent: A little girl not eight years old went regularly to dancing-school, bedecked in all the colors of the rainbow, and complaining of the tight gloves and tight slippers that squeezed her pudgy little hands and feet. When there, a little boy led her out upon the floor; and after the prescribed salutation, they danced together, waltzes and all, after which she was led back to her seat by her small escort, and treated to confectionery and compliments. What culture had the mother missed, who could thus handicap her little one, and what a deteriorated mother was that little one getting ready to be? But notwithstanding grievous and typical instances like these, I cannot but think that we are moving onward in the social world.

"There is less etiquette and more reality; less veneering and more real grain of the wood. Once the business of well-to-do women was society. What did that mean? That the

be-all and end-all was to dress in fashion, dance a minute with stateliness, preside at a dinner of several hours' duration with master-ship, and so on. Now to be sure, there are large circles of women to whom the *decollete* dress, whirling waltz, progressive euchre-party, and box at the theater, are the world's chief charm. But the spell of this sort of life is broken. The special inclosure known as 'society' grows smaller and less fascinating to the great many-sided world of women. Christianity is emancipating us, and showing us so many other things to do.

"Women more gifted, cultured, and rich than these who give themselves wholly to society, devote themselves nowadays to things they find so much more worthy of them, that 'society women' have become a subdivision, quite clearly marked, of the real womanhood that has a broad, free life and outlook on the world. Just as, in the early days, one who did not take wine was almost ostracized, but is now respectfully regarded and even praised, so 'not to be in society' is no longer a mark of singularity, but a differentiation from the type, that is clearly recognized and held in high esteem. Perhaps 'society' itself will pass away. Who knows? One feels like saying this below one's breath, and yet, *who knows?* There are so many better things to do than to sit for two hours as devotees around the stomachic altar of a dinner table, or to spin in a waltz, taking attitudes elsewhere indecent or intolerable. But society dissected down to

the marrow, yields but these two spectacles; and these two will pass away.

"Banish wine from the dinner-table, dancing from the 'evening entertainment,' and 'society,' with its late hours and indigestions, would ere long collapse. Nothing is surer than that wine is to be banished, and that with the growing uplift and dignity of womanhood, dancing, and the outrageous mode of dress that goes along with it, will one day be held as a mere relic of barbarism. That was a prophetic innovation at the White House when our gracious Mrs. Hayes replaced the dinner with its wine-glasses by the stately and elegant reception. Perhaps while men rule the State, in their government "of the minority, by the minority, for the minority," its highest expression will still be the dinner-table with its clinking glasses and plenty of tobacco smoke afterward; but when men and women both come into the kingdom for the glad new times that hasten to be here, the gustatory nerve will be dethroned once and forevermore. For there are so many more worthy and delightful ways of investing (not 'spending') one's time; 'there are so many better things to do.'

"The blossoming of women into deeds of philanthropy gives us a hint of the truer forms of society that are to come. Emerson said, 'We descend to meet,' because he claims that we are on a higher plane when alone with God and nature. But this need not be so. Doubtless in the outworn and stereotyped forms of society, where material pleasures still hold sway, we do 'descend to meet;' but when a philanthropic purpose determines our companionships and leads to our convenings, then we climb together into pure and more vital air. The 'coming women'—nay, the women who have come, have learned the loveliest meanings of the word 'society.' Indeed, some of us like to call it 'comradship' instead, this interchange of highest thought and tenderest aspiration, in which the sense of selfhood is diminished, and the sense of otherhood increased.

"But our social-purity work contemplates as its highest object the harmonization of

men and women into one circle of worth, work, and winsomeness. Why do they now so poorly comprehend each other? Largely because their daily interests are so widely separate; their occupations, friendships, pleasures, are so far apart, their themes of mutual conversation few; their worlds not worlds that inter-sphere, but only touch. Hence, come class-dinners, even in co-education schools, from which women are ruled out. The wine-glass and cigar have an accursed spell to separate women from men. The physical conditions they induce, and the themes to which they tend, are foreign to the purity of woman's habitudes. The modern "club" is the home's rival in the circles of the rich as is the saloon in circles of the poor. Indeed, man in the home has had as yet but the faintest evolution, and yet home has already done more for man than for any other member of its favored constituency. It is his special humanizer,—the garden where his choicest virtues grow. Man's heart is lonesome often, and the feeling does him honor, for his lonesomeness is always for the home that was, but is not, or else that is not, but that ought to be or to have been.

"When the White Cross gospel shall have been embosomed in young manhood's life, for one blessed generation, the sanctities of fatherhood shall be seen to exceed all others to which a manly spirit can attain in this state of existence, and the malarious dream of wicked self-indulgence shall slowly but surely give place to the sacred self-restraint which waits to crown with all good fairies' gifts the little life which noble love alone may dare invoke.

"Then comes the stater Eden back to men,
Then reign the world's great bridals chaste and calm,
Then springs the crowning race of humankind."

Reform in India.—The infamous laws for maintaining the military brothels in India have at last been abolished by an act of the English Parliament. The repeal of these laws has been brought about as the result of the tireless effort of a large number of devoted philanthropists.

SLAVE WIVES AMONG THE INDIANS.

THE following facts respecting a state of things existing among certain Indian tribes, we quote from a letter written by Mrs. Fannie H. Rastall, of Kansas, to the National Superintendent of the Social Purity Department of the N. W. C. T. U.:—

“There is located at Lawrence, Kansas, an educational institution known as the Haskell Institute, for the education of Indian children. This institution is in charge of Ex-Governor Charles Robinson, from whom Mrs. Rastall’s husband obtained the following facts, as stated by Mrs. R.:

“Among the tribes of the western, or perhaps, the south-western part of the Territory, west of the Cherokee Strip, the most degrading conditions of polygamy exist, *with the consent of the United States Government*, it having promised not to interfere with the *tribal relations*. The Indians there sell their daughters, when young, to any man who has a pony with which to purchase one; and the purchaser of the oldest daughter has a prior claim to all others.

“A bright young Indian girl was brought, at ten years of age, to be educated at Lawrence. Soon after she was twelve years old, a large, muscular, coal-black African appeared at the school, and demanded possession of her, as his property. He had bought her of her father, to receive her at the age of twelve years. For days he hung around the Institute, and the only excuse Gov. Robinson could find for her protection was the fact that the contract with the United States was that she must remain in school three years. The colored man left. When the full time of three years had expired, *she was returned by the United States to her tribe*, and her owner began to seek her. When last heard from, she was in hiding, twenty miles from the home of her parents. Gov. Robinson pathetically added, “I do not know what became of her.”

“Is it not dreadful? Can we not at least get Congress to modify its pledge not to “interfere with tribal relations” so as to make it able to prevent slavery, polygamy, and the

immoralities attendant upon these evils. Did you know such things were permitted, with the sanction of our great Government tacitly given?”

“It would certainly seem that the efforts being made by our Government, and by various philanthropic associations, to civilize and Christianize our American heathen, are not likely to produce any very brilliant results, so long as young girls who have received the advantages of education, and have, to some degree, become accustomed to the culture and refinement of civilized society, may be sold by their parents as slave wives to the most untamed and brutal savage.”

Human Chattels.—The idea that slavery is extinct in this country is wholly a mistake. Mrs. Obernauer, missionary of the Woman’s Christian Temperance Union in Northern Michigan, has brought to light some most appalling facts respecting the enslavement of young women, in dens of infamy in the wilderness of the upper portion of this State. At a mass-meeting recently held in the Grand Opera House at Detroit, Michigan, Mrs. O. rehearsed some of the facts elicited by her investigations, mentioning, among other cases, “a young girl who was brought to the home of Mrs. Solomon Steele, in the upper portion of the Lower Peninsula, by a man in a cutter. The poor girl was almost frozen, and well nigh insensible. She had hung for hours in the branches of a tree, trying to elude a bull-dog, which was waiting below to tear her to pieces. She was escaping from one of the horrible dens of the north woods. When the man drove up in the cutter, the poor girl took her life in her hands, and dropped to the ground. As she ran toward the cutter, she was pursued by one of her persecutors, with a shot-gun. The man in the cutter, however, was also armed, and succeeded in rescuing the girl. The last words she heard from her persecutor, as she reached the cutter, were, ‘I’ll shoot you yet.’ She told Mrs. Steele that a girl who was with her when she escaped from the prison-pen, had been shot in the leg and recaptured.”

Vice in Northern Wisconsin.—Dr. Kate C. Bushnell, Evangelist for the Department of the White Cross and White Shield of the N. W. C. T. U., who has been for some months quietly investigating as to the actual condition of the degraded women in the pinery dens of Northern Wisconsin, stated in her report before the recent convention of the N. W. C. T. U., that she “has obtained conclusive evidence that the investigations made by the detective employed by the State authorities respecting these ‘so-called dens,’ were neither complete nor thorough; and that there still exist in Northern Wisconsin dens surrounded by very high board fences (commonly called stockades), the keepers of which keep bull-dogs to guard them; that both girls of former innocent and guilty lives are enticed into these dens by promise of work, and held against their wills, compelled to lead a degraded, criminal life, without remuneration therefor; are abused and often murdered without any notice being taken of the matter; and that local officers are guilty of every degree of complicity in the crime, from indifference in the enforcement of the law, and a favoring of the keeping of dens of infamy, to the helping to hunt down and return escaping girls, and the turning procurer and selling of girls into the slave-life themselves; that the forms of restraint used to keep unwilling girls in a life of shame are fines, threats, arrests [by abetting officials], high-board fences, lock and key; and in one instance, at least, a ball and chain were used.”

