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BATTLE CREEK, MICH.
December, 1889.

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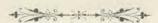


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PLATE 1. The Alcohol Family.

PLATE 2. A Healthy Stomach.

PLATE 3. Stomach of a Moderate Drinker.

PLATE 5. Stomach of a Moderate Drinker.

PLATE 5. Stomach of a Hard Drinker.

PLATE 5. Stomach in Delirium Tremens.

PLATE 5. Stomach in Delirium Tremens.

PLATE 6. Cancer of the Stomach.

PLATE 7. A.—Healthy Nerve Cells. B.—Fatty

Degeneration of Nerve Cells. C.—Healthy Blood.

D—Blood of an Habitual Smoker. E.—Blood of a

Drunkard. F.—Blood Destroyed by Alcohol. G.—

The Drunkard's Ring. H.—Healthy Nerve Fibres.

J.—Fatty Degeneration of Nerve Fibres. Y.—

Healthy Muscle Fibres. K.—Fatty Degeneration of

Muscle Fibres

PLATE 8. Smoker's Cancer. A Rum Blossom.

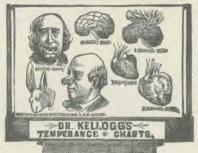
A Healthy Brain A Drunkard's Brain. A Healthy

Heart. A Drunkard's Heatt.

PLATE 9. A. A Healthy Lung. B.—Drunkard's

Consumption D.—A Healthy Kidney. E.—Enlarged Fatte Kidney of Beer-Drinker. F.—Atto
phied Kidney of Gin-Drinker. G.—Healthy Liver.

Wathing sea Committee in this line has



of what is exhibited by the several charts:—

H.—Liver of Drunkard, Showing Nutmeg Degeneration. I.—Magnified Section of Fatty Liver of Drunkard. Y.—View of an Eye Diseased from the Use of Tobacco and Whisky. K.—View of the Interior of a Healthy Eye.

PLATE 10. Alcoholic Drinks, showing the percentage of Alcoholic Drinks, showing a list of poisons used in adulterating the various liquors. Sphygmographic Tracings of the Pulse, showing the effects of Alcohol and Tobacco upon the pulse. A.—Pulse of a Healthy Person. B.—Pulse of a Moderate Drinker. C.—Pulse of a Drinkard. D.—Pulse of an Old Tobacco-User. E. Pulse of a Young Smoker,

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WINTER SOLITUDES.



BATTLE CREEK MICHIGAN

DECEMBER, 1889.

INTERNATIONAL HEALTH STUDIES.

BY FELIX L. OSWALD, M. D.

Author of "Physical Education;" "The Bible of Nature," Etc.

8. - Enrken.

In a little Virginia summer-resort I once heard an ingenious defense of an old bachelor whose persistent indifference to the baits of Hymen had excited the curiosity of the local gossips.

"Do you see that old lady under the tree over yonder?" said a friend of the obstinate celibatist, pointing to a queenly-looking old matron, reputed to have done a deal of jilting in her time—"well, gentlemen, if you had known that woman when she was young, you would not think our modern girls so irresistible, after all!"

It is equally doubtful if the athletes of any Caucasian race would care to vaunt their physical superiority, if they had known the Turks in the golden age of their national development. For more than three hundred years, a handful of Mussulman heroes, never exceeding five million natives, kept all Europe in check, and more than once saved their national existence by deeds of valor that could not be wholly dimmed by the prejudice of Western historians. And even now, after the vigor of that warrior nation has been worn down by centuries of endless warfare against numerically superior foes, their athletes can still challenge comparison with our best specimens of Western manhood, and it might be questioned if, man for man, the rustic population of European Turkey could be matched in any other country of the modern world. A gardener in the terrace-lands overhanging the lake of Janina, will make his way to the water's edge with a wooden tub, resembling a pepper-box in shape, and a beer-barrel in size, and return to his uphill plantation with a load of water, which not one of a thousand western farmers would undertake to move along a level road, without the aid of a horse and cart. On the cattle-market of Adrianople, rustics can be seen, carrying along two fat sheep, tied together by their hind legs, and hanging down left and right, from the carrier's broad shoulders, like two huge sacks, and the 'longshoremen frequenting the wharves of the Golden Horn, often astonish their foreign employer by shouldering a five-hundred pound box of dry goods, as our roustabouts would shoulder a bag of wool. On his way to the merchant's warehouse the loaded porter does not stagger; he does not pant or fidget under his burden, but walks along complacently, kindly chatting with the little boy who brings up the rear with a smaller box, or even disengaging a hand for a moment, to fumble for the address-card, in his capacious breast-pocket.

And the muscles of that paradoxical biped have been developed on an almost exclusively frugal diet; vegetable diet, in our green-grocer's sense of the word, would hardly be the right term. Our Turkish porter does not care much for cabbage and string-beans. A compensation of four piastres (about forty-five cents) will keep him at work steadily from eight a. m. to four p. m., relying for his noon-day lunch on such scraps of bread or dried figs as he may fish out of his pockets. But an hour before sunset, he has reached his little cottage in the suburbs, and after changing his heavy jacket for a linen blouse, he sits down in the shade, to a meal of rice and butter, sugar, (eaten in lumps like candy), bread, dates, figs, and grapes, washed down with cold, slightly sweetened



TURKISH PORTER.

water, and on luck-days perhaps, a sip of black coffee. Coffee, the supposed national beverage of the Turks, is used in the United States of America, far more universally than in any part of the Ottoman Empire. In Texas, Arkansas, and Tennessee, there are thousands of backwoodsmen who would hardly deem it a worse grievance to get out of flour, than out of coffee; while among the laboring classes of Turkey, and Asia Minor, the seductive narcotic has never become much more than a holiday drink—highly valued where the Government monopoly has raised the price of tobacco to forbidding figures, but by no means considered anything like a daily necessity.

Nor has the opium habit of the western Mohammedan assumed the proportions of a national vice, in the sense in which alcoholism has become the national vice of the Germanic races. The opium-hells of Constantinople are patronized chiefly by foreigners,—

Persian merchants and Egyptian officeseekers, while native revelers stick to their sherbet, or soothe their feelings in a cloud of tobacco smoke. Wealthy Turkish business men, in the seclusion of their private homes, do use opium, now and then, but as a mental sedative, rather than as a tonic. A medical friend of mine, who had followed the fortunes of Muktar Pasha as a military surgeon, assured me that out of a brigade of four thousand rank and file, less than two dozen (five of them officers) used opium, in any form. In northern Africa and Persia, the vice has made much more headway, though southern China, in that respect, exceeds any country of the Mohammedan world.

But if a mania for confectionery can affect the enamel of the teeth, it must be admitted that dentists could hardly find a better business location than the capital of the Turkish Empire. Sugar and pastry, in all possible forms, and often in the strangest combinations (mixed with perfume, for instance), is offered for sale at every street corner of Constantinople, and Beyrout, and really absorbs the loose cash of the necessitous natives to a rather undue degree. Not women and children only, but broad-shouldered men, will sit down and proceed to fill up on sweetmeats that would surfeit a bevy of Vassar graduates, after the six years' training

of a chewing-gum club, but the penalty of Nature, for such excesses, is somehow or other, never paid in the form of dental ruin, the fact being, that the Turks, even of the larger cities, have finer teeth than any of their South European neighbors, the frugal Greeks hardly excepted. The decay of our masticatory organs may, indeed, be due to quite other causes, — our habit of swallowing our food boiling hot, for instance, as well as to an excessive use of animal diet, since the *Gauchos* of the South American plains are subject to toothaches that often make a rider jump off his horse, and get a comrade to belabor his jaws with a common butcher-knife.

A rather curious effect which city-life seems to exert on the descendants of the Turcoman shepherds, is the tendency to fatten in old age. Like other semibarbarous races, the Turks are apt to work hard, only under the spur of a direct necessity, and after accumulating the means of a more leisurely mode of life, are pretty sure to become downright indolent, just as their forefathers, on reaching camp after a week's foray in the wilderness of the Turkestan steppes, were inclined to treat themselves to the luxury of an absolute far niente.

Intellectually, the typical Turk is a rather sluggish biped, and strange to say, more so in European Turkey than in Asia Minor, where the sloth of the Turanian brain has been considerably leavened by Arabic influences. All along the borders of the old Arab Caliphate, the nations of Islam have caught the poetic

the audience will lie awake for hours, ruminating the romance in ecstatic silence.

The law of Mohammed permits a plurality of wives, but polygamy has, after all, been only a subordinate factor in the agencies that have brought about the political degeneration of the Turkish Empire. Nine out of ten Turkish peasants and mechanics content themselves with one wife, and in the larger cities, as usual, a considerable percentage of hand-to-mouth workers never marry at all, though a mode of existence which Mons. Taine describes as the "celibacy of vice," is perhaps less common in Constantinople than



TURKISH LADIES VISITING.

and romantic afflatus of the southern Semites, and revel in the luxuries of fancy, with a liveliness of enjoyment which greatly tends to modify the dreariness of poverty. A group of English children, crowding around a ghost-yarn-spinning nurse, can hardly surpass the rapt attention of a troop of Moslem nomads, squatting around a camp-fire, and bending forward for fear of losing a single word in the descriptive tour de force of a popular story-teller. "Yah Benian, yah mubarakin!"—"Oh, my brother! Oh, you blessed one!" they break out at every more than usually attractive passage of the tale, and even after the close of the see ace, and wrapped up in their night shawls,

in any other capital of modern Europe. Nor are the Turkish women all harem-drones, or purely ornamental attachments to their husband's household. In the rural districts, they work almost as hard as Indian squaws, and can be seen trudging along the pike-road with mattocks or spades, or bending under a horse-load of country-produce. Their city-sisters of the wealthier classes are, undeniably, very idle, and considering their lack of mental resources, it seems rather to their credit that their abundance of leisure rarely leads to anything worse than a passion for gossip, and for elaborate ceremonies.

Education, all through the Turkish Empire, is in a

sadly backward state, but intelligent parents supplement that defect by the employment of private tutors, and, as a rule, children—boys, especially, make the best of the extant opportunities, and manage to pick up a lot of incidental information by reading, and seeking the society of well-informed neighbors.

In other respects, Turkey is not so very far behind the Christian countries of southern Europe. Factories and mines have proved remunerative in various parts of the Empire; railways are fairly well patronized, and the primitive methods of agriculture are compensated by the circumstances that only a small area of arable territory is devoted to the production of noxious poisons. There are some opium-plantations near Smyrna, and along the banks of the Pruth; tobacco is cultivated on government farms, but breadcrops are honestly turned over to the baker, (alcoholic stimulants being mostly imported by foreigners from Italy or France), and a very large portion of the productive soil is devoted to the culture of the finest garden-fruits. The figs of Smyrna are superior to the best Spanish varieties, and even California has never yet matched the plums of the Maritza valley, nor the honey-sweet grapes of the southern Balkans. Large tracts of land have become too arid for the production of cereals, but experiments have established the fact that such districts can still be utilized for rose-bush plantations (for the manufacture of rose-water and attar), which, in the provinces of Saloniki and Adrianople, cover thousands of hill-slopes, sending their perfume, at certain times of the year, to a distance of fifteen or twenty miles.

The love of perfumery is a redeeming trait of Oriental barbarism, and the absence of that passion in so many thousands of the Western unbelievers, is a defect almost incomprehensible to an educated Turk, who would as soon dispense with music or domestic comforts, as with musk and rose-water. Mohammed, the prophet, went even farther in ranking perfume, with love and prayer, among the three principal sources of human happiness, though the traveler Kohl is perhaps not wholly wrong in suggesting that the inhabitants of certain Eastern cities have to take refuge in rose-oil as the managers of a pest-house, in disinfectants. The neglect of municipal hygiene is,

indeed, a strange reproach, in a race by no means indifferent to the advantages of personal cleanliness, but may be an after-effect of the times when their forefathers roamed the steppes with their hide-tents, and saw nothing wrong in leaving masses of refuse in the next vicinity of a camp which they proposed to abandon before the end of another week. neglect of public streets may have a similar origin, and is carried to almost incredible length in Asia Minor, where the principal thoroughfare of a populous town is often left unpaved, and consequently covered with dust to a depth of twenty or thirty inches, or with a corresponding stratum of mud in the rainy season. The interior of Turkish houses frequently forms a striking contrast to the condition of such streets. Mosaic floors, walls lined to a height of three feet with polished stones, fountains and deep-arched windows opening upon a central garden-plot, all help to counteract the heat of the long summer, in a way far surpassing the methods of our Western civilization, which appears to have exhausted its resources in making winter comfortable, leaving individual enterprise to mitigate the dog days, with fans and lemonade. The night-air superstition, which in Italy, prevails with an even ultra-American malignity, is almost unknown among the natives of the Turkish empire. A wealthy Turk will wrap himself up in a shawl-like blanket, and go to sleep in the draught of an open lattice window, as his ancestors did in the draught of an open tent, and, as a consequence, pulmonary affections are extremely rare in Turkey, where the worst diseases are imported epidemics - generally of South-Eastern origin, and doubly dreadful in a country of faith-cure fanatics; for the most popular of all prescriptions throughout the land of Islam, is still a scrap of paper (to be worn like a charm), inscribed with some appropriate passage from the Koran.

Local fevers, too, are remarkably rare, owing probably to the abundance of excellent fruit. The riverside towns are often girdled with a belt of swamps, which elsewhere, would prove seed plots of chronic malaria; but sulphate of quinine becomes superfluous in a country where dried figs can be bought at a dime a bushel, and the very best grapes at five paras (about a cent and a quarter) a pound.

(To be continued.)

When life has been duly rationalized by science, it will be seen that, among a man's duties, care of the body is imperative, not only out of regard for personal welfare, but also out of regard for those who are to succeed him. His constitution will be con-

sidered as an entailed estate, which ought to pass on uninjured, if not improved, to those who follow; and it will be held that millions bequeathed by him will not compensate for feeble health and decreased ability to enjoy life.— Herbert Spencer.

SHORT TALKS ABOUT THE BODY, AND HOW TO CARE FOR IT.

BY A DOCTOR

10. — Condiments and Baking Powder

How human beings ever acquired a taste for those acrid substances which burn, smart, and tingle, as they go down one's throat, is a mystery which the physiologist cannot easily explain. These substances contribute no nourishment to the body, and aid no vital processes. They are, in fact, signboards placed upon certain substances to warn both man and beast that they are possessed of poisonous properties. It is a rule to which there are but few exceptions, that wholesome substances have bland, sweet, and pleasant flavors, while poisonous substances are possessed of properties which give to them an acrid, burning, smarting, or astringent taste. A savage or a monkey selects with unerring certainty, wholesome food substances from among the thousands of poisonous fruits and other plant products of the forest or the jungle. He is enabled to do this by the taste alone, and invariably rejects substances possessed of such irritating properties as mustard, pepper, spice, and similar condiments.

Condiments are in no sense foods, and they act merely as whips to the digestive organs, to goad them on to the performance of more work than ought to be required of them, and more than they are really able to do. The ultimate effect is debility and disease.

In countries where curry powder, a mixture of very strong condiments, is freely used, disease of the liver is exceedingly common, and has been attributed to this cause by eminent medical authority. Substances which smart, burn, and sting, on their way down to the stomach, are unfit to enter it, although they may do excellent service in raising blisters outside of it. The use of condiments stimulates the appetite and encourages overeating, and at the same time vitiates the sense of taste, so that an individual is unable to distinguish or enjoy the finer flavors which Nature has put into all our foods, and which are sufficient to recommend them to a healthy, undepraved taste. Salt is the only condiment allowable, and this should be used sparingly. Vinegar is of doubtful value, and when made from cider, which is not always the case, is liable to contain in great numbers, minute creatures known as "vinegar eels." Lemon juice may be used as a substitute, with advantage. Pickles are a dietetic abomination not to be tolerated. They are appetizing, but indigestible.

The soda, saleratus, cream of tartar, baking powder, etc., that are so commonly used in cookery, are chemical substances, and in no sense foods. None of these substances should ever enter a human stomach, unless administered as medicine. While their use, as ordinarily employed, cannot be shown to produce immediate bad results, in many cases, it is unquestionably true that their continual use results in harm to the digestive organs, and also to the liver and kidneys, which are compelled to remove the alkalies from the blood. A skillful cook requires no such chemical agents in the preparation of palatable, as well as wholesome, food.

There is no more active dyspepsia-producing agent than soda and saleratus biscuit, one of the most common articles of food to be found upon the tea table of rich and poor in this country. Doubtless well prepared baking powders are much preferable to soda and cream of tartar, or saleratus and sour milk, mixed by the cook in accordance with the most accurate "rule of thumb," through which bungling chemistry the biscuit often present a golden hue which may be attractive to the eye, but gives to the tongue quite too distinct a flavor of soda and potash to be agreeable to a fastidious taste, to say nothing of the effect upon the stomach. The idea many people have, that baking powders are harmless, for the reason that the acid and alkaline ingredients of which they are composed are in such proportion as to exactly neutralize each other, is a popular error. The alkali and acid neutralize each other, chemically, but do not destroy each other. The two together form a salt which, when ordinary baking powders are used, is identical with "Rochelle salts." The taking of a daily dose of salts cannot be considered in any way compatible with the maintenance of good health. These chemical substances must all be carried off through the liver and kidneys, which imposes an extra and unnecessary burden upon these overworked organs. The very best baking powders are decidedly harmful, and the sooner their use is generally discarded, the better it will be for the stomachs of the next generation.

The habit of eating clay, charcoal, plaster, chalk, etc., which is sometimes acquired, is detrimental to health, and liable to produce dangerous disease, as the earthy substances sometimes accumulate in some portion of the intestines, and a fatal inflammation may ensue.

Clay-eating is practiced by many barbarous tribes in Africa and South America, and to some extent among the Indians of this country. Its effects, as seen among these people, are exceedingly harmful, sometimes causing death, in two or three years. The tolerance of the stomach for foreign substances is sometimes very remarkable. Dr. Pavy relates a curious story of a sailor, who, seeing a juggler pretending to swallow knives, supposing that the knives were really swallowed, with the characteristic recklessness of his class, attempted to do the same, and succeeded in getting down four pocket knives. After two or three days, three of these passed off, but he never saw the fourth. He died a few years later, after swal-

lowing a number of knives, when the remains of several were found in his stomach, having been retained for years.

Mineral substances are often taken into the system in the form of drinking water. Carbonate of lime and the sulphates of lime and magnesia are the substances most commonly introduced in this way. It is well known that the use of such water, commonly known as hard water, is detrimental to health, producing dyspepsia, and calculi of the bladder, kidneys, and gall bladder. Mineral substances are unusable in the body, whether taken in food or drink.

HEATED MACHINERY.

The train that will not stop for a hot box, is liable to burn up by the friction of its motion, long before it reaches the natural end of its journey. A group of four Newark pastors stood on the steps of the City Hall, whither they had gone on business connected with the Law and Order League. In response to a query, one of them told how much work he was doing by day and by night, and planning to do. To him his interlocutor said: "You are sinning against yourself; you are burning your candle at both ends." The unheeding man, so warned, was dead of overwork within two years. He managed to consume his candle in half time. It was a brilliant success, but soon burned out.

A retired manufacturer, watching the strife from which he has withdrawn, tells of five business men under forty-four, in the circle of his personal acquaintance, who within one year died of brain or kidney disease, or went to the mad-house; all from overwork. A strong man, under forty, was accustomed, during the four months of winter to leave home at six a. m., and return from business at eleven p. m. In about three years his body grew so tired that it retired from business to a quiet place under the sod, where it is now taking a long rest.

These instances are fair samples of what is going on in the lives of thousands, along all lines of activity, in the burning intensity and fierce ordeals, especially of urban life.

When Frank James, the notorious bandit, came out of hiding and surrendered himself to the Governor of Missouri, he explained that he was tired of a life of taut nerves, of day-riding and night-riding, of constant listening for foot-falls, rustling leaves, cracking twigs, and creaking doors; tired of the saddle and the cartridge-belt. The life of many a better man than he is of equal tension; nerves keyed as taut as the

strings of Ole Bull's violin; watching against ambush, surprises, and disaster in the deceitfulness of business and subtlety of competition; his mind kept in the saddle and on the road until, even when he lays his head on his pillow and longs to sleep, it keeps galloping on down the sleepless eternity of the uneasy night; tantalized and tossed along the edge of slumber, like a sun-scorched rider who skirts a shady forest which he cannot find a way to enter; and when at last he dozes, dreams he is Mazeppa, bound helpless on the back of a flying wild horse. Such a man, spending his first night at a mountain-house where it was customary to call guests to see the sunrise, was startled from his half-sleep by the porter's sharp rap on his door, and cried, "What's the matter?" "Day's breakin', sah." "You do n't say! what are his assets and liabilities?" The poor man had not yet pulled his brains out of Broadway.

We do not need any one to tell us, after the fashion of a recent author, of a strange land at the South Pole where there are strikes for longer hours and more work. We know places nearer by, where men are striking for eighteen hours rather than eight, and wishing they were general passenger agents in charge of the time-tables of the solar system, so they might revise the schedule of the earth's revolution and put more hours into a day. The *Independent* said, when John Swinton stopped publishing his paper, that he had worked on it about twenty-five hours a day. We all know the man, type of a class who, though he might, will never take any vacation until some time he takes a day off for the purpose of attending his own funeral.

There is small chance to deny that American life, by reason of something in our blood, climate, and other stimulating conditions, is unequaled in rush and excitement. Herbert Spencer tells his countrymen: "We English have had too much of the gospel of work. It is time to learn the gospel of relaxation." But visiting Englishmen are impressed with the still greater intensity of our life. Archdeacon Farrar said, in 1885: "In America I have been most struck with the enormous power, energy, vivacity, and speed in every department of exertion." Emily Faithful came from the sobering influence of London fogs and told us that our climate is too electric, sparkling, exhilarating, exasperating, and our life too strenuous, exacting, and driving.