An Alarming Tendency.—One of the most alarming tendencies of the age is the loss among young men of that abhorrence for vice which is the greatest safeguard of virtue. A young man may be known to be a rake and a seducer without seriously injuring his standing in what is called “good society.” The average young man is from early boyhood so accustomed to contact with the vicious and the impure that he loses his natural repugnance toward evil, and finally comes to look upon vice as a sort of necessary evil, if he does not himself descend to the depths of depravity which he condones in others. Par-

ents should awaken to an appreciation of this growing danger, and endeavor to meet it by early training in the right direction.

Noble Work.—The W. C. T. U. of Chicago is doing a noble work in its “Anchorage Mission for Women,” which is a sort of rescue station which receives, for lodging, lonely, friendless, or erring women who desire to reform, and finds home for them. Within the last year, according to the annual report of the managers, more than four thousand persons have been lodged in this home, of whom nearly two hundred have been materially aided in their efforts toward a better life. An enterprise of this sort might find a useful place in every large city in the land. Here is a work for women, which will bring to them blessings for both this world and the next.

—You must quarantine against immoral literature. This is a deadly poison. It comes in various and attractive disguises. Exclude it as you would the germs of a pestilence. To effectually protect your homes from its baleful influence, supply them with healthy literature. It is as easy to cultivate a good as a depraved literary taste in children. They will read something, and what they read will exert an important influence on their character. Let your most earnest effort be exerted to keep out of the house the sensational novel, the blood curdling tale of vice, the obscene pictures, and the whole flood of wicked, degrading, crime-producing literature that threatens us. Put in reach of your families good papers, magazines, and books. Bait them with a chaste story, and keep them supplied with wholesome knowledge. A bad book may prepare your son for the cell of a felon. A novel may vitiate the whole life of your daughter.—*Memphis Advocate.*

—One of the most encouraging features of the times is the recent enactment of laws for the protection of girls. One of the most beneficent of these is a law lately passed by the State of Connecticut, which imprisons a man who deserts his wife or refuses to support her, or who is guilty of infidelity.

GOOD HEALTH
 J. H. KELLOGG, M. D. EDITOR.
 BATTLE CREEK, MICHIGAN.

CLOSE OF THE VOLUME.

THIS number closes the twenty-second volume of GOOD HEALTH and the fifteenth year of the connection of the present editor with its management.

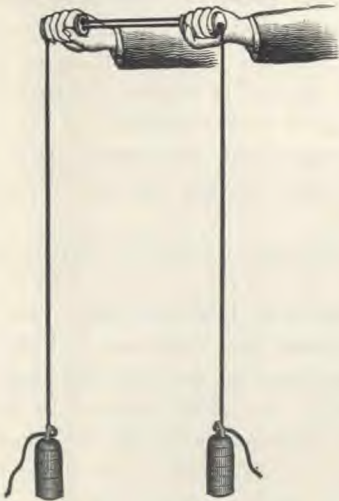
In looking back over the years of labor in the interest of this journal and the principles which it represents, we find much reason for congratulation of the friends of health and temperance reform, at the great progress which has been made along every line of work connected with this movement. Rational ideas respecting diet, many of which were regarded as fanatical fancies when this journal first undertook their advocacy, as the only Western representative of this phase of reform, have been so thoroughly indorsed and adopted by the intelligent public, that they are no longer regarded as in any way peculiar. Graham bread and oatmeal are no longer dietetic curiosities to be found only on the tables of a few hygienists, but are among the staple articles of diet in every first-class hotel and restaurant, and are the daily food for millions of human beings in every part of the civilized world.

Dress reform has recovered from the backset received by the ultra and extreme views of some of its early advocates, who seemed to think that no reform could be made in woman's dress, unless by the adoption of a style

decidedly masculine in appearance, even to the extent of donning coat, vest, hat, and pantaloons, as did Mary Walker and many of her equally honest and sincere followers in this line; and has found a prominent and permanent position among the reforms demanded by a large proportion of the intelligent and thinking women of to-day.

The same success has attended nearly all of the long-fought issues which this journal has represented, and we trust that its influence has contributed in some degree to this happy result, although we are glad to believe that its influence has been but a very small factor in the achievement of the immense progress in the direction of health and temperance reform which this age has witnessed. In our opinion, the chief influence which has directed the line of progress is the spirit of inquiry into causes and effects, which is abroad among the intelligent and thinking classes everywhere, and the general disposition to break the bands of conservatism, and general loss of respect for dogmatic assumptions. Heterodoxy no longer serves the purpose as a scarecrow to the masses, against incursions into the fields of knowledge outside the beaten track of orthodoxy. This is true in all lines of thought, and especially in studies in the direction of the physical well-being of the human race.

GOOD HEALTH has always been a staunch advocate of all good reforms, and expects to be such in the future; and its managers would here express their hearty thanks for the kindly reception the intelligent public have always given this journal, and the increased appreciation of its value, which has increased its circulation within the last fifteen years more than fivefold. With the beginning of a new volume, many improvements will be entered, which it is hoped will greatly enhance the value of the journal, and constrain every person now a reader to remain a patron of the journal, and a friend to the interests which it represents.



A NEW APPLIANCE FOR PHYSICAL CULTURE.

THROUGH the kindness of Prof. Kunz, of Basel, Switzerland, we have received a sample of an ingenious device, invented by Dr. Largiader, of that city, which is termed by the inventor, "An Arm and Chest Strengtheners." As will be seen by the accompanying cut, which we have had made to illustrate this useful invention, the device consists of two handles, to which are attached cords supporting weights. The cords are connected with the handles in such a manner that the handles may be separated, each cord gliding through an opening in the handle opposite the one to which it is attached. This device can, of

course, be used in a great variety of positions. Its chief advantage consists in that the weight is a uniform one. In the use of rubber bands, the weight constantly increases as the hands are separated. As will be seen by the cut, each cord supports several small weights, by means of which the amount of work required can be easily regulated. It is also possible to give to one arm more work than to the other, as circumstances may require.

This device is not only ingenious, but simple and inexpensive. It seems to offer nearly all the advantages afforded by the much more expensive devices consisting of weights and pulleys, which have heretofore been used for exercises of this sort. The inventor has intended it for use in the public schools, as it is so inexpensive that any school can be furnished with the exercise appliances for each pupil, at small cost, and so compact that a large number of persons can be engaged in exercise at the same time in a room of moderate size. We shall subject this appliance to a practical test in the Sanitarium gymnasium, and may have something more to say with reference to it in a future number.

A TRIP ABOVE THE CLOUDS.

LAST month we gave our readers a brief account of our visit to Denver, Colorado, and mentioned our departure from that city to Colorado Springs, a health resort of worldwide renown, located just at the foot of Pike's Peak. We found here our friend and former patient, Col. H. S. Haines, who has made this beautiful spot his home for twelve years or more, and, who placed us under many obligations by numerous courtesies and assiduous attentions in aiding us to crowd into a short stay of five days as much interesting and novel experience as possible. It is not our purpose to enter into a description of this well-known spot, or to regale our readers with descriptions of the magnificent and fascinating scenery with which Colorado Springs is probably blessed in extent and variety beyond any other spot upon the globe. The gifted pen of the lamented Helen Jackson, and the

enthusiastic descriptions written by hundreds of others, have done no more than scant justice to the lavish display of landscape beauty nature has gathered together in this remarkable spot, as though intent upon the creation of a magnificent picture-gallery, with each work a masterpiece from nature's own workshop, unrivaled by any product of human skill. Probably nowhere in all the world can be found gathered together within so small a compass, such a variety of picturesque and interesting scenery as may be found within two hours' drive of this little city,—the Garden of the Gods; Monument Park; Cheyenne Canyon; Manitou, with its boiling springs; the Cave of the Winds, with its musical stalactites; and, rising high above all, grand old Pike's Peak, lifting its head more than fourteen thousand feet above the sea.

We—that is, our party, consisting of the writer, Mrs. K., three little folks,—Agnes, Bessie, and Willie,—and a friend who joined us on the train—arrived at Colorado Springs about noon on Wednesday. After spending a half-hour in hunting up a temporary residence, we secured a commodious carriage and a driver, and made an excursion to the Garden of the Gods, where, seated upon a rug spread out under the shade of a huge rock, we ate our hygienic lunch, consisting of graham bread, grapes, peaches, milk, and nuts.

After dinner we drove out to Manitou, and from thence to the Cave of the Winds, which is reached by a steep climb of two miles. The road runs along the old trail to Leadville, and commands many interesting views of gorges, cascades, and towering peaks skirted with pine and aspen, and crowned at the highest points with glistening snow. It is a common axiom that "water never runs up hill," but on this drive we encountered an ocular demonstration of the fallacy of the proverb; for while we were apparently driving rapidly down a steep grade, the water in an irrigating ditch at the side of the road was to be seen running rapidly in the opposite direction. The appearance is so deceptive, that unless one felt perfectly assured that it is impossible for water to run up hill, he would be ready to take his

oath that he had seen a small brook rippling up a hill-side, as merrily as though it were running in the opposite direction.

The next morning we were off, bright and early, for the top of Pike's Peak, via the new stage road, which had been completed to the top about six weeks before. The whole day was consumed by the trip, and the ride of sixteen miles and back, starting from Cascade Canyon, was one never to be forgotten. The stage-coach, with nine passengers and the driver, was drawn up, as far as the half-way house, by four horses accustomed to mountain-climbing. At the half-way house, the horses were exchanged for mules, which were better adapted to high mountain travel. Up to this point the road is so smooth and well constructed that the horses jog along at a brisk trot the greater portion of the way; but as the top is neared, the road is wholly made up of broken stones, and consequently is so rough that passengers are treated to several miles of very vigorous Swedish movements.

The greatest discomfort experienced during the upward ride, however, was the strange combination of heat and cold. The sky was for the most part cloudless, and the rays of the sun were so hot that the nose, or any portion of the skin exposed to them, was quickly blistered, while if one succeeded in keeping himself wholly in the shade, the clear, frosty air made his nose and ears tingle with the cold, the temperature near the top being several degrees below freezing. However, we were prepared with comfortable wraps and furs so as to escape freezing; but the next day found our faces decorated with noses swollen and red enough to fit the countenance of a toper.

About 2 P. M., we reached the top, where we found a United States Signal Station, with a courteous observer and assistant in charge, who took much pains to make our party comfortable and at home. The majority of the party suffered so much from vertigo and nausea as to make a horizontal position necessary for comfort. Several looked very pale, and groaned audibly, while some others who said

nothing probably felt pale, and heartily wished themselves safely back at their lodgings, when they glanced down the steep mountain-side and noticed the narrow driveway zigzagging up the precipitous rocky peak above timber-line.

No one, however, was so much pre-occupied with his physical discomforts as to be wholly oblivious to the magnificent spectacle spread out before us. There were long ranges of mountain peaks, some even higher than that on which we stood, reaching off to the north and south, covering a territory hundreds of miles in extent. Away off towards the west, as far as the eye could reach, was stretched a diversified landscape of mountains, hills, valleys, arid mesas, and grass-covered plains, while toward the east stretched the boundless prairies, till sky and earth were blended in the purple distance, like an ocean picture in which the blue of sea and sky appears as one.

"All aboard," shouted the driver, at precisely 3 P. M., so we quickly climbed to our seats; and, cracking his whip over the heads of his mules, the driver started us down the mountain-side at a dashing pace. One who has never ridden behind a Rocky Mountain stage-driver has missed one of the most genuine sensations of life. One moment he is urging his team, with a vigorous if not melodious voice, and with a whip that goes off with a report like a horse-pistol, until the mules are tearing down the steep declivity on a keen run. The harness rattles, small bowlders, struck by the wheel, fly from the track as though shot out of a catapult. The old stage shakes and rocks till the frightened passengers cling to the seats to prevent being spilled out of it. Valises, rock specimens, umbrellas, and lunch-baskets, travel to and fro, among the passengers' feet, from one end of the vehicle to the other. The side-curtains roll down, and along with the gentlemen's scarfs and the ladies' wraps and ribbons, stream out in the wind toward the rear. Everything is on the move.

Just now we make a slight turn, and are horrified to find the road coming suddenly to an end. We have certainly reached the "jump-

ing-off place." We are going at a 2:40 rate, and not two rods in front of us is the brink of a precipice, over which we certainly must go, and in ten seconds will find ourselves mangled and bleeding and tangled up with mules and wagon-spokes, a thousand feet below. Every woman screams, every child cries, the men try to look calm, while they feel their hearts in their throats. The driver shouts, "whoa, Jim," throws his whole weight on the brake, switches the front team off to the left in a sidewise scramble, just as their feet touch the edge of the precipice, and swings us up close to the edge, so we can look down and see the awful fate from which his skill has saved us. Another explosion of the rawhide lash over the ears of the mules, and away we go again, at the same frightful rate, every passenger hanging on for dear life, grateful that he has escaped the jaws of death, but almost wishing that the dare-devil driver hadn't. About every eighty rods, for the first four or five miles of the descent, we enjoyed exactly the experience described, for however often we escaped, we felt sure we should go over next time, and our driver seemed anxious to impress upon us the fact that a slight turn of his hand would give us a free pass to the bottom. We don't recommend this style of travel for nervous invalids, but for people who need waking up and shaking up it is just the thing.

It need not be said that we were all thankful when we found ourselves safe on board the train at Cascade Station, feeling satisfied with mountain-climbing in a stage-coach. Next month we will tell our readers about our impressions of Colorado, from a health stand-point.

—In England attention has recently been called to the danger of infection with contagious diseases, from books in circulating libraries. Some librarians have adopted the plan of disinfecting the books by means of the fumes of carbolic acid.

—Cobbett, in his "Advice to Young Men," says: "Let me beseech you to resolve to free yourselves from the slavery of tea and coffee and every other slop-kettle."

SOME SANITARY BOOKS.

THE rapid development of sanitary science, especially as relates to the construction of buildings, house-drainage, sewage, etc., within the last half a score of years, has greatly increased the responsibility of architects and constructors. The public, as well as sanitarians, are becoming acquainted with the fact that some of the most deadly diseases are due to defects in sewage and plumbing; and consequently those who are responsible for the sanitary arrangements of a dwelling or other building to be occupied by human beings, are held accountable to a much higher standard than was the case half a score of years ago.

Probably one of the most common embarrassments which conscientious architects have encountered in their efforts to conform their plans to the highest state of knowledge on sanitary subjects, has been the want of handy volumes containing a concise statement of the essential requirements for so doing. Fortunately, this lack no longer exists. Mr. Wm. Paul Gerhard has, within the last two or three years, issued a number of volumes which architects and builders, health officers, and in fact all persons interested in practical sanitary science will find invaluable. These works treat, in the most practical manner possible, of all questions relating to the healthful conditions of a human habitation. We can in no way do our readers a greater favor than in presenting the following list of works by this able and experienced writer:—

“The Sanitary Drainage of Buildings, House Drainage and Sanitary Plumbing;” 23 Murray St., New York, D. Van Ostrand, publisher; “Sanitary House-Inspection,” John Wiley and Sons, publishers, New York; “The Drainage of a House,” Rand Avery Co., publishers, Boston; “The Prevention of Fire,” Wm. Paul Gerhard, publisher; “Preliminary Report on a System of Sewage Disposal at the Asylum for the Insane at Middletown, New York,” the Argus Co., Albany, publishers; “Sanitary Drainage of Tenement Houses,” The Case Lockwood Brainard Co., publishers,

Hartford, Connecticut. The address of the author of the above works is Wm. Paul Gerhard, C. E., consulting Engineer for Sanitary works, 39 Union Square, West, New York.

IMPORTANT INFORMATION.

OF all the frauds perpetrated upon the public at the present day, none are so stupendous and so infamous as those practiced by the venders of patent medicines, under the alluring titles of tonics, bitters, invigorators, and sundry similar names. The worst poisons are daily swallowed by thousands of persons who imagine that they are receiving great benefit therefrom. A short time ago the writer received, from a former patient, a sample of medicine which she was taking, for which the quack doctor from whom it was purchased, charged her \$20.00 an ounce. She thought the medicine more beneficial than any remedy she had ever tried, but thinking the price rather high, wrote to us for information as to its nature, so that it might be purchased at a drug store at less expense. An examination showed this precious medicine to be nothing more or less than chloral, which the dishonest charlatan was peddling out to his patients at the rate of \$10.00 for five cents' worth. Even worse drugs are often used in this manner. Indeed, some of these infamous nostrum venders go so far as to deliberately train persons into the habit of opium-taking, for the purpose of enriching their own pockets.

Dr. Bennett F. Davenport recently reported to the State Board of Health of Massachusetts the analyses of a large number of tonics and bitters, every one of which contains alcohol, or something worse. In reading the portion of the report which we give below, please observe that nearly all the specimens contained as much alcohol as does wine, and some as much as gin or whisky:—

“Dr. Buckland's Scotch Oats Essence, New York City. ‘Enough alcohol is added to dissolve resins, and prevent fermentation.’ ‘Not a temporary and fleeting stimulant, but a permanent tonic. Its use must be regular, and

continued over a considerable period. An extract of double and triple strength also made. Dose, ten to fifteen drops, to a teaspoonful three or four times daily, increased as needed.' In the simple essence, thirty-five per cent of alcohol was found on assay. Further examination of this article reveals a still more dangerous ingredient in its composition. The sample analyzed was found to contain one-fourth grain of morphia to the ounce of the so-called 'Essence of Oats.' A more insidious and dangerous fraud can scarcely be imagined, especially when administered as this is recommended, for the cure of inebriety or the opium-habit.