An English physician says: "American city life requires nerves of steel to endure its terrible strain, and produces a highly nervous and dyspeptic type of men and women." Another Englishman says of us: "Their life is feverish. They are rapid in everything. They live every moment an intense, daring, crowded, reckless, and restless life." Oliver Wendell Holmes asserts that, whether the chemists know it or not, there is a double proportion of oxygen in the New World air. Colonel T. W. Higginson once wrote: "Nature said, some years since, 'Thus far the English is my best race, but we have had Englishmen enough; put in one more drop of nervous fluid and make the American." Matthew Arnold, in the lofty exercise of his universal censorship, rebuked Higginson for this, but himselt said: "Undoubtedly the Americans, both men and women, are highly nervous. A great Paris physician informs us that he notes a new and distinct form of nervous disease produced in American women by worry about servants." Arnold attributed our super-sensitive nervousness to overwork, frantic hurry, want of healthful exercise, injudicious diet, and a most trying climate.

In another land and time a man was called more precious than the gold of Ophir. A singular country it must be where a horse is more valuable than a man. I fear that strange land is not far away. One hundred thousand dollars has been paid for a horse here, and the palmiest days of man-selling never saw such a price obtained for human live-stock. A manufacturer of heavy goods loads his trucks with four or five tons each, but orders his truckman never to drive the big Norman horses off a walk. This makes slow work for long cartings, but is found to be profitable economy in the long run. It pays to keep the huge animals from straining themselves. With himself the manufacturer deals less mercifully, for he keeps extending his business, takes on an enormous load of work and care, and drives himself uphill at a gallop, saying: "In such sharply competitive times as these, a man must keep a little ahead of the world, or quit and retire." But Nature, though long-suffering, has her limit of patience. Several serious warnings have intimated the probability of his retiring under a form of order known to the medical profession as paraly-If shortly the cemetery hill slope bears a new monument, scant satisfaction will it be to his unthinking clay that in distant city streets his much-prized and long-surviving truck horses are still being driven, in accordance with his orders, on a walk! - William V. Kelley, D. D., in N. Y. Christian Advocate.

They are slaves who fear to speak For the fallen and the weak; They are slaves who will not choose Hatred, scoffing, and abuse,

Rather than in silence shrink From the truth they needs must think; They are slaves who dare not be In the right with two or three,

- T. R. Lowell.

More Than a Centenarian.—The average death age at the present time is about forty years. Scientists tell us that there is no reason, looking at the matter from the standpoint of comparative anatomy and analogy, why human beings should not live at least a century, and the occasional examples seen of persons who have lived to this age and beyond, seem to prove the theory to be correct. The latest example of this sort is afforded by an Indian named Old Gabriel, of whom a special to the New York Sun speaks as follows:—

"For several years there has been domiciled at the Monterey County hospital, an old Indian known by the name of 'Old Gabriel,' who is believed to be over 150 years of age. Father Junipero Zerra arrived in Monterey in the year 1770, and it is well authenticated that at that time Gabriel was a grandfather. Father Sorrentina, the priest, and Bishop Amat reached Monterey some time in the year 1845. The former says that 'Old Gabriel' was then living with his sixth wife. He was then said to be over 110 years old. An old lady by the name of Castro, who died five years ago at the age of ninety-five years, in testifying to Old Gabriel's age, said that when a child she saw him, and at that time he had children who were several years older than she then was."



EVIL EFFECTS OF CONSTRICTION OF THE WAIST UPON THE ORGANS OF THE ABDOMEN.

BY J. H. KELLOGG, M. D.

[The following is an extract from a lecture by Dr. Kellogg, before the lady patients at the Sanitarium.]

Your attention has already been called to the pernicious influence of tight dressing upon the lungs and heart; to-day we will discuss the question as relates to the organs of the abdominal viscera. Tight bands, and tight, inflexible waists or corsets are responsible for many of the ailments which affect the liver, bowels, and the pelvic organs. Many a liver has been examined after death and found deeply creased from the ribs being squeezed upon it; and could such a liver be expected to do good work? When the ribs are compressed so that the apex of the chest is at the lower, instead of the upper, end as in the natural form, the liver and stomach are crowded out of their natural places. Some fifteen years ago, I, with a few others, was pursuing a line of special studies in Bellevue Hospital, and every day the professor would give us an opportunity to look over a lot of hard cases, to see if we could find out what was the matter. In examining a woman one day, I found a large round mass much below where the liver should be, and at a little distance, another smaller lump; the two seemed to be connected, but there was a deep furrow between. The appearances puzzled me considerably, until it occurred to me to ask her if she had ever laced. "Oh, yes;" she replied. "I used to tie my corset strings to the bed post." I then told the professor that the woman had "tight-laced fissure of the liver."

Two years ago I related this in Minneapolis, when a woman arose and confessed that she had just such a liver, as the result of tight lacing when a girl. I examined her afterward, and found her liver far down in the abdominal cavity, and deeply creased.

When we read of how the Chinese women compress the feet of their daughters through long and painful years, so that they shall be able to wear the regulation shoe of the aristocracy, three inches in length, we think it is horrible. Yet these same Chinese look with abhorrence upon American, and most

other civilized women who compress the waist, because they say of the waist, "Here is where I live." They believe the stomach to be the seat of the soul. They look upon every injury done to it as a sin and crime, and no doubt they are right, for every vital organ of the body suffers. The small-footed Chinese woman is fat and rosy, and enjoys a fair degree of health. Her heart, and lungs, and liver, and stomach are all right. She hobbles around, and gets as much exercise in that way and in riding, as the ordinary fashionable American belle. A person can live and enjoy health without any feet at all; but no woman can be healthy with a compressed waist.

The ideal waist is not a circle, as many imagine, but an irregular ellipse. I have examined a large number of savage women, Italian peasant women, and others who never had deformed themselves by bad dressing, and I did not find the great disproportion between the size of the hips and shoulders, and the size of the waist, that is found among American women. I have sent out to medical missionaries in different parts of the world, and had measurements taken, with the same result. The ideas which American women have of symmetrical proportions in the figure are entirely erroneous, and it is time they were displaced by the truth. The artificial monstrosities depicted in fashion plates are as unnatural as they are inartistic.

When the waist is constricted, the bowels, liver, and stomach have to go somewhere, and as they cannot go up, they are crowded down; the colon is crowded into a space much too small for it, and becomes stagnant and inactive, and as a result the bowels are constipated. Every woman who laces, or wears tight skirt bands, has prolapsus of the bowels, and that very often is followed by hernia. When recently in England, I listened to a very learned lecturer of St. Bartholomew's Hospital, on the subject

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of hernia. He has found that a predisposing cause of hernia is a prolapsed condition of the bowels. They are held in place by certain membranes, and when the intestines are crowded upon, these membranes stretch more and more, until they no longer offer proper support. Consequently, hernia is one of the risks incurred by bad dressing.

But this is not the worst; the pelvic cavity contains organs very likely to be deranged thereby. The bladder, the uterus, and the ovaries suffer, variously. The uterus is held in place by three pairs of ligaments lax enough to allow it to tip a little. These ligaments are really muscles, as I have demonstrated by electrical tests in performing the operation of shortening the round ligaments. In coughing, straining, jumping, etc., the weight of the bowels would come down upon the uterus with very great force were it not that a little pair of muscles, the round ligaments, contract instantly and draw the uterus forward out of harm's way. But for these ligaments, the uterus would lie backward all the while. An animal which goes upon all fours needs no such safeguard, and these ligaments are not found; but the higher orders of apes, as the chimpanzee, which often walks on two legs, are furnished with round ligaments.

Suppose a woman who has never had muscular exercise enough to develop these round ligaments, or has laced until they have become attenuated by stretching, to a mere thread of tissue, is thrown upon her feet with considerable force? The result is likely to be a displacement which will ruin her health. In a perfectly healthy woman, it would do no harm, because the round ligaments would contract, and pull the uterus forward. A well woman can run, and jump, and spring, as she pleases. The prevailing idea that a woman, because of the arrangement of her internal organs, cannot go up and down stairs, and do sundry other things which men do, is an utter fallacy. An equestrienne will vault from the ground to the back of a running horse, and receive no more harm than if she were a man. She will do a hundred other things, which would bring on the whole list of displacements, in an ordinary woman. She will continue her performances, even until within a few weeks of confinement, with no injury. Her round ligaments, and other abdominal muscles are well developed, and take care of themselves. There is no more reason why a woman should have to take special care to keep her internal organs in place, than a man, provided she is equally well developed and healthy.

(To be continued.)

A HYGIENIC NECESSITY.

It is interesting to a lover of hygienic reform to note the increasing interest of women in the subject of healthful dress. Though far too early in the day to expect radical reform in the garments of the many, yet the living example of the minority is as a precious leaven which, soon or late, may permeate the whole. The trend of the times in this regard is seen in the free discussion of dress at womens', and even girls' clubs throughout the country; in the new toleration accorded to unpleasant facts and figures concerning it, and in the unconscious reaching out of women for more comfort in dress, or rather, more immunity from discomfort. This last, most significant sign of all, is general; at least among those who comprise the respectable middle class. It is the undoubted outcome of that other reaching up and out of women, into professional and business life; to compete with man as she must, when she enters his long indisputed domain, she must, like him, wear garments which do not fetter or impede. Perhaps her mental aspirations will prove her physical salvation, after all, for the more she plans to do and to be, the more does she see that she must have health, in order to compass it. Experience, that disagreeable, but always successful schoolmaster, is slowly bringing her to see that she can do little, and be still less, with all that dreadful weight of skirts hanging from her hips. After carrying from fifteen to twenty pounds, the removal of ten or fifteen pounds is indeed a great reform, but it will shortly be forced upon her understanding that absolute hygiene does not permit one added ounce of weight upon the hips.

She begins to see that she must decrease the number of bands at the waist, and therefore the number of skirts must be diminished; one of lightish material with warm, union under-garments, being sufficient for comfort. The dress, too, for the same reason, will have to be made of light weight goods, and in one piece; the skirt fashioned in severe simplicity, to avoid extra weight. And lastly, the heavy winter cloak, with tight-fitting waist, and skirts to the bottom of the dress, will have to be modified or banished. In fact, all this modern costume, with its scant provision for warmth, its thin, tight boots, and its immense drag upon the hips, will have to be relegated to the purely fashionable woman; by and by, when it gets to be unfashionable for women to be idle and useless, even she will discard it.



WINTER SOLITUDES.

(See Frontispiece.)

When winter winds are piercing chill, And through the hawthorn blows the gale, With solemn feet I tread the hill, That overbrows the lonely vale. O'er the bare upland, and away Through the long reach of desert wo σ The embracing sunbeams chastely pla And gladden these deep solitudes.

- Long fellow

THE CHRISTMAS CLIMAX.

A FEW weeks before Christmas, three girls sat around a pretty lunch-table on which was spread a very nice little meal. The room tastefully furnished, and the dress of the hostess—the last thing in teagowns—proved that she had an ample purse at command. So, in fact, did the china, the silver, the damask upon the board.

The tea-gown, the little cap perched upon the lovely hair, all the matronly affectations of dress, as well as the wedding-ring and keeper upon her finger, were tokens that she had now been married a year. But as her guests studied her face, they became aware that it wore a worried, puckered look that they had never seen upon it in the days of her single blessedness, and being near relations and very intimate, they did not make any pretense of not noticing it.

"You don't look well, my dear," said her cousin Persis, breaking the silence.

"You do n't look comfortable, somehow," said her sister Fannie. "I know that look of old. Indeed, I think you look cross," she added, plainly, taking another tea biscuit from the plate. "That is the long and short of it, Penelope."