"Carter's Physical Extract, Georgetown, Massachusetts. Dose, one tablespoonful three times daily. 22 per cent of alcohol found on assay.

"Hooker's Wigwam Tonic, Haverhill, Massachusetts. One tablespoonful three times daily. 20.7 per cent of alcohol found on assay.

"Hoofland's German Tonic, Philadelphia. Admits Santa Cruz rum. Wine-glass, four times daily. 29.3 per cent.

"Hop Tonic, Grand Rapids, Michigan. One tablespoonful to wine-glass three times a day, 7 per cent.

"Howe's Arabian Tonic, New York. 'Not a rum drink.' Tablespoonful to wine-glass four times daily. 13.2 per cent.

"Jackson's Golden Seal Tonic, Boston. Admits Marsala wine. Half wine-glass three times daily. 19.6 per cent.

"Liebig Co.'s Cocoa Beef Tonic, New York. 'With sherry. Two to four teaspoonfuls three times daily. 23.2 per cent.

Mensman's Peptonized Beef Tonic, New York. 'Contains spirit.' One tablespoonful to three, three times daily. 16.5 per cent.

"Parker's Tonic, New York. 'A purely vegetable extract.' 'Stimulus to the body without intoxicating.' 'Inebriates struggling to reform will find its tonic and sustaining influence on the nervous system a great help to their efforts.' Dose as tonic, one to two teaspoonfuls, one to three times daily. 41.6 per cent.

"Schenk's Sea-Weed Tonic, Philadelphia.

'Distilled from sea-weed after the same manner as Jamaica spirits is from sugar-cane. It is therefore entirely harmless and free from the injurious properties of corn and rye whisky.' Dose, half wine-glass three times daily. 19.5 per cent.

Indigestible Food Elements.—Most of our foods contain elements which are not digestible. Prominent in the list of these substances should be placed the rinds of fruits and vegetables. "The edible part of fruits is peculiarly delicate, and liable to rapid decomposition if exposed to the atmosphere; it is, therefore, a wise provision of nature to place a strong and impervious coating over it as a protection against accident, and to prevent insect enemies from the seed within. The skin of plums is wonderfully strong compared with its thickness, and resists the action of water and many solvents in a remarkable manner. If not thoroughly masticated before taken into the stomach, this skin is rarely, if ever, dissolved by the gastric juice. In some cases pieces of it adhere to the coats of the stomach as wet paper clings to bodies, causing more or less disturbance or inconvenience. Raisins and dried currants are particularly troublesome in this way, and, if not chopped up before cooking, should be thoroughly chewed before swallowing. If a dried currant passes into the stomach whole, it is never digested at all. In the feeding of domestic animals this fact should be kept in mind. If grain and leguminous seeds are not crushed or ground, much of the food is often swallowed whole, and the husk, or pellicle, resists the solvents of the stomach, causing a considerable loss of nutriment. Birds, being destitute of teeth, are provided with a special apparatus for grinding their seed; namely, the gizzard. The indigestibility of certain nuts is partially due to the brown skins."

—Oliver Wendell Holmes says, "Each one of us is an omnibus in which rides all our ancestors." Unhappy is the man who carries in his omnibus a drunkard, a glutton, or a tobacco-slave.

DOMESTIC MEDICINE



NASAL CATARRH.

Local Treatment for a Cold.—The most disagreeable local symptoms attending an acute cold in the head are coryza, or a watery discharge from the nose, the obstructed nasal breathing, and the distressing pain in the face, or just below the eyebrows. These symptoms may be greatly ameliorated and the cure of the disease expedited, by the employment of some local measures, only a few of the most effective of which we have room to mention.

Inhalants.—The inhalation of strong ammonia water, strong spirits of camphor, the vapor of balsam of benzoin, tar, oil of eucalyptus, and especially the inhalation of menthol, which is now sold at nearly all drug stores, placed in convenient inhaling tubes, frequently give great relief to the coryza, and the stuffed feeling of the nasal passages, by stimulating the dilated blood-vessels to contraction. These measures are not effective, however, unless employed early, and should then be frequently repeated, perhaps once or twice every hour during the first forty-eight hours after the cold has been contracted.

Snuffs.—We do not recommend the taking of snuff of any sort, as a habit. There is, nevertheless, some efficiency in the insufflation of certain substances in the form of powder, especially in the early stages of a cold. Among the best preparations of this sort are the following:—

Equal parts of boracic acid and starch.

The same with twenty grains of menthol and a dram of compound tincture of benzoin added. The further addition of five grains of cocaine adds still greater effectiveness to the powder, but of course these preparations are intended to be used only for a short time, for the relief of the acute symptoms for which they are recommended.

An ounce of finely-powdered starch or sugar containing a dram of spirits of camphor, thoroughly rubbed into it, is also a good remedy of this class. For those to whom the odor of camphor is disagreeable, an effective powder may be prepared by adding to an ounce of finely-powdered coffee, half a dram of tincture of camphor, and five grains of cocaine. Any of the powders previously mentioned in this article will be found of service in relieving, not only the coryza and stuffed feeling of the nostrils, but the distressing faceache and headache which frequently attend the first stages of a cold. A little of the powder should be drawn into the nostrils as often as once every hour or two.

Solutions.—On the whole, medicated solutions are, perhaps, less useful in the treatment of the first stages of a cold than the powders or vapors which have been described. Nevertheless, there are a few solutions which are of real service, and should be mentioned first of all, in efficiency. A spray of a four-per-cent solution of cocaine thrown into the nostrils every hour is the most efficient of all remedies, if we except a powder prepared from the

same drug, in relieving the local symptoms of an acute cold.

A solution of listerine, one part to eight or ten of water, used as a spray, is also an efficient remedy. What the mucous membrane requires, when acutely congested, is a mild stimulation, but not irritation; hence, anything of a strongly irritating character should be avoided. A solution of common salt, two drams to the pint of water, used as a spray, will sometimes afford relief.

Heat applied to the face and forehead by means of a sponge dipped in hot water, affords great comfort by relieving headache and faceache, and undoubtedly to some degree lessens the congestion of the nasal mucous membrane. Bathing the face with water as hot as can be borne is a less efficient, though advantageous measure. Care should be taken to avoid cold draughts upon the head or face, or exposure and evaporation of moisture after bathing: hence, care should be taken to keep the head and face well protected by means of a soft woolen blanket or something equally efficient.

Diet.—It is important that something should be said respecting diet, in the treatment of this condition. For the first twenty-four hours, the staple article of diet should be hot water. A little milk or gruel, or, better yet, a few bunches of grapes or other juicy fruit, may be allowed, but hot water is certainly to be preferred, and the more the better. It is hardly probable that the patient will take too much of this efficient detergent. In a cold, there is an obstructed condition of the emunctories, or cleansing organs, of the body. Hot water greatly aids the elimination of the effete products which are accumulated in the system, and thus hastens the terminations of the abnormal effort made to eliminate waste products from the nose. Two or three quarts of hot water may be swallowed every two or three hours during the first stages of a cold, with great advantage. Meat and all rich and stimulating articles should be scrupulously avoided. Milk in moderate quantity, with fruits and grains simply prepared, should constitute the diet.

As has previously been remarked, it is important that a person suffering from an acute cold should carefully protect himself from exposure. On this account, he should,—if possible, for the first twenty-four hours, stay

constantly in bed. Though he may feel well enough to be about his usual duties, time and health will be economized by this means. The susceptibility to disturbance of the circulation is so great during the onset of a cold, that the slight exposures to which one necessarily subjects himself, even while endeavoring to guard himself carefully from further exposure, are sufficient to cause a continued increase of the cold, which may even be favored by the measures of treatment employed. In other respects, also, rest is favorable to recovery since it allows the system to husband its energies and employ them all in a curative direction. The waste of the system is also lessened, and thus the duties of the crippled excretory organs are lightened.

We have endeavored to sketch in the foregoing what a long experience and careful observation has taught us to be the rational method of treating that very common disorder, a common cold. That there is no other means by which a cold can be successfully managed, we will not say. We have known, in fact, of instances in which persons engaged in out-of-door employments have effectually cured a cold by a long drive in a cold wind, or a vigorous day's work in a keen atmosphere. It is not to be questioned that the inhalation of cold air acts as a local stimulant, and the waste oxygen inhaled under such circumstances, together with vigorous exercise, stimulates both the circulation and the process of elimination; and thus the very measure which would seem likely to aggravate a cold, goes to operate as a cure; but only persons of vigorous constitution and those accustomed to an out-of-door life are likely to succeed in effecting the cure of a cold by this method. And most certainly unsuccessful is any method of treatment which combines out-of-door exposures, with sweating baths and the other measures of treatment commonly employed. We have known persons to sweat themselves into a state of great debility and weakness, in the attempt to cure a cold, while all the time augmenting the malady by their ill-advised procedures. Again we wish to emphasize the statement that if a cold is not substantially relieved or broken by the application of two or three hot baths within the first forty-eight hours after it has been contracted, these measures of treatment will not prove effectual, and if continued, will probably aggravate the cold.