"Thank you," said Penelope, tossing her head. But suddenly she set the plate she was about passing to her guests down upon the table again, fished a little scrap of lace and linen cambric from some mysterious recess of the tea-gown, and applied it to her eyes.

"Is it — is it — anything about Laurence?" inquired cousin Persis, hesitatingly.

"Yes. I confess it is Laurence. He—he—he is always talking about his mother's way of cooking," sobbed Penelope, fairly breaking down. "He really

did love the things his mother made for him. Now, I deal with a good baker; I have Vienna bread; I vary the sorts, all light and good, and I think I know about meat and vegetables, and I like fruit desserts. I can buy so much that is good, but it is that old New England home-made cookery that Laurence pines for. The other day he said in quite a tragic way, 'Oh, for one of those dear old boiled apple dumplings.'"

"Awfully indigestible," said Persis.

"I went to visit dear Mrs. Chapone before I was married," said Penelope, "and you went with me, Fannie."

"How kind she was," said Fannie. "She was always cooking something good ——"

"Good!" said Penelope. "O Fannie, I love and respect my mother-in-law, but, I must confess, everything swam in grease."

"The bread came to the table from the oven," said Fannie.

"Four kinds each meal," said Penelope. "Coffee, tea, chocolate, pies, waffles, for breakfast. Bacon, fried potatoes, fried everything——"

"And she made one taste it all," laughed Fannie.

"When we got home," said Penelope, "we went to bed and had a bilious attack apiece. All the time Laurence was with his mother, they lived in the country, and he was out of doors all the while on horseback, in the open air for hours, rowing, fishing, superintending the farm work, lending a hand himself. But now he comes from his office to the flat, or walks a block or two after supper. If he takes me anywhere, we ride, usually. I know he could not eat

the same things now, but it has gotten to be a mania with him."

"Why do n't you tell him all that?" asked Fannie.
"Why, if I were to hint that his mother's cooking might not be the best known on earth, we should certainly quarrel," said Penelope.

"I don't know what you are to do, Penelope," sighed Persis.

"I know what you ought to do," said saucy Fannie.

"Ask Laurence's mother down here. She'll know just how her poor boy suffers for want of proper nourishment. Let her cook for you a month. That will include Christmas,—you will like to have her spend Christmas with you, you know,—and then she will be on hand to both plan and order the Christmas dinner. That will be the grand climax of greasiness, and fussiness, of course. If you manage to live through that, all may yet be well."

"Hush, Fannie! Don't be disrespectful," said Penelope. "But I don't know but you are right. Laurence's sister, Matie, is old enough now to be left in charge, so mamma Chapone can leave home as well as not. She just dotes on Laurence, and I believe she'll come."

Shortly after, the girls tied on their bonnets and went home, and Mrs. Laurence Chapone sat down to write a letter to her mother-in-law.

"Your mother is here," said Penelope one afternoon, as her husband entered the dining-room. "She is out in the kitchen, getting you up one of her dinners. I wrote, dear, and asked her to come and spend a few weeks with us, including Christmas."

"You are a good, little wife," said Laurence. "Dear mother, what a perfect woman she is! And if you can approach her in cooking——"

Then he rushed out into the kitchen, where, amidst the smoking and the frying of the steak, shone his mother's round, rosy face.

"We're just dishing the pot-roast, dear," said she, "and it's beautifully larded with the pork. And you shall have apple fritters to-day. There was n't quite time for apple dumplings. Wheat bread and biscuit, Indian and rye, all turned out well. And I've just tossed up a cheese pudding, and got the chocolate right. Biddy is as smart as can be to learn."

And so with smiles and pleasant talk, the mother's visit, and the meals she cooked, began.

It occurred to Penelope sometimes that they principally lived on butter, lard drippings, and sweet oil. The very soup was covered with little globules of fat, and the hiss of the frying-pan awoke her at dawn.

And we must not forget to say, that before she went to bed, Mrs. Chapone each night, cheered her

son with chocolate of the richest sort, and Welsh rare bit, or with lobster salad and coffee with beaten eggs.

Penelope took it all patiently, and lived in a world of smoke and sizzle; devoted the hours she had used to spend over her books and music, to beating eggs or stirring plum puddings, adopted cooking aprons permanently, and was never free from a headache.

Laurence also complained of his head, but his devoted wife never hinted that a whole mince pie after fried scallops for breakfast, might be the cause of it.

Meanwhile, Christmas came on apace, and indefatigable mamma Chapone redoubled her efforts for the family comfort. The smoke and the sizzle increased, and such quantities of pound cake, pork cake, gold cake, silver cake, chocolate cake, cream cake, besides doughnuts, cookies, and crullers, as filled the cellar! And, oh, the fruit cake! Heavy, and black, after the most approved fashion, and rich and sweet beyond measure,—it was a wonderful creation. And such mince pies! Old Mrs. Chapone was playfully triumphant, and Biddy was in ecstacies. With the big turkey and the basket of game Laurence had sent up, surely the Christmas dinner promised to be a success. At least it promised to be what Fannie had said,—"The climax of greasiness and fussiness."

Cousin Persis and Fannie went out of town a few days after their first conversation with Penelope, only returning after Christmas. Of course they went immediately to see her.

When they reached Penelope's flat the door was ajar, and they entered unannounced. There was no one in the parlor, but from the dining-room they heard Penelope's voice:

"Can't you eat anything, dear?"

"A little hot water and a slice of dry toast—no butter," replied another voice—that of Laurence—but never had it been so lugubrious.

"But Laurence, dear, I can cook everything in your mother's style now," said Penelope. Won't you have a few fritters?"

"Fritters!" cried Laurence, with an expression of disgust.

"And there is still a mince pie, — I can heat it at once," said Penelope.

"Don't mention mince pie," said Laurence. "My dear, this is excellent."

"And for dinner?" said Penelope.

"Some plain boiled mutton, stale bread, and some oranges," said Laurence.

Fannie smothered a laugh as she and Persis made their appearance in the dining-room.

Laurence was very yellow. His nose was red, and there were pimples at the corners of his mouth. Penelope's skin was a little rough, and her eyes not as bright as usual.

- "How do you do, Laurence?" the girls inquired.
- " Not well," said Laurence.
- "Nor I," said Penelope.
- "We are both bilious," said Laurence; but we are in the doctor's hands and shall get over it, no doubt. Good-by, dear; don't go into that hot kitchen to-day; Bridget can quite manage our plain dinner. Remember,—no sweets nor fats,—none of those greasy messes. We must diet."
- "Well?" said Fannie looking at her cousin, as Laurence closed the door.
- "I took your advice, dear, said Penelope, "and Mamma Chapone has been cooking for us for a month, and I have learned all her recipes. The principle is easy—soak everything in fat and eat everything red hot.
 - "Yes," said Fannie. "Well?"
- "And now since Christmas, he won't let me cook anything," said Penelope. "He even speaks of his mother's cooking as 'greasy messes'! I wouldn't have her know, but he has had enough of the old-fashioned cooking he used to long for."
- "I knew he would," said Fannie; "that is why I proposed that you should ask her to come."
- "Fannie!" cried Penelope, "I thought it was that I might learn to please him."
- "Not a bit of it," replied Fannie. "I felt sure, even if he lived through the rest, his mother's Christmas dinner would finish him!"

Penelope, who had learned a lesson, healthwise, which would last her all her life, carried forward the reform, vigorously. The remembrance of the "greasy messes" she and Laurence had suffered from, caused her to begin by banishing meat entirely from their table. She did not know at first quite how she would contrive to fill its place, but happily, at this juncture, there moved in, in the adjoining flat, a family who believed in, and practiced hygienic living. From the good, motherly woman of this household, Penelope learned the art of preparing delicious dishes from the various cereals, vegetables, and fruits. The simple, inexpensive, but enjoyable meals she daily grew to evolve from these, were alike a surprise and a revelation to Laurence; but, as he, too, had had his lesson, he only smiled as he noted the absence of meats, and the abundance of fruits, vegetables, and grains on his table, and suffered Penelope to have her way. This "way" proved a pretty good one; for as time went on, and he noticed how fair his young wife's complexion became, and awoke also to the fact that his own pimples and blotches had grown "conspicuous by their absence," and realized that he was no longer conscious, hour by hour, of head and stomach, he grew really enthusiastic. Now, too, Penelope had time, in plenty, to spend with books, and music, and his home, free from those dreadful, greasy breakfasts, dinners and suppers, and from the aches and pains they brought, and the work they entailed, seemed, what home was intended to be, a reminiscence of Eden. — Adapted.

ICELAND.

BY E. L. SHAW.

This chief city of Reykjavik, by the way, seems to have a monopoly of the home comforts, as well as the wealth of the island, for, notwithstanding the inhabitants of the outlying country, are in the main, exceedingly intelligent, and even though, as has been said, "in an Icelandic farm-house you will not infrequently meet with a roughly dressed university graduate, who will be able to sustain more than his half of a conversation in Latin," yet the national hopelessness and inertia pervades everything. A modern historian, writing of Iceland in the fifteeenth century, really described her as travelers see her to-day. "Wagons, ploughs, and carts went out of use and knowledge; architecture in timber became a lost art, and the fine, carved and painted halls of the heathen days, were replaced by turf-walled barns." Those same one-story, "turf-walled barns," with low roofs, low entrance, insufficient light, and insufficient ventilation, and with rooms, often lacking both windows and floor, form the present homes of this people. The sleeping rooms are either small, dark closets, accommodating but a single person, or larger, windowless apartments, containing rude bunks, (in accordance with a curious Icelandic custom, much too short for the sleeper), arranged in tiers, one above another, at their sides. These are occupied by the entire household. Naturally, these conditions are bettered somewhat in homes whose owners are more well-to-do, but life in the most comfortable of Icelandic farm-houses would undoubtedly seem to us of this favored country, swept bare of most that makes life desirable.

The national dress, at the capital, is not unlike our own; that of the women differing, mostly, in its length of skirt. In the poor, and widely scattered country households, however, it is probable that its fashion is more often determined by the necessities or the exigencies of its wearer, than made a matter of mere taste.

As no grains or cereals are grown, no fruits, and but few of the coarser kinds of vegetables, the ordinary diet is meager and insufficient. By a greater expenditure of labor the soil might, no doubt, be compelled to contribute more food, or a greater variety, but little is ever attempted in this direction; possibly, after all, we do not entertain sufficient charity for a nation whose entire season for seed time and harvest is compressed into the space of three months.

Fishing, shepherding, fowling, hay-making, the gathering of driftwood and peat for the winter's use, — volcanic fires consumed the forests, ages ago — fill up the summer; the women turning in with a will, and helping through the hay-making season, and likewise doing whatever else their hands find to do of out-door work, thereby drinking in, from the exceptionally clear, pure air, long, deep, draughts of the health and strength which women of this people possess in a notable degree. The long, winter months are devoted to all which can be done indoors; the care of the wool of the sheep, carding, spinning, weaving, etc., combined with study, teaching of the younger ones, and tool-making.

The wild grasses are of the greatest importance for maintenance of the domestic animals, the cow, horse, and sheep; many of these being obliged to forage for themselves during a large portion of the year; as few farmers, anywhere, could provide a store of food sufficient to support their stock during the rigors of a nine-months' winter. The hardy little mountain pony stands to the Icelander in the stead of carriage and locomotive, road and tramway; for all journeyings are made on pony-back, in paths which his own sturdy, adventurous feet have marked out.