LANDT'S LESSON.

BY S. ISADORE MINER.

THIS is the letter Landt Ballentyne was reading with a rather woe-begone face, as he came up the graveled walk leading to the school dormitory:—

DEAR LANDT: I know you will be disappointed you cannot spend the holidays at home, and we are all so sorry, too; but Aunt Nellie's children have the measles, and I am expecting Mabel and the twins to come down with them any day. Three will be more than I am able to care for, and then, too, were you sick, you might not be able to return to school at the beginning of the next term. I am very anxious to have you improve your advantages. Keep up a stout heart, and be a good boy. I will send you a box of holiday goodies, and the children have put in the little presents they were saving for your return.

Affectionately,
MOTHER.

This was Landt's first year away at school, and he had been anxiously looking forward to the time when he might make his first home visit. It was now two days before Christmas, and he was to have gone home on the morrow. No wonder, big thirteen year-old boy that he was, a few large drops rose to his eyes, which, boy-fashion, he dashed quickly away with the back of his hand.

"Well," said he, "the box 'll be one comfort. If I can't go home, home'll come to me. Hope there'll be some of Judy's ginger cookies and a big plum-cake. My! won't I have a treat after living on the Doctor's oatmeal and graham rolls four months? and would n't his eyes stick out if he knew it? Guess I won't say a word to anyone about it."

The Doctor—good Dr. Winthrop, the founder of the Chesney Boys' School—did not approve of ginger snaps and plum-cakes, especially on the wholesale plan some of the boys had been accustomed to; in fact, it might truthfully be said that he did not approve of them at all. That was why his annual school announcement contained the wise request that parents would refrain from sending boxes of cake

and sweetmeats to their children while under his care. "A healthy stomach makes a sound body and a clear mind," was the Doctor's motto, and he did not hesitate to regulate his table fare accordingly, but was often frustrated in his work by the thoughtlessness of parents ignorant of the laws of health; for this rule was not always regarded, sometimes because it was not read, or if read, forgotten, and sometimes, pity 't is to say it, it was knowingly evaded. The Doctor often confiscated such contraband goods, or doled them out with such meager hand that the boys said they would rather not have any at all than just a smell; but Landt's box escaped notice in the general confusion of home-going.

Mrs. Ballentyne did not mean to defy the Doctor's authority. She was one of the number who had not informed themselves concerning the Doctor's restriction. She had mourned a little at Landt's description of what he called "prison fare," but Mr. Ballentyne had often assured her that it would do the boy good; and as Landt wrote that he had gained nearly ten pounds and never felt better in his life, she had gradually ceased to think of it. "But now," she said, "he will appreciate a little home cookery as never before," and Judy was bidden to do her best.

Landt carried the coveted box to his room immediately upon its arrival Christmas eve, and scarcely waiting to throw aside his cap, tackled its fastenings. First of all came the children's presents—a rather droll collection. Hattie had insisted on sending her favorite plaything, her "boofer wabbit," an astonishing animal composed chiefly of cotton flannel and sawdust, with bright staring shoe-button eyes. Nothing was too good for her Landt, so a menagerie of candy quadrupeds, somewhat the worse from contact with small fingers, followed suit.

"Dear little p.t!" said Landt, with eyes suspiciously moist, as he read the note his mother had pinned to the rabbit, explaining its unexpected appearance. Then came a book from Harry, bought

with his own pennies. Mother added that he wanted to send his new bow and arrow, but the box would not admit them, for which she was truly grateful. "No doubt he was, too," thought Landt, for he knew what a sacrifice even the new book must have been to Harry's quite selfish little heart.

Next were some handkerchiefs nicely hemmed and marked by Mabel, some new ties and hose from his mother, and last of all, his father's gift, a pair of beautiful nickel-plated skates. Landt gave a subdued hurrah, and skipped around the room in a whirl of delight.

When the last gift was deposited on the table, a second box came to light, crammed to the brim with good things to eat—bad things the Doctor would have called them. First of all was the plum-cake, an icy monument to Judy's culinary skill, and redolent with spice. This was surrounded by a tempting row of ginger cookies just turned a discreet brown. Forthwith they were attacked, and while one hand conveyed the gingery discs to his mouth, the other removed a pot of preserves, a glass of quince jelly, mince tarts, and round rosy-cheeked apples, all chinked in with nuts and candies,—food fit for a king, as the old stories say, or fit for a glutton, but unfit for any youngster like Landt.

Neither his mother nor the Doctor would have allowed him to do as he did, and he knew better, too,—knew even better than his mother, the results of violating the laws of hygiene, for the Doctor had not lectured and explained to no purpose,—knowledge which his mother had never acquired. But the plum-cake looked so inviting, he could not resist trying it, late though it was. So one piece after another disappeared, interlarded with jam and tarts, and topped off by sweetmeats. On the Doctor's plain but wholesome fare, his stomach had returned to a normal condition, though still weak from his former high living. No wonder it revolted at such ill usage, and complained so loudly that it made itself heard through every nerve. Landt passed a sleepless night, and morning found him unable to rise, with a hot, aching head and very bad tasting mouth. One visit to his room revealed to the Doctor the cause of his pupil's sudden illness.

Not till his poor, overloaded stomach was relieved by an emetic, did Landt get relief. But all through the week he felt miserably sick and weak, especially when he thought of plum-cake. He never wanted to see another, and felt relieved to know that the remains of his feast found their way to the hen-house. Not only did his greed cause him physical suffering, with even no mother beside him to pet and console, but he missed all the pleasures the Doctor had planned to lighten his disappointment at not being able to pass his vacation at home, and could not even try his new skates. But he ate his oatmeal without grumbling, and wrote his mother afterward that if

the Doctor's diet was "prison fare," Judy's was "poison fare," which was worse.

DEEP BREATHING.

NOBODY teaches American boys how to breathe. City boys, and many from the country too, have finer chests before they go to school than they ever do afterward. Sitting in a school-room, or shop, or factory, or any other room, five or six hours a day, and then sitting most of the rest of the day besides, does much to weaken the chest; for when you sit still, you do not breathe your lungs half full. Take one large, full breath now, and see how your chest rises and expands, and how differently from a minute ago, when breathing only as you generally do. Many boys actually do not breathe their lungs full once in a whole week. Is it any wonder they have weak chests, and that they easily catch cold? How are you to have strong lungs if you do not use them? Which has the strong arms—the invalid leaving a sick bed or the blacksmith? he who uses his arms, or he who does not?

When walking at the rate of four miles an hour, you breathe nearly five times as much air as when you are sitting still. Now, the fuller breaths you take, and the more of them you take in a day, the stronger and fuller chest you are going to have. If every boy in the United States would take a thousand slow, very deep breaths every day from now on throughout his life, it would almost double our vigor and effectiveness as a nation. For deep breathing not only enlarges the chest itself, and makes it shapely and strong, but it gives power and vigor to the lungs and heart,—makes them do their work far better. And it does the same for the stomach and bowels, the liver and kidneys; indeed, to all the vital organs. It makes the blood richer. It adds directly to the vigor of the brain as well, and so enables it to do more work. In short, it is about the best known way of getting and keeping health. And who would care to hire a sick man to work for him? Or who can do much hard work when he is sick? Not that we can always avoid sickness, but it is less likely to come, and has harder work to enter, when we are robust and in good training than when we are weak and run down.—*Wm. Blaikie, in Harper's Young People.*

—A little girl of three years, whose papa and mamma were so wise and careful of her that they had never allowed her to eat any but the most healthful food, was one day allowed to take dinner with guests. She was especially interested in the mystery of the pepper-box, an article which she had never before noticed. She watched with close attention while one of the gentlemen peppered something, and then, extending her own little plate, said, with the utmost politeness, "Please put a little dirt on mine, too."

Question Box.

[✍] All questions must be accompanied by the full name and address of the writer, as it is often necessary to address by letter the person asking the question.

GLEANINGS FROM THE SANITARIUM QUESTION BOX.

(CONTINUED.)

1. Are buckwheat cakes with nice maple sirup bad diet for breakfast?

Ans. I have not so much fault to find with the buckwheat cakes as with the way they are made. If made in the manner of the Mexican bread called *tortillas*, I think they would be perfectly wholesome. The flour is mixed with water to make quite a stiff dough. It is then made into little round cakes, and left to rise a little while. They are then shaped, by the hands, into large, thin, flat cakes, which are placed upon a tin, over a hot fire, and baked. They have to be turned frequently to prevent burning. The Mexicans eat pepper with their tortillas, but the Indians do not.

2. What do you consider the best exercise for developing the muscles of a girl ten years of age? Do you recommend wooden or iron dumb-bells?

Ans. Brooms. There is nothing better for developing the muscles. Still, all three might be used to good advantage. Wooden dumb-bells secure elasticity and quickness of movement. All the muscles of the body may be developed by iron dumb-bells. Iron dumb-bells are to be preferred to wooden ones, if a person can have but one. Indian clubs are good, but tend to develop but a small portion of the body, compared with iron dumb-bells.

3. How soon after eating should a fomentation to the stomach be applied?

Ans. The sooner the better, if needed. The heat is excellent to stimulate digestion. They should not be too hot, however, and the clothing should be so adjusted that general perspiration will not be produced. A hot bag is better than a fomentation. Speaking of indigestion, reminds me that a lady wrote me a little while ago, wanting to know what I thought of dirt-eating for dyspepsia. She said that her husband had eaten a half-pint of

gravel, and he was so improved that she wanted it recommended in GOOD HEALTH. I do not know whether he was cured in this way or not. Perhaps the gravel diet was better than he had been used to having. There is no one thing that can be recommended for dyspepsia.

4. Is parched corn wholesome?

Ans. It is one of the most wholesome and digestible foods, if eaten properly and at the proper time; but it is also necessary that it should be parched properly. I have seen individuals who could not digest anything else. It is the favorite article with the Indians. They usually carry a parcel of parched corn with them when they go upon warfare. It contains more nutriment than almost any other food, unless it be parched wheat. On some of the islands off the coast of Spain, it is the custom of the people to live almost entirely upon parched grain. It is called *gofio*. It is exceedingly wholesome, and very excellent for persons suffering with acid dyspepsia. Corn, to be most easily digested, should be parched until of a brownish color. It should be eaten with the meals, and thoroughly masticated.

5. What causes the little hard lumps often coughed up?

Ans. I have often heard people say that they had coughed up a tubercle. They were mistaken. You could not see a tubercle. It is too small to be seen. It is not half as large as a pin head. The lumps come from the tonsils, which have become enlarged. A person whose tonsils are in this condition should be treated.

6. Is a person more likely to have tonsilitis after once having had it?

Ans. When the tonsils are left in an inflamed condition, the person is much more likely to have inflammation of the same kind again. When in that condition, I think the tonsils should be removed.

7. Is there any danger in removing the tonsils?

Ans. There is a popular idea that if a person has his tonsils removed, the disease will go to the lungs. This error involves a wrong idea of disease. There is no such thing

as entity of disease. Disease is an effort of nature to get something out of the body. If it is removed, we have no more reason to expect that some other part will be inflamed, than to expect if a person has his thumb cut off, that one of his fingers will be affected.

8. Is not soda a good medicine for sour stomach?

Ans. It is good for the sourness, but not for the stomach. Persons accustomed to use soda frequently have to use it in large quantities after a while. It neutralizes the gastric juice as well as the sourness. The best remedy for sour stomach is to remove the cause. Two glasses of hot water will be found excellent to relieve acidity. The question may be asked, How does it do it? In the stomach the food is in an acid condition. When the stomach is sour, another acid is formed, in addition to the natural acid. Some portion of the food has undergone fermentation. An acid called acetic acid is formed, which makes a sort of vinegar. When the food passes down into the intestines, the gall-bladder contracts, and forces down into the intestines quite a portion of bile with the food, which neutralizes the acid. By taking a quantity of hot water, the stomach is emptied into the intestines and washed out. Sour stomach is generally caused by errors in diet, as by the too free use of sugar. Sugar is a substance that readily ferments. It is not digested in the stomach, but by the small intestines.

9. Please give us your opinion respecting the digestibility of dried fruit and raw eggs?

Ans. Dried fruit is not, as a rule, so easily digested as fresh fruit well cooked. The process of drying hardens the tissues, and decreases the digestibility of the fruit. If dried fruit is allowed to be properly macerated in water before cooking, I think it can be made nearly as digestible as fresh fruit.

Raw eggs are digestible, if properly prepared. An egg swallowed whole, without the shell, is almost as indigestible as a hard boiled egg. The albumen is coagulated, and only very slowly dissolved. When beaten to a froth, raw egg becomes very digestible.

Literary Notices.

PROPHETIC LIGHTS, by Eld. E. J. Waggoner, M. D.; Pacific Press Pub. Co., Oakland, California; San Francisco; New York. 180 pp., illustrated. Paper covers, 75 cents; Board covers, \$1.25.

In this work, some of the prominent prophecies of the Old and New Testaments are interpreted by Bible and history. The design of this work, as stated by the author in the preface, "is to remove some of the covering that has been thrown over the prophecy by tradition and human speculation, so that its clear light may shine out. This has been done by letting the Bible tell its own story in its own language. No theories are advanced, but the plain predictions are laid side by side with the well-attested historical facts which show their exact fulfillment."

To any one interested in Bible subjects, this work will prove a most readable and instructive volume. Indeed, the perusal of this work will hardly fail to elicit a lively interest in Bible subjects, even in those who have previously cared little for such topics, and no one can give the work a careful study without finding his faith in revelation and the inspiration of the Scriptures greatly strengthened thereby. The work contains much that will be new to the ordinary reader, and presents old topics in a new and striking light.

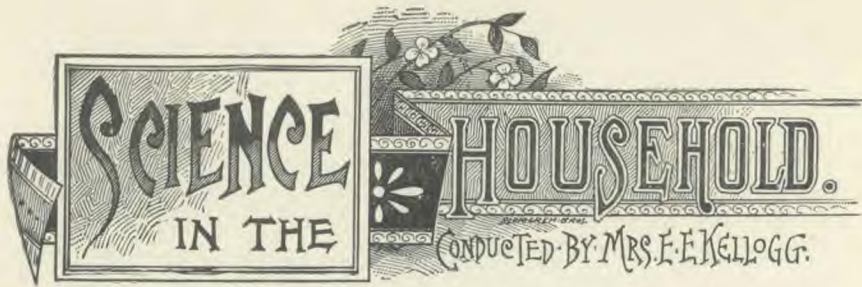
The attractiveness of this work, as well as its usefulness, is enhanced by the large number of artistic illustrations which have been designed and engraved especially for it. We heartily commend this work to our readers, and bespeak for it, not merely a casual perusal, but an earnest and careful study of its contents.

HEALTH AND TEMPERANCE ANALYSIS, AND HOW TO REMEMBER, by G. K. Owen, Oakland, California. This pamphlet of fifty-two pages is almost wholly made up of analytical summaries of subjects relating to anatomy, physiology, and hygiene of the human body. The work is specially designed for those who are preparing themselves to lecture on these subjects, for which purpose it is admirably adapted. It will also be found useful to all those who are making a study of these important subjects, and we would recommend it to all who are interested in this line of study.

Copies can be obtained from the author. Address Eld. G. K. Owen, care of Pacific Press, Oakland, California.

The Woman's World, for December, presents its usual lists of interesting and valuable articles, among which we note a sensible and timely paper on "Woman's Suffrage," by Millicent Garrett Fawcett; "A Visit to a South African Ostrich Farm;" a story about a man with "A Broken Arm;" and two highly interesting papers, one "On Embroidered and Embroidering Books," and the other on "Head Dressing," the latter of which aims to show that women are more sensible in the toilet to-day than they ever were before.

CASSELL & Co., New York, \$3.50.



SEASONABLE BILLS OF FARE.

BREAKFAST.

Stewed Figs,	Apples,
Rolled Wheat with Cream,	
Baked Sweet Potatoes,	Celery,
Boiled Irish Potatoes, with White Sauce,	
Graham Muffins,	Cream Toast.

DINNER.

Canned Pea Soup,	
Baked Potatoes,	Cauliflower with Tomato Sauce,
Mashed Squash,	Baked Beets,
Corn Bread,	Whole-Wheat Bread,
Pearl Wheat with Cream,	
Cranberry Sauce,	California Grapes,
Corn-Starch Dessert.	

Graham Muffins.—Two cupfuls of warm water, three cupfuls of graham flower, and one-third cup of fresh yeast or one-fourth of a dry yeast cake dissolved in one-third of a cup of warm water; stir well together, and put in some warm place to rise until morning. In the morning, when well risen, add a teaspoonful of sugar, and bake in hot gem-irons, or in muffin rings.

Corn Bread.—Take two cupfuls of hot mush made from white granular cornmeal, add to it two cupfuls of cold water and one-half a cake of compressed yeast, dissolved in one-half cup of warm water, add a teaspoonful of salt and two of sugar if desired. Stir in sufficient whole-wheat flour to make it stiff enough to knead. Knead thoroughly, cover up warm, and put in a warm place to rise. When light, mold into three loaves, put into pans, and allow it to rise

again. Bake in a moderate oven three-fourths of an hour.

Baked Beets.—Select large beets; wash them well, but do not cut them; bake in rather a moderate oven from three to four hours.

Canned Pea Soup.—Select a can of peas from some reliable brand. Open, and rub the contents through a colander; heat to boiling, and add salt, if needed, and one-half cup of whipped cream. Serve hot.

Cauliflower with Tomato Sauce.—Steam the cauliflower until tender. Have ready a sauce prepared by thickening one pint of strained stewed tomatoes with a tablespoonful of flour rubbed smooth in one-half cup of cream, and pour over the cauliflower while hot.