One thing which strikes us as being more inexplicable than any other in the daily life of this people, is, the small part their women have in the general education. A recent traveler, writing in Scribner's magazine, referring to this subject, remarks, "As a result of this lack of education among women, while in the homes of Iceland a warm family affection reigns, true intellectual companionship between husband and wife can be rarely possible. For while there are an unusual number of well-educated men in Iceland, there are, so far as I could learn, exceedingly few even tolerably educated women. Of course there are exceptions to this rule, and the traveler cannot fail to meet here and there, - notably in Reykjavik - charming and refined women, and these I found, in one and another instance, were keenly conscious of the low estate of their sisters, and alive to efforts in their behalf."

But sometime, maybe, when American enterprise and American gold shall have found their way to this far-off land, and shall have cured this along with other evils, the noble and kindly race — so well worth the rescuing — will be lifted out of their present hopeless poverty, and traditionary discomfort, and in a more genial atmosphere, and under more favorable conditions, a new era of brain power may be born to Iceland, something akin to her former brilliant period of intellectual life.

A WORD TO THE GIRLS.

When your brother is asked what vocation he intends to follow, he says that he hopes to be a doctor, a minister, a merchant, or a mechanic. He is qualifying himself for some special work in life, and studying with a certain end in view. But when some one asks what you intend to become, you are not able to answer. The question is a new one. Perhaps it had never occurred to you that you should choose and prepare for a certain work. But why not? Why should not you, as well as your brother, be ready to meet the future?

Our grandmothers and great-grandmothers may have held that work lowers the dignity of the "fairer sex," and as to learning a profession, most of them would have raised their hands in horror at the thought. In fact, they were barred from the professions and higher education. Such mistaken ideas may have been well enough for our "fore-mothers," but they will not do for the girl of the last quarter of the nineteenth century. She lives in a different atmosphere; public sentiment has whirled about to a more sensible position. It has been learned that woman can be doctor, dentist, lawyer, teacher. There is no field into which she can not enter and reap success.

While she is to be admired who, whether through hardships or in favorable circumstances, qualifies herself for the higher professions, it is not for these attainments we especially would plead. We believe that every girl should be taught some honorable means of self-support, as religiously as she should be taught to love her God. It makes no difference

what her social position is now, whether she be the daughter of luxury and ease, or the child of humble poverty, she should learn a trade, a profession, a remunerative business to which she could turn if required so to do. She should learn some one thing so well that people would be willing to pay her for doing it. Let it be speaking French or making bread, if she be competent, and can show herself to be, the world will receive her when she knocks for admission. The idea is not that she should master any great thing, but that she should excel in some one thing. All honor to those who aspire to and work for high positions in literature and art, but in choosing a business with a view to remuneration, it might be well to remember that the world can live without French and music, but it must have bread.

"But what is the need of devoting time and money to this preparation, when we, like the most of girls, intend to marry, and will then not follow our chosen vocations?" you ask. The poor woman living at the end of your street, who is struggling to support herself and three little ones, asked the same question years ago when she was care-free and hopeful, like you. Look into her troubled face to-day, and allow her to answer the question for you. You may never be called upon to make your own living. Very well. Be qualified so to do, anyway. It will make you more independent, and happier. You will gain strength by the effort put forth. Your friends will admire you the more, and you will be the better fitted to grace any position in life to which you may be called. - Sel.

RESPONSIBILITY FOR EARLY BREACHES OF CONFIDENCE.

"WHAT is auntie telling Baby?"

"Auntie tellin' Baby sec'ets. Baby mus n't tell."

"Oh! Baby will tell mamma."

"No, Baby musn't tell. Auntie says Baby musn't tell."

"What! Baby won't tell mamma! Mamma give baby some sugar" (coaxingly).

But baby shakes her curly head, and refuses the dearly loved bribe, though evidently very much disturbed in her mind between the rival attractions of sugar and loyalty to auntie.

"Won't you tell mamma? Poor mamma will cry."

Then the more than foolish mother puts her handkerchief to her face, and, with forced sobs and pretended tears, works on her baby's feelings. The
child hesitates, the little lip quivers, the little bosom
heaves; then what the bribe of sugar could not do,
the pretended grief accomplishes.

"Do n't k'y, mamma; I tell 'ou;" and the little one in a moment more has had stamped on her impressionable brain a lesson never to be forgotten—a lesson of bribery from her mother, to be false to her given word.

Auntie laughs lightly, and shakes her finger, saying, "O Baby! Baby! auntie won't trust you very soon again." And the child looks from auntie to mamma, from mamma to auntie, with a vague feeling of discomfort and wonder. She can but tell that she has betrayed her trust, and, when she looks in mamma's face, she feels (though, of course, she does not form

it in her mind) that she, too, has been betrayed. She knows that mamma has shed no tears, and that all her sobs have been pretended. But then her mother and aunt laugh, so it must be funny, and she, perforce, laughs too.

O unwise mother! O cruel mother! to lay the foundation of a lax morality. Who will that mother have to blame, when, in future years, her daughter deceives her, or her son proves false to his position of trust?

When you hear in a household, as a sort of family joke, 'Oh! he never comes in when he says he will; we never expect him,' or 'We never trust her with a secret; she could n't keep one to save her life," you may set it down as infallible that there is something radically wrong in the training of the children of that household. Where such things exist, spite of all care, as they will sometimes, the matter is one of very serious import, and as such is not one fit for joking.

Never treat lightly in a child, no matter how small that child, a broken promise. A promise is a promise, and as such should be kept sacred, no matter of how small intrinsic importance. Teach children, as early as possible, that to break a promise or to prove indifferent to an obligation is no light matter. Were this a thing more earnestly attended to in each child-hood, the world would not be so rife with 'vows lightly made, lightly kept,' be they those made privately for the good of a few, or those made publicly for the good of the many.—Sel.

TEMPERANCE NOTES.

EVERY ward of Salt Lake City possesses a loyal, working, Temperance Legion.

THE increase of cigarettes smoked last year in this country, over those of the year before, was 300,000,000.

A LATE Boston paper is responsible for the statement that there were 3,645 women arrested for drunkenness during the past year.

It is the testimony of an English physician that out of 1,540 cases of gout, all save one made more or less use of wines and liquors.

TWENTY-ONE States, and all the Territories and the District of Columbia, have now enacted scientific temperance laws for their public schools.

40,000,000 bushels of grain, each year, are used in the manufacture of alcoholic liquors. This would make 600,000,000 four-pound loaves of bread. A LITTLE Brooklyn boy, only eleven years of age, died, recently, of drink, in the city hospital.

The official Brewers' and Malsters' Directory, for the current year, reports *nine* breweries in the District of Columbia.

The first temperance organization ever formed in Mexico, has lately been organized at Socono, New Mexico. It is a branch W. C. T. U., composed entirely of women.

A PROMINENT Bengalese of Calcutta, has prepared, in Bengalee, a "Hand-Book of Temperance," filled with telling facts and figures. It is the only publication upon the subject in that language.

THERE is a law against cigarette smoking, at West Point. The cadet who violates it, is obliged to carry a musket for twelve consecutive hours, pacing his beat, back and forth, rain or shine, for that length of time.

POPULAR SCIENCE.

THERE is said to be a spot in Siberia, about thirty miles square, which to the depth of sixty feet, has been continuously frozen, for the last 100 years.

To freeze a tin cup to the floor: Fill the cup full of small pieces of ice, and throw some salt into it. Pour water on the floor, or on a board, set the cup in it, and stir the ice and salt together. The cup will soon freeze fast. This can be done in the hottest room, or in the hottest weather.

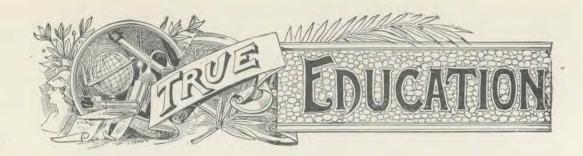
In the region of the mouth of the Rio de la Plata River, the Atlantic Ocean has been ascertained to be 40,236 feet, or eight and three-fourths miles in depth. This is its greatest known depth. The average depth of all the oceans is from 2,000 to 2,500 fathoms, or from 12,000 to 15,000 feet.

It has been found that, by the addition of chloride of zinc to the pulp, in course of manufacture, paper may be made as tough as wood or leather; the degree of concentration in the zinc solution determining its toughness. This substance can be utilized in a variety of ways, as it is thoroughly waterproof.

An improved oven thermometer, a device to be applied to the oven doors of cooking stoves, ranges, etc., to indicate the exact heat for baking purposes, has lately been patented by a firm in Obio.

A GERMAN patent has been taken out, whereby bottles may be manufactured from cast iron, containing twelve per cent. of silicon, a compound which will resist the action of the strongest acids.

One of the wonders of the United States, is the Walled Lake, in Iowa. It covers a surface of 2,800 acres, with a depth of twenty-five feet of water. It is from two to three feet higher than the surrounding country, and is enclosed by a wall ten feet high, fifteen feet wide, at the bottom, and sloping up to five feet wide at the top. The stones of which the wall is built, vary in size from one weighing one hundred pounds, to those weighing three tons. Around the entire lake is a belt of trees, half a mile in width; with this exception, the country in which the lake is located, is a rolling prairie. When, how, or by whom, this wall was constructed, or these trees set out, is a mystery.



TRAINING CHILDREN TO A SENSE OF DUTY.

STURDY, self-reliant men and women, true to their ideas of duty, were, a few generations back, largely in the majority. Coming up, for the most part, through hardship and self-denial, their characters were formed by the very discipline thus involved. Life then was weightier, harder to live; responsibilities were not then so slightly assumed; but greater confidence was engendered between man and man, and in all life's relations, a sense of duty was, in the main, a controlling influence. Naturally, discipline, both mental and moral, was a great feature in the training of the children of those days. We are apt, now, as we look back, to think those fathers and mothers far too strict, and in our over-flowing sympathy for what seems, by contrast, the hard, joyless lives their little ones led, we have insensibly swung over to the other extreme; we give our children the largest latitude of behavior; we lay the talent of the world under contribution for their entertainment; and seek in a thousand ways, not only to relieve study of all tedium and discomfort, but to actually render a child's life with it, more attractive, even in his own eyes, than without it. But there is one thing we do not do; we do not teach him the dignity of duty.

While all the modern improvements in methods of dealing with children are not a whit too many, or too varied, we pause sometimes to wonder if discipline, which should hold such an important place in the training of the young, is not entirely left out of their education. Older people do things all their lives which they do not like, nay, often positively dislike to do, but they do them from the necessity which duty imposes. How often does an adult man or woman consult mere inclination in regard to what comes up to be done, day by day? Neither should a child, from its earliest youth, be permitted to do so. In our own case, the inexorable laws of existence constitute themselves our master; but just as surely, when our child's time comes, will they be his master, too. Since, then, it is really the inexorable that he will have to meet, all the way through, it is but simple kindness to break the fact to him, gently, during his initiatory experience in life.

Children should be trained to go to bed, and to get up, at a proper hour, without any inducement being held out to them. Indeed, that training is always found to be the best, which offers no inducements, and gives no rewards for ordinary, daily duties. Let them be taught to eat proper food, and in proper quantities; to observe distinct hours of study and of play, as well as to do with unfailing regularity, portions of work, suited to their ages, each day. Teach them to respect both themselves and their work, by being punctual. In this way only, can the dignity of labor, as well as duty, be inculcated.

But, let them do all this, because it is the thing to do; because they ought. Keep them so close to you that you can count their little heart-beats, but insist, from first to last, upon immediate, unquestioning obedience; make life as delightful to them as your fond, parental heart may wish,—remembering that even the tiniest hearts will be all the happier from the consciousness of duties done—but assume from the first, that your little child will perform his little tasks, from day to day, without murmuring, or hope of reward; as a mere matter of course, the same as papa and mamma perform their larger ones; and for the same reason,—because it is his duty.

Home training of this kind, supplemented by a school training, which, as Professor Porter, of Yale college, once said, trains a young person "to do what he ought to do, when he ought to do it, whether he wants to do it or not," turns out, in place of the shifting, vacillating youth, too much lacking in power of application to ever amount to anything, unless it be in the role of libertine or defaulter, a pains-taking, self-denying student, who, rising by hard work in his chosen vocation, proves himself, meanwhile, a model son and an upright citizen; one whom all his world, be it great or small, delights to honor, E. L. S.

THE HOME TRAINING OF OUR GIRLS.

In the following direct and forceful article Dr. Howard Crosby gives emphasis to the subject of the proper bringing-up of our girls. He says, "A primal defect in our social life is the notion that girls have nothing to do. Boys are brought up to some employment, but girls to none, except where pecuniary want compels them. The family that is 'welloff' has busy boys and idle girls. The young man, after eating his breakfast, starts out to his daily occupation, and returns at the close of the day. The young woman, after eating her breakfast, (usually at a late hour), saunters about in quest of amusements. Novels, gossip, shopping (for unnecessary trifles), dressing in three or four different costumes, formal visiting, drawing (if able), and lounging, are the elements of the young woman's day. In the evening, by way of recreation (!), she goes to the theater or a ball.

"This unequal discipline of the sexes is the basis of innumerable evils. It makes the girl careless and selfish; it turns her mind to personal adornment and other frivolous matters as the great concerns of life; it takes away the sense of responsibility, and produces feebleness and disease in her physical constitution. It also prevents her from asserting her true dignity in the eyes of man, for the life of utility is alone dignified. Women, thus brought up in indolence, are looked upon by men very much as were the women of the old dark times of the world; as mere playthings, expensive toys, not as counsellors and friends. Marriage in such circumstances is a

mere mercenary arrangement, and the girl is prepared neither in body nor mind for the serious responsibilities and lofty duties which marriage implies. Her training, moreover, or lack of training, has made it necessary for her to marry a long purse. Economy, helpfulness, co-operation - these are not coming to the new household from this vain source. Dresses, drives, entertainments - these will form the staple demands on the young husband. Accordingly in city life where this class of young women is chiefly found, a young man is (greatly to his hurt often) kept from marrying by reason of its costliness, whereas society should be so ordered that marriage would help the larder and not beggar it. We want simplicity of life, frugality, modesty, industry and system. If we could introduce these virtues into our higher society, we should diminish the despair, envy, jealousy, dissipation and suicides of the single, and the bickerings, wretchedness and divorces of the married.

"Let our girls have as regular daily duties as our boys. Let idleness be forbidden them. Let recreation be indeed recreation, at proper times and in proper quantities. Let us open more numerous avenues of female industry, and let every woman be clothed with the dignity of a useful life. Can such a reformation be brought about? My dear Madam, begin it yourself. Rule your household on this principle. Have the courage to defy fashion where it opposes. Be a bold leader in this reform, and you will soon see a host of followers glad to escape from the old folly."

A TEACHER in a public school has been accustomed to require her pupils to say, "The equator is an imaginary line, passing round the earth," etc. It never occurred to her that the boys and girls of her school had no idea what an imaginary line meant, until one day a visitor asked them how wide they thought the equator was. Some thought it was 5,000 miles wide, others 2,000, and others said they could jump over it. The visitor then asked how they thought ships got over it. One pupil said he thought the crews got out and drew them over, and another said he had read that a canal had been dug through it. "What is the name of the canal?" was asked. "The Suez Canal," was the answer. — Sel.

A Post-Graduate Course.—A wise, New Jersey mother, a widow, was in good circumstances, continuing a prosperous business her husband had left her,

and having four daughters, she gave to each of them the best education the city she lived in, afforded. As it was the seat of a college, the schools were unusually good, and so was the society of the place. When the oldest daughter was graduated from school, her mother took her into the kitchen and initiated her into all the arts and mysteries of that department, and from that to upstairs work, and to the providing the supplies - in short, to everything pertaining to housekeeping, even to presiding at the table. After she was thoroughly instructed in all this, and perfectly competent to do it, she and her mother took turns in having the entire charge of the house, a week about. When the other girls were graduated they went in turn through the same course of instruction, and, consequently, at no time in their lives was housekeeping ever a bugbear to any of them. - N, Y. Advocate.



TRAINING-SCHOOLS IN VICE.

THE alarming frequency of crimes committed by boys and youth, throughout the country, would almost lead one to wonder whether there were not, somewhere among us, regular training-schools in vice, capable of turning out criminals ad libitum. As one most potent factor in vicious education, we might well turn and give our attention to the picture-posters of the day; with their immense educating power, what must be their effect upon the unformed minds that study them familiarly and constantly? In referring to what London has suffered, presumably, from these and like agencies, a London paper remarks, "Is it not within the bounds of possibility, that to the highly pictorial advertisements to be seen on the boardings of London, vividly representing sensational scenes of murders, exhibited as the great attractions of certain theaters and places of amusement, the public may be, to a certain extent, indebted for the horrible crimes in Whitechapel? Imagine the effect of these gigantic pictures of violence and assassination by knife and pistol, on the morbid imaginations of unbalanced minds. These dreadful picture-posters are a blot upon our civilization."

Every city, village, and even hamlet, along our lines of travel, abounds in these hideous caricatures of life, which offend the eye, and shock the moral sense. And if adult men and women feel their effect thus vividly, we can scarcely calculate their demoralizing tendency upon the younger and more susceptible class, to many of whom the streets stand in the stead of home influences and higher education!

Occasionally, some of the better class of our newspapers assist in the crusade against these sworn enemies of social purity, which are, as it were, turned loose in our midst. The Boston Journal, speaking of the allowance accorded to debasing show-bills and papers in public places, says, "We allow youth to become accustomed to suggestions which are forced upon them in spite of their shield of innocence; we permit every little periodical stand to show advertisements and publications which should never be suffered to contaminate the press or the public; we close our eyes to a thousand methods by which curiosity is stimulated before reason has attained the strength of control; and then we wonder why such pure and precious things as children should grow to such perverse and wicked maturity."

It is to this sort of liberal education — the education of the blood-curdling pictures, the Buffalo Bill entertainments, and the ubiquitous dime novel—that a young man, recently captured in the act of robbing a stage coach, — shooting several of the passengers dead, and wounding others,—undoubtedly owes his present prospect of a felon's cell. And we may count by hundreds, all over the country, his fellows, who, trained under the same influences, in one department of vice or another, emulate his fearful example. A glance down the columns of the daily paper gives us frequent unwelcome news of them, revealing, from time to time, their individuality and whereabouts.

Here is work mapped out for journalists, philanthropists, and educators. Let public sentiment be aroused or created on these subjects,— a sentiment so strong and resistless that these great evils shall be caught up and swept away on its mighty, out-going tide.

E. I., S.

RECLAIMING THE LOST.

PROBABLY there are very few persons who do not look upon a woman of low character as the most thoroughly "lost" and "abandoned" of any human being. This opinion is based upon lack of knowledge and experience. Physicians and philanthropists have opportunities for becoming acquainted with this

class of persons, and forming a true estimate of their character, as others do not; and it is the universal testimony of those who have the best basis for forming an opinion, that a very large number of this wretched class are by no means so utterly and irreclaimably bad as they seem to be. Many among them have been driven by that desperation which is the outgrowth of want and despair, to adopt a life toward which they have no natural tendency, and for which they may entertain a genuine repugnance. Their lives are full of misery, want, and bodily distress. Many among them would most gladly escape from the bondage of vice, if they only knew the way. Dr. Kate Bushnell, Evangelist of the White Cross Department of the N. W. C. T. U., in her recent annual report, suggests methods of work for these wanderers, which have in other humanitarian fields proved their efficiency by their beneficent results:—

"I saw a horse that had fallen under its burden on the street. Its owner was beating it pitilessly to make it get up and move on. How it made us shudder to hear the whizz and crack of the rawhide on the poor animal's back! Blood was streaming from its nostrils; but the panting horse neither flinched under the whip nor stirred a muscle to get up. What was the matter? Was it willful stubbornness? It looked like it. The driver would have whipped it to death in his rage, but some men came along and proffered assistance. The whipping was stopped, and for the moment no attention paid to the motionless horse. The load was taken out of the wagon; still the

horse lay motionless. The wagon box was removed; still the horse paid no attention. A few buckles of the harness were loosened; still the horse seemed lifeless. Then all rubbish, harness, and every obstacle were taken out of the way; the horse looked up, caught the kindly glances of the men, felt the gentle stroke of the human hand, and in an instant was trotting along the road.

"I said to myself, 'There is a great deal of womannature in a horse.' There is not much of revenge, but a great deal of hopelessness in her when she gets down under the burden of life; you can't whip her up off the street and into the line of duty. If it is worth while to save a fallen horse by removing every burden, and giving nothing but kindly encouragement, is it not worth while to save a fallen sister that way? Our labor organizations are taking away the heavy load under which woman has fallen; our charitable organizations are looking after the smashedup vehicle: our White Cross and White Shield organizations are loosening the buckles of the harness of artificial social customs which bear heavily upon a woman as soon as she is down. Let loving sisterly and brotherly hands, then, give the tender, encouraging stroke, and the woman is all right and on her feet, so glad for the chance to try again."

MORAL QUARANTINE NEEDED.

Society is full of lepers, both moral and physical. The association of the innocent and the morally sound with the vicious, the morally and physically corrupt, is producing an extension of such moral maladies as profligacy, dissoluteness, adultery, divorce, abandonment, infanticide, and outrage, to a degree hitherto unparalleled in the history of civilized nations. What is more needed than a system of moral quarantine? The confinement of those moral lunatics is as necessary as for raving lunatics and kleptomaniacs. Moral pest-houses are needed for the isolation of those whose very breath is poison, whose very presence breeds moral corruption. We wholly agree with the following words by one of the leading philanthropists of the age:—

"Think of the peace, order, and quiet that pertain to a normal idea of home. Then think of making home an asylum, or a small-pox hospital. No one would for a moment tolerate the idea; but the kleptomaniac, libertine, gambler, and drunkard, all of them morally insane, and totally unfit to be harbored within home's sacred walls, are still retained there, because society makes no provision to place them where they ought to be, - within the walls of institutions where they can have expert care and treatment, be self-supporting, and, best of all, be delivered from themselves. There are thousands of these "scourges of God," these embodied penalties of the violation of natural law in some ancestral or pre-natal state, and they are the curse of the homes in which their lives are spent. These homes deserve protection from society; those victims of an abnormal make-up, as visible to the spirit's eye as a humped back or a goitered neck are to the physical, deserve protection from themselves. The drunkard in Chicago who pounded his sick wife to death with the body of their new-born child, was an illustration carried to the supreme degree, of the cruelty to which the state is not yet awakened, on behalf of the home. When women statesmen come to their own, let us hopefully believe the home will not be left so shelterless as it is now."