Corn-Starch Dessert.—Make a small hole in the end of several eggs, through these remove the contents, fill the empty shells with hot corn-starch pudding,—one-half flavored with cocoa-nut and the other with a tablespoonful of grated chocolate. When cold, break off the shells. Place one of the white and one of the chocolate colored eggs together in a dish, and serve with sugar and cream, or surround the egg-shaped forms with different colored jellies.

Bran Jelly.—Select some clean wheat bran, sift it with one hand, stirring briskly meanwhile with a wooden spoon, into a kettle of boiling water, until the whole is about the consistency of thick gruel. Let this cook slowly for two hours. Place a fine wire sieve over the top of a pan, pour in the mixture, and let it drain. When well drained, place the pan on the stove, and allow it to come to a boil. When boiling, stir into it a spoonful or so of sifted graham flour, rubbed smooth in a little cold water, boil up once, turn into molds previously wet in cold water, and set away to cool. Serve with sugar and cream.

RENOVATING CLOTHES.

BLACK silk may be sponged with a decoction of soap bark and water, if very dirty, and hung out to dry; or if only creased and needing to be freshened, weak borax water or alcohol will do. Where possible, it is better pressed by laying the pieces smoothly, and passing them through the clothes wringer screwed very tight. If you must iron, do it after the silk is dry, between two damp pieces of muslin; the upper one may better be Swiss, that you may see what you are doing through it. This is a little more trouble than ironing the wrong side of silk, but you will be repaid; the hot iron gives the silk a paper-like feeling; above all, never iron silk wet, or even very damp.

Satin may be cleaned by sponging lengthwise—never across the width—with benzine, if greasy, or with alcohol or borax water. This will not be injured by direct contact with iron; press on the wrong side.

Black cloth may be sponged with ammonia and water,—an ounce of rock ammonia to a wine-bottle of water; or liquid household ammonia diluted very much may be used.

Black cashmere may be washed in borax water, as, indeed, may navy blue. It should be rubbed only between the hands, not on a board, and the water only pressed, not twisted, out. Each width folded in four as smoothly as possible, and run through the wringer, then opened and hung up to dry, is the best way. Cashmere so treated, if it be of good quality, will look like new.

Pongee silk is supposed by many never to look so well after washing; but, if properly treated, it may be made up again, with new added, and the difference cannot be seen. But as usually washed, it is several shades darker, and sometimes has a stiffness to it, although it may not have been starched; this change of color and stiffness is due to its being ironed wet. Again, a pongee dress may come from the laundress covered with dark spots; this is where it has been allowed to dry, and then been "sprinkled down;" the sprinkling shows. The remedy is simply to put it in water, dry it, and iron it when quite dry. Pongee requires no more care in washing than a white garment; it will bear hard rubbing if necessary, but it must not be boiled or scalded. Treat it about as you would flannel; let it get quite dry; and if you use a quite hot iron, of course not hot enough to singe, all the creases will come out, and the silk will look like new. The reason it darkens it to iron it wet is this: If it were put into boiling water, the silk would darken as flannel would. If you put a hot iron on the damp silk, you convert what water remains in it into boiling water; it is thus scalded. A silk which has changed color in the wash, may be partly restored by washing again. Parenthetically, I may remark that this ironing them wet is the reason gentlemen's white silk handkerchiefs become yellow with washing.—*Catherine Owen, in Good Housekeeping.*

How They Eat in Japan.—The Rev. William Elliot Griffis, author of the "Mikado's Empire," gives the following interesting description of table customs in Japan:—

"Each one has a table of his own to eat from. It is a tiny affair, four inches high, a foot or so square, and on it are four bowls and a pair of chop-sticks. The eater or guest sits on the matting-covered floor, making a seat of his heels, and proceeds, after due formalities of politeness, to 'take up.' The bowl of rice, deftly attacked by the dexterously held *hashi* (chop-sticks), is soon emptied, and is refilled. Mother, maid, or housekeeper presides over the pail or wooden bowl of steaming rice, which is white as snow, and cooked so that each tender grain preserves its individuality. It is etiquette to ask for as many bowls of rice as one needs."

"The tiny tables and generally dainty service in porcelain and *farince*, in a Japanese house, impress the visitor at once. Everything is done on the floor, which no boot, shoe, or sole ever touches, and one sees at once how manners in Japan must be deferential and courteous, and bowings and salutations much lower than with us."

"At a grand dinner, in which the courses number from a dozen to twenty, one becomes the center, after about two hours, of the circumference of scores of tiny dishes of all shapes, colors, and decorations. At a formal dinner, attended by many persons, the table is set in the center of the group. It is about one foot high, and about four or even six feet long, and finely lacquered. On this the hard-boiled eggs, baked or broiled fish, dishes of vegetables, pickles, condiments, sweets, cut oranges, and pyramids of flowers are placed."

"The orthodox bill of daily fare includes no meat, but fish, soup, rice, vegetables, and pickles. The poor people often have to eat millet, instead of rice, and in the cities, salt or smoked fish, instead of fresh. Beans are also common."

Milling in Mexico.—By far the greater part of the corn used in this part of Mexico is ground by hand, on a *metate*, which is nothing more than a flat stone, roughened. The grinding is done entirely by the women, and the corn so prepared is used in the making of tortillas. Of late years hand-mills for grinding corn, imported from the United States, are coming into use, and there are a few grist-mills; but by far the larger part of the total corn crop is prepared for food as it is required for use by each family. Wheat and other small grains are ground into flour in ordinary mills, of small capacity and primitive machinery, run usually by water-power. The Mexican flour is of very good quality, though dark in color, owing to lack of facilities for bolting.—*U. S. Consul, Monterey.*

Publisher's Page.

Special Notice.—Old subscribers will please notice that the price of GOOD HEALTH has been raised from \$1.00 to \$1.25 a year. All new subscriptions received after this date will be charged at that rate. An exception is made, however, in favor of old subscribers. All who renew their subscription before Jan. 1, 1889, will receive the journal during 1889 at the old rate. After Jan. 1, 1889, all subscriptions received will be charged at the new rate. Among our thousands of readers, there must be many who will be glad to avail themselves of this favorable opportunity to continue the journal at the old price.

A NEW DEPARTURE.

With the next number, GOOD HEALTH begins its twenty-fourth volume. Beginning as a sixteen-page journal, it has undergone successive enlargements, until its present size was reached one year ago. The managers now propose another enlargement, which will change the form of the journal, making the size of the page eight and one-half by eleven and one-fourth inches. Several weeks ago, skilled artists were asked to send in competitive designs for the cover, from which a selection was made, a reduced engraving of which may be seen on the opposite page. The entire make-up of the journal will be changed to fit its beautiful and artistic title page. New type, new engravings, and first-class printing will add to the attractiveness of an interesting table of contents. The services of a number of paid contributors of wide celebrity have been secured, and the managers have planned for the readers of 1889 a feast of good things such as they have never had placed before them in any previous volume of the journal. GOOD HEALTH has long enjoyed the largest circulation of any health journal in this country, and perhaps in the world; and its managers are determined to maintain its position as the leading journal of its class.

In making the many improvements contemplated for 1889 it has been found necessary to add to the price of the journal the small sum of twenty-five cents. The cost of producing the journal has more than doubled since its first appearance as a sixteen-page monthly, although the price has remained the same. The managers do not expect any pecuniary reward to accrue from its publication, and only ask that the actual cost of its publication be paid by those who are benefited by it. During the last year, the journal has been published at a loss, and the small increase in subscription price is made necessary for the purpose of enabling the journal, in its improved form, to meet its bills for paper, printing, and other necessary expenses connected with its publication.

The attention of new subscribers is called to the prospectus for GOOD HEALTH for 1889, which appears on the two pages following. No one can afford to miss the interesting and practical information which will appear in the pages of this journal during 1889.

Dr. Oswald, whose valuable articles on the "Stimulant Delusion" are now appearing in GOOD HEALTH, will contribute to the journal during 1889 a series of articles under the general heading, "International Health Studies." Dr. Oswald has traveled extensively in all parts of the world, visiting numerous out-of-the-way places rarely visited by other travelers, and has had remarkable opportunities for the collection of

valuable, unique, and interesting facts upon the subject upon which he proposes to write. As a clear and vigorous writer of pure English, he has no superior in this country.

The Annual Commencement of the Training-School for Nurses was held the evening of Nov. 7th, in the large Exercise Hall of the Sanitarium. About five-hundred persons were present, including nearly seventy-five members of the Freshman and Junior classes. This school being always in session, there are no vacations. Thirteen persons who had completed their full two years' course of study, received diplomas. An interesting program was carried out, and enlisted much applause from the audience. At another time we will give a full account of the interesting exercises.

For the Holidays.—Among choice books suited for holiday gifts, few offer greater attractions, and are of more real practical value, than "Sunbeams of Health and Temperance." This work is worth ten times its cost to any family, for the information which it contains. There is not a page in it which does not present something of interest to old and young. In an attractive way it teaches many most wholesome lessons as to the care of the body. Price: muslin, \$2.15; gilt edge, \$2.50. GOOD HEALTH PUB. CO., Battle Creek, Mich.

Some months ago we announced the opening of a new health institution at Mt. Vernon, Ohio. We understand that the institution has met with fair success during the last summer, and has good prospects of increasing prosperity. Drs. G. A. Hare and wife, recently of the Sanitarium of this place, will, we are informed, shortly undertake the medical management of the institution, and we trust their efforts will be attended with success.

The new illustrated "Manual of Gymnastics," by Dr. O. C. Place, is now ready. Price, \$2.25. Address this Office.

Sanitary Convention.—A Sanitary Convention, under the auspices of the State Board of Health, will be held in the city of Hastings, Michigan, Monday and Tuesday, Dec. 3 and 4. The President of the Convention is Hon. D. R. Cook, and the Secretary, A. E. Kenaston. Among the subjects which will be discussed, are the following interesting topics: "Degenerations of Age," "Prevention of Diseases of the Eye and Ear," "The Germ Army: How it may be Routed," "Food and its Adulterations," "Ventilation and Heating," and "School Hygiene." Each of these subjects will be presented first in the form of a paper, and afterward further elucidated by discussion.

The question, "Am I my brother's keeper?" which is often asked by the unenlightened, when sanitary matters are being discussed, must be answered most emphatically in the affirmative. Certain it is that the wholesale slaughter of human lives witnessed in epidemics of typhoid fever, dysentery, diphtheria, and kindred diseases, may, in the great majority of cases, be charged to the neglect on the part of some individual, of a proper regard for the safety of others. The eminent Dr. Parkes, of England, said: "When a man dies of typhoid fever, somebody ought to be hanged." People ought to be impressed with the importance of having an interest in the principles of individual, domestic, and public sanitation; and there are no educational means through which information on these subjects can be more efficiently disseminated than by Sanitary Conventions. It is to be hoped that the citizens of Hastings will appreciate their opportunity, and improve the occasion to the utmost extent.

Good Health for 1889.



For more than twenty years GOOD HEALTH has been before the public as the leading American periodical devoted to the health interests of the individual and the home. It is in the most thoroughly practical sense

A Popular Family Magazine,

In whose monthly columns are discussed all practical topics relating to the healthful development of the mind and body. It is the policy of the managers to avoid abstruse, technical, and impractical topics, and the discussion of unprofitable questions, and to present in a striking and impressive manner facts of real interest and practical value.

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A Number of New and Talented Writers have been Engaged for 1889, among whom are

DR. FELIX L. OSWALD,

Well-known to the reading public as a leading contributor to the *Popular Science Monthly* and other popular magazines. Dr. Oswald is one of the most talented of American writers in the command of pure English, and his extensive travels and acute observations have given him a fund of material with which he cannot fail to interest many thousands of readers in a series of articles which he has agreed to contribute to the columns of GOOD HEALTH during 1889, under the general title, "*International Health Studies.*" Dr. Oswald will also continue in the early numbers of the year his able and interesting series of papers on "*The Stimulant Delusion.*"

DR. NORMAN KERR, OF LONDON, ENG.,

Will furnish a series of practical health papers which will be of great value and interest to all students of hygiene. Dr. Kerr is well known throughout the civilized world as a physician of high standing, and a pioneer in scientific studies of the problems of inebriety.

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A NEW DEPARTMENT.

With the new volume will appear in the journal a new department devoted to EDUCATION. In this department will be represented the most advanced thought on this important question, under such topics as "*True Education,*" "*Modern Educational Methods,*" "*Educational Reform,*" "*Results of Physical Culture Combined with Mental Training.*" Mrs. E. G. WHITE, Prof. W. W. PRESCOTT, A. M., and others will contribute to this department.

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POPULAR MEDICAL PAPERS.

The volume for 1889 will contain a series of popular medical papers of great value. The subjects treated will include the following: "*Popular Nostrums, What They Are, and the Mischief They Do,*" (including analyses of the principal nostrums and exposure of the fraudulent claims of their manufacturers.) "*Cancer and Cancer Quacks;*" "*Regimen for a Subject of Nasal Catarrh;*" "*The Terrible White Plague—Consumption;*" "*Rules of Life for a Consumptive;*" "*A Bad Heritage—How to Escape its Consequences;*" "*Studies in Physical Culture;*" "*The Plague of Leprosy in the House;*" "*Hygiene of the Eye and Ear.*"

Good Health for 1889 will Contain the following Departments:

General Articles,

Devoted to practical hygiene and popular medical papers.

Dress,

In the interest of rational "dress reform," opposing extreme notions and by practical illustrations and suggestions pointing out the way to a sensible conformity with the laws of health.

The Happy Fireside,

CONDUCTED BY MRS. E. E. KELLOGG.

Devoted to the interests of the home, temperance, moral and social culture, and popular science.

True Education.

Educational reform, the training of the whole individual, rather than the mind only, manual training, physical culture associated with mental training, and kindred topics.

Social Purity.

This department represents the "White Cross Movement" and its interests, and all that pertains to the purity of morals in the individual, the home, and society.

Editorial.

J. H. KELLOGG, M. D.

The editor each month serves up a rich variety of hygienic tidbits, pithy, practical, and representing the latest scientific thought in this channel.

Domestic Medicine.

In this department Dr. Kellogg condenses the most practical results of his extensive experience in the treatment of the sick. The Doctor believes in the education of the people in medical subjects, and proves his faith by his works.

The Question Box.

This interesting department, which affords a channel for communication between the editor of the journal and his readers, will be continued. Each month this department contains medical advice and suggestions which would cost ten times the price of the journal if obtained in the usual way.

Household Science.

In this department Mrs. Kellogg will continue to give to the readers of GOOD HEALTH the invaluable results of years of work in her experimental kitchen, and experience gained in the management of the cuisine of the largest Sanitarium in the world, and the instruction of classes in the Sanitarium School of Domestic Economy. Other writers will also contribute to this department.

Price, \$1.25 a Year.

GOOD HEALTH PUBLISHING CO.,

BATTLE CREEK, MICHIGAN.

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Michigan City	2:27	3:27	6:27	4:32	3:07	6:40	10:10	8:40
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.....	am	am	pm	pm	pm	am	am	am
.....	5:55	7:15	8:05	4:10	Port Huron	10:20	1:15	7:35	10:50
.....	7:28	8:31	9:34	5:40	Lapeer	8:42	11:57	6:17	9:17
.....	8:05	9:10	10:15	6:30	Flint	7:55	11:27	5:40	8:40
.....	8:43	9:35	10:38	7:20	Durant	7:05	10:58	5:03	8:05
.....	10:00	10:30	11:33	8:26	Lansing	5:20	10:07	4:00	6:45
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.....	7:15	12:50	2:21	Schoolcraft	2:52	8:11	1:44
.....	7:25	1:00	2:32	Cassopolis	2:40	1:33	V. A. L.
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.....	10:05	am	3:43	5:30	Valparaiso	11:40	5:30	10:30	8:40
.....	10:20	7:20	4:00	5:50	Chicago	9:05	3:25	8:15	1:45
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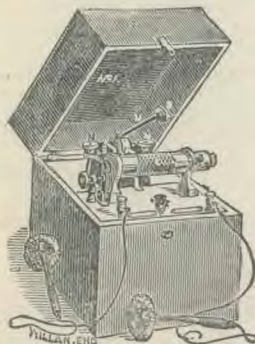
FIG. 2.

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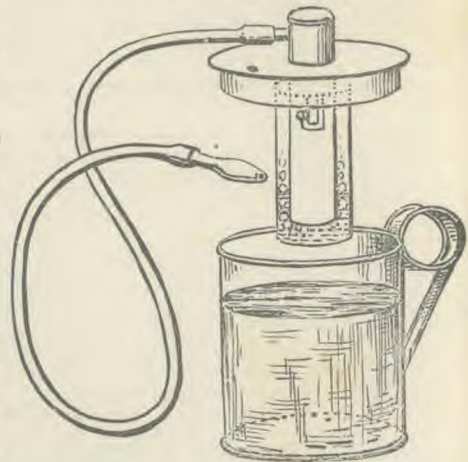
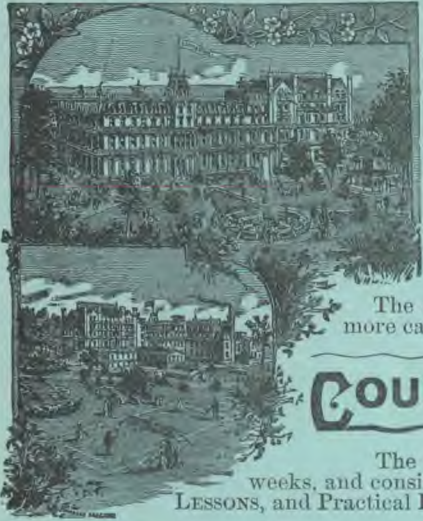


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