RETROSPECTIVE AND PROSPECTIVE.

This number ends another volume of this journal, which now for more than twenty-three years has been before the public as an exponent of principles of hygiene and sanitary reform. At the beginning of its career, the advocates of the reforms then pioneered by this journal, were by many looked upon as fanatics and hobbyists, and it is with much satisfaction that those who then enlisted in the cause of sanitary reform are now able to point to the fact that many of the views then advanced, and by many violently opposed, have long since become firmly engrafted upon the minds of intelligent people everywhere, and the practices which were at that time considered as indicative of a state of mind akin to lunacy, are now generally adopted by a large proportion of the more intelligent classes in all parts of the civilized world. Man may now eat in peace his oatmeal mush and graham bread, without being ridiculed as a dietetic Dress reform has thousands of advocates crank. and willing disciples, where a score of years ago only a few hundred women were found strong minded enough to brave the current of public opinion, and dress in accordance with the dictates of common sense and the requirements of nature's laws, irrespective of the dictates of fashion. Scores of new discoveries in biology and chemistry, and other branches of science, have come forward in support of the so-called vagarist reformers, and the evidences in support of these views have gradually accumulated, until the mass of evidence has become absolutely

irresistible. Surely the world moves, and Good Health feels a just pride in having helped the world to move in the direction of sanitary progress.

But while many victories have been won, there are other battles yet to fight. The subject of hygiene has developed within the last quarter of a century, from such a small beginning that a mere handful of facts comprised the whole science as then taught; now ponderous encyclopedias devoted to this science alone, fail to exhaust the treasure-house of modern sanitary wisdom. New fields are constantly being explored, new facts of great interest and utmost importance are almost daily brought to light; but many phases of the subject are still hidden in darkness, and the next score of years may possibly see such developments in human knowledge as will quite cast into obscurity our present stock of information. So GOOD HEALTH has no fears that its mission is ended, or that there is not abundant work on hand for many years; and during the year 1890, with which the next volume will begin, it will endeavor to glean from the broad fields of scientific study and research the freshest, most striking and interesting facts, and especially those of a practical character. We trust the thousands of readers who have perused the pages of this journal during 1889, will still receive its monthly visits during the year to come, and feel assured that if they have found it a source of pleasure and profit in the past, they will find it yet more interesting and valuable during the year to come.

According to a recent telegram, the people of St. Louis are being treated to a feast upon diseased cattle; a large number of animals affected with Texas fever, or pleuro-pneumonia, having been slaughtered and the flesh distributed about the city.

A SANITARY writer suggests that rats are not such unmitigated evils as they are usually considered. They are among the most persevering and thoroughgoing of scavengers, and these sanitary officials are much needed in most civilized communities.

CULTIVATING DISEASE.

We heard a story, some time ago, about a doctor who went off for a vacation and left his student at home to attend to his practice. The student understood but few diseases, and knew of only a few remedies, and, at the end of two weeks, when the doctor returned, the patients were all cured. The student was "very sorry," but the doctor said, "never mind; jump into my carriage, and I will show you how to make practice." They made a friendly call upon the family of one of his patrons, and inquired after the health of its members. The report was that all were well.

"Are you sure, Mrs. Jones, that you are well? You don't look very well; the whites of your eyes are yellow, and I think you are a little bilious. Let me feel your pulse." By this time the woman's apprehensions had been sufficiently awakened to quicken her pulse.

"I am afraid, madam," said the doctor, gravely, "that your liver is quite out of order. There is malaria around, and I fear you are going to be sick. I will just leave you a little medicine, and will call again to-morrow as I ride this way."

Sure enough, the next day found her sick in bed. She had "medicine disease," if she did not have malaria, and she had not slept a wink the night before, because of thinking of what the doctor had said. Now she said, "Doctor, I have been thinking about it. I haven't felt very well lately; I have had black specks before my eyes, and I was dizzy a little when I stooped. How very fortunate you came along just as you did!" And the doctor left her some more medicine, and in a day or two she was sick sure enough, and after her recovery could not be grateful enough to the doctor for saving her life!

We have sometimes unwittingly cultivated disease by inquiries after symptoms which had been forgotten. One case, in particular, which we recall, taught a lesson as to letting alone old symptoms if they were not spoken of. A lady had a most persistent pain in her side, which fomentations, and plasters, and liniments, and all sorts of other modes of treatment, failed to reach. She would come into the office every day to tell us about it. Well, we went away for two weeks, and when we got back she came in cheerful and bright, and said nothing about her side. After awhile we were so unwise as to say, "Mrs. Brown, how about that pain in your side?" She said, "I declare, I had forgotten about it; " and, feeling around for it, finally declared that it was just the same. It took a month to make her forget it again.

The doctors of the future will not cultivate disease by minute inquiries after symptoms. They will know by appearances, and by microscopic investigations.

But the patients are generally themselves most to blame in the matter of cultivating disease. When they get up in the morning, they take a complete inventory of themselves, in order that not a morbid feeling or a pain shall have a chance for escape. We had one patient, a number of years ago, who used to consider it her duty to have some nice new symptom to present every morning - a sort of medical nosegay - as a pleasant salutation. That patient never got well, although she just missed doing so. By and by she settled into such a state of "innocuous desuetude," as Mr. Cleveland would say, that she rotated only once in twenty-four hours-she would allow her nurse to give her only two half turns a day in bed. She lay with her eyes closed, and it was too much trouble to eat unless her nurse fed her. We watched her idiosyncrasies closely, and then gave orders that this patient should have some exercise; that she must feed herself, and she must get out of bed. She protested that she could not do either, and let food stand for a whole day, untasted. The next day she had a good appetite, and fed herself comfortably. She kept improving, until she could walk nearly a mile a day in the halls. Then she woke up to the fact that she was getting well too fast, and was losing her invalid prerogatives, and so went directly to bed again. Starvation would not stir her; she would not get well; she reveled in symptoms, and we wrote to her husband to come and take her away. She is living her invalid life yet. She loves to be coddled and doctored, and delights in working up new symptoms.

One more case. A lady lost her husband, of consumption. She fancied she had taken the disease from him, began to cough, and went every day to the cemetery to scatter flowers on her husband's grave. We examined her lungs, and found them perfectly sound. "Well," she said, "do you think I am going to die of consumption?" "Yes," we said, "if you try hard enough, you can, but with your constitution it would be a long-drawn-out agony. We would not if we were you. There is no need of your dying of consumption."

We recommended her to cultivate a flower garden instead of visiting the cemetery, and to adopt some healthy, roguish boy; for she was living all alone. She followed the prescription, and in two or three years got so well and so good looking that she was married again.

That woman could have died just as well as not. Many people are frightened to death by ghosts of disease-ghosts of cholera, consumption, or dyspepsia. That is the way the mind-cure doctors flourish. They succeed admirably where there is no real malady. How are we to combat these hobgoblins of disease?-We must combat bad bodily states by good mental states. We see frequent illustrations of this in persons who are suffering from incurable diseases, and vet all their lives wear happy, cheerful faces. How many times some hero has left his bed and ridden to the front of battle by sheer force of will! Many a fond mother, forgetful of her own bodily pain, will go without food and without sleep in caring for her child, until she sinks from exhaustion. Bed-ridden invalids have been forced by fear of fire or other danger to rise and run for their lives, and have gotten well, in consequence of forgetting their diseases. It is reported that during the Charleston earthquake, quite a number of chronic invalids were so thoroughly shaken up that they left their beds and never went back to them. Thousands of women have been cured by their interest in the work of the W. C. T. U., and other humanitarian enterprises. The cultivation of good, wholesome thoughts does antagonize disease.

Another thing, the internal organs do not want to be thought about. A man's stomach is healthy when he does not know he has one. When we are conscious of the existence of any internal organ, that organ is sick. The internal machinery was intended to do its work unconsciously. When we begin to think about our stomachs, digestion is arrested. John Hunter said he got gout by thinking about his great toe. A man who sits at the table wondering if baked potatoes will agree with him, and whether fruits and vegetables are a good combination, is in a fair way to have trouble with the simplest food. Thinking about the internal organs gets them into a sort of stage fright, and they are powerless.

AN ERRONEOUS NOTION ABOUT MEAT-EATING.

NOTHING could be more erroneous than the popular belief that the use of flesh food is essential to physical or mental strength. The fact seems to have been forgotten that some of the most powerful nations of antiquity were non-flesh-eaters. It is an interesting fact that all the great nations of history who attained any great ascendency, were practically vegetarians. The early Assyrians and Egyptians were vegetarians on account of their religious belief. The Persians, the Greeks, and the Romans, as well as other lesser nations, were, at an early period of their history, vegetarian in their dietetic habits. Barley was the meat of the hardy Roman soldier, who carried an armor which a modern man could scarcely lift. The Greek and the Roman poets picture the Golden Age, their ideal of a happy human existence, as a period in which flesh-eating and the slaughter of animals were unknown. Pythagoras, perhaps the most famous of early Grecian philosophers and teachers, also a physician, was a vegetarian, and most vigorously opposed the practice of flesh-eating, which at that time (about five centuries before the Christian era) was becoming common among his countrymen. Greece had already begun to degenerate, and the free use of the flesh of animals may have been either a result or, in part, a cause of this degeneracy.

The moral influence of flesh-eating, accompanied as it must necessarily be by the wholesale slaughter of animals, is most distinctly debasing and brutalizing. The man who habitually takes the life of dumb brutes, and steels his heart against their piteous appeals for mercy, is necessarily made less susceptible to those influences and sentiments which are the best safeguards of human life in civilized communities. The boy murderer who some years ago was tried for the murder of his playmates with no other motive than natural blood-thirstiness, was the son of a butcher, — a fact which suggests a multitude of horrible reflections respecting the hereditary influence growing out of this slaughter of the innocents.

The strength of the ox, the elephant, the useful horse, and the mammoth hippopotamus, the fleetness of the reindeer, and the agility of the chamois, are derived from the natural products of the earth, and not from flesh. Second-hand food does not afford that degree of efficiency as a sustenance which is supplied by the purest products of the vegetable world. Flesh does not afford the elements most needed for the replenishment of strength, either physical or mental. Force is most readily derived from the products of the vegetable kingdom. A good example of this fact is afforded by the natives of the Canary Islands. The remarkably fine development and the astonishing vigor of these people have been remarked by many travelers. The writer met, some years ago, two of these islanders, who had wandered away from their native land; and in physical development they certainly confirmed what has been written upon this

subject by visitors to their island home. All travelers attribute to the simple food of this people their superiority over the average of mankind in physique and ability to endure labor and hardship. The food of the Canary Islander is almost exclusively composed of a single article, known as *gofio*, of which a writer in a contemporary journal speaks as follows:—

"There is nothing mysterious about this food. It is simply the flour made from any of the cereals, by parching or roasting before grinding. One can scarcely pass through any village of the Canaries without witnessing some step in the preparation of this food. The grain is first picked over, then roasted above a charcoal fire, and afterward ground at the windmills, which abound everywhere. When it is to be eaten, milk or any other fluid is mixed with it, without further cooking. Nothing can be more 'handy' than such an article of food. The Canarian laborer, if he goes forth to his work alone, takes with him some gofio in a bag made of the stomach of a kid; if there are several persons, the skin of a kid is used. When meal-time has arrived, a little water is poured into the bag with the gofio, the mixture is well shaken, and the meal is prepared without further ado.

"The Canary Archipelago consists of seven inhabited islands, with a population of two hundred and eighty thousand persons. At least two hundred thousand of them live economically on gofio, as their fathers did before them, from time immemorial. The food is said to be not only delicious and wholesome for those who are not accustomed to it, but to possess also a tendency to counteract certain digestive ills to which the civilized stomach is heir, thus restoring man, in a measure, to the physical condition of the happy savage."

Physicians are doubtless largely responsible for the

mistaken notions which generally prevail respecting the special value of flesh as a nutriment. Nothing is more common than the prescription of an extra quantity of beefsteak, or some other form of flesh food, for a patient who needs building up. We are acquainted with one physician who frequently prescribes a diet consisting wholly of flesh food. Many such patients have, at various times, fallen under our professional care, and we have frequently seen the best results follow the almost total interdiction of meat. In fact, we have not infrequently found it necessary to proscribe flesh food altogether for a time, before our patients could be made to show perceptible signs of improvement. The prescription of meat is by no means so frequently followed by improvement in strength as is generally supposed. Indeed, in the words of an eminent New York physician, Dr. Geo. H. Fox .-

"How often it is noted that the roast beef and beefsteak prescribed by the physician with a view to building up his patient's strength, fails utterly in effecting the desired result! Indeed, my experience and observation have seemed to teach that much of the lassitude, billiousness, headache, constipation, and depression of spirits from which many individuals suffer, is directly caused by an excessive ingestion of albuminoid elements of food, such as meat, milk, and eggs."

In the opinion of Dr. Fox, what feeble people require is not so much tonics, etc., as "an increased amount of exercise, together with a simple farinaceous diet, to promote strength and restore normal conditions. The effect of an exclusive meat diet in skin diseases is to increase the redness and itching in a notable degree, while a simple farinaceous diet would improve the appearance of the eruption."

EFFECTS OF ALCOHOL. — Dr. Mogilianski, by a series of experiments, has proved that the long-asserted power of alcohol in promoting the assimilation of albuminoid elements of the food, is not true, except in the case of those accustomed to its use. It was found to diminish the assimilation of fats, and it decreased the destruction of albuminoids in the body.

Poisonous Oysters. — A French scientist has recently been investigating the cause of the frequent occurrence of poisoning from the use of oysters and other mussels. The result of the investigation is as follows:—

"The committee came to the conclusion that the

poisonous action of mussels is due to the presence, especially in the liver of the fish, of an organic base, the mytilotoxine of Brieger, and that this is developed under the influence of a particular microbe occurring only in mussels that have lived in stagnant or polluted water."

It should be added that it has been observed that oysters reared near the outlet of city sewers are frequently found to produce poisonous symptoms when eaten, especially at certain seasons of the year. It is well known that the oyster is a scavenger in its dietetic habits. It is indeed for this purpose that it is placed by nature in the slime and ooze of the ocean bottom. It is strange indeed that this loathsome creature has ever been selected as an article of food.

CONDENSED MILK. — The popular notion that the use of condensed milk is perfectly safe, is erroneous, since the temperature at which milk is evaporated is not sufficiently high to destroy either diphtheria or ptomaimes. Milk, whether condensed or in its natural state, should always be boiled before using.

A New Danger.—According to the Medical and Surgical Reporter, the Council of Hygiene in Paris, is about to take steps to suppress the use of old magazines and newspapers for wrapping up foods. The Austrian government has prohibited the use of such papers, and also of colored papers to inclose articles intended to be eaten. In several European countries much greater care is exercised to protect their citizens against sources of danger to health, than in this country.

FLIES AS CARRIERS OF CONTAGION. — Dr. Alesses' discovery that the bacillus of Koch may exist in the intestines of a fly that has fed on phthisical sputa, has drawn considerable attention to various instances of the propagation of contagion in this manner; among these the granular ophthalmia of Egypt. It has been said that the lamented Father Damien attributed his leprosy to the inoculation, through the agency of flies, of an abrasion on the scalp. Keep flies away, by cleanliness of premises.

THE PHYSIOLOGICAL NEED OF REST. - Rest is as necessary for health as is exercise. Indeed, one may live longer without exercise than without rest. Exercise is essential for a high degree of health and vital activity, but rest is essential for the maintenance of life itself. Probably many people exhaust themselves as much by recreation as by work. This sort of rest (?) is not rest. We quite agree with Prof. Blakie, who says: "It is a grand safeguard when a man can say, 'I have no time for nonsense; no call for unreasonable dissipation; no need for that sort of stimulus which wastes itself in mere titillation: variety of occupation is my greatest pleasure, and when my task is finished, I know how to lie fallow, and with soothing rest, prepare myself for another bout of action."

EFFECTS OF TIGHT CLOTHING.—A case of sudden death at Birmingham, England, shows the dangers attendant on tight clothing. The deceased, a servant girl of excitable temperament, died suddenly in an epileptic fit, and the evidence at the coronor's inquest attributed the fatal issue to asphyxia, due to the fact that both neck and waist were unnaturally constricted

by her clothing; the former by a tight collar, the latter by a belt worn under the corset. The free movement of the heart at a crisis such as an epileptic fit, is of the utmost importance. In this case its movement was hampered by a tight girdle, while at the neck the free return of blood from the brain was prevented. "This is no isolated case," says the Lancet, "as regards its essential character; minor degrees of asphyxiation are still submitted to by a good many of the self-torturing children of vanity."

Contagiousness of Consumption.—A writer in the British Medical Journal gives the following account of the communication of consumption through the wearing of earrings. A young girl, E. Z., aged 14, was intimate with a girl friend who died with consumption. She "removed the earrings from the friend's ears, and wore them in her own. Shortly after, the holes in her ears began to show a discharge. At the hole in the left ear there was an ulcer, matter from which showed the presence of tubercle bacilli; and on this side of the neck was a large ulcerated gland. The progress of the case was rapid, and at the time of writing the report, the patient was rapidly sinking from phthisis."

DIPHTHERIA FROM FOWLS. — Science translates from the Bulletin Medicale the occurrence of an epidemic of diphtheria on the island of Skiatos, one of the Grecian isles, five years ago. Old and reliable practitioner assert that not a single case of diphtheria had been known on the island for thirty years previous:—

"In June a child aged twelve years was attacked with diphtheria, and died. Seven other cases occurred in the immediate neighborhood; five of these died. The disease extended, until, within a period of five months, one hundred persons were attacked, of which number thirty-six died. Three weeks before the sickness of the first child, a flock of turkeys had arrived from Salonica. Two of these were sick on the arrival, and each of the others was subsequently attacked. Dr. Paulinis found in the throats of the sick fowls, patches of false membrane. The glands of the neck were swollen, and in one bird the disease had extended to the larynx. Although there had been no immediate contact between the sick birds and the first child attacked, still the distance between them was slight, and a wind had been for some time blowing in a direction favorable to the transportation of the disease. Dr. Paulinis believed that the disease was contracted from the turkeys, its germs being carried by the current of air."

A REMARKABLE MAN. — One of the most remarkable personages living at the present time, is a resident of Cleveland, O., known as Dr. Willie King, a colored man, who is thus described by a contemporary:

"He is possessed of enormous muscular strength, and besides, has two hearts and a double set of ribs. He was recently examined by physicians, and one of them, Dr. Bigger, of the Huron street hospital, reported as follows: 'He evidently has two hearts, one on the left side and the other on the right. He has remarkable control over the muscles of the heart, chest, and abdomen. He can stop his heart from beating for half a minute, and can force his left heart eight inches down into his abdomen. He also seems to have two sets of ribs - one set inside of the other, as if they were telescoped. By a tortuous motion he can throw the inner ribs directly downward so that they can be felt and counted. His muscular development is superb, for I saw him bend an iron bar three-quarters of an inch in diameter, by striking it across his forearm."

REPORT OF TYPHOID FEVER CASES.—The State Board of Health of Michigan has declared typhoid fever to be a disease "dangerous to the public health," and hence required by law to be reported to the health officials. In regard to this, *Science* remarks:—

"Any physician who shall neglect to immediately give such notice shall forfeit for each such offense a sum not less than fifty nor more than one hundred dollars. After Oct. 1, any householder who shall refuse or willfully neglect immediately to give such notice shall be deemed guilty of a misdemeanor, and is liable to a fine of one hundred dollars, or, in default of payment thereof, may be punished by imprisonment in the county jail not exceeding ninety days.

"It seems important that the people generally shall understand this new law, which applies to scarlet fever, diphtheria, small-pox, and all such dangerous diseases, as well as to typhoid fever; but at this time of the year, typhoid fever is usually most prevalent, and it is especially dangerous in times of drought; therefore the safety of the people may now be greatly promoted by having every case of typhoid fever reported to the health officer, who is by law (Section 1, Act 137, Laws of 1883) required to promptly attend to the restriction of every such disease. A new law, which took effect Oct. 1, makes it a misdemeanor, punishable by fine or imprisonment, for the health officer knowingly to violate that section of the law, or for any person knowingly to violate the orders of the health officer made in accordance with that section. But the actual penalties which are in-

curred by the violation of these laws, are death penalties to many of the people, about one thousand being lost in Michigan in each year from typhoid fever. The saving of a large proportion of these lives is the real reason for this health effort, in which it is hoped all the people will heartily join."

HEREDITARY INFLUENCE OF ALCOHOLISM .- M. Sollier, in his Aubanel Prize Essay on this subject, by abundant and well-arranged statistics, traces the afflictions of the idiot, the epileptic, the imbecile, the hydrocephalic, the choreic, and the mentally debilitated, up to the alcoholic father, mother, or grandparent, in so many and such clearly marked instances, that it is quite impossible to deny his conclusions from the data he gives. An alcoholic subject runs a terrible risk of conferring upon his descendants either insanity, or tendency to vice, or suicide, or hysteria, and the milder nervous disorders. legacy of evil may miss a generation, and then appear in the next, like gout. Generally it will take the form of dipsomania, in a taste for the same liquor as that preferred by the ancestor; in its mildest form it will so predispose the unhappy descendant to inebriety, that he will find the freedom of his will in that direction seriously impaired. The moral degeneration that ensues, has been described as "a dulled moral sentiment, a hazy mental outlook, which, while not developing to actual turpitude, yet makes the higher forms of manly and womanly nobleness difficult, if not impossible, of attainment."

Tobacco As a Germicide.—Some Italian and German investigators some time ago advanced the theory that smoking is an excellent means of preventing infection, during exposure to diphtheria and other contagious diseases. We are glad to see that the *British Medical Journal* has given the weight of its theory against the practical application of this use of tobacco. The journal well says,—

"If persons not accustomed to smoke were to take to pipes, cigars, or cigarettes on the outbreak of an epidemic, they would probably make themselves very unwell, and especially predisposed to fall victims to the prevailing pestilence. The mental condition of a man who has smoked tobacco too strong for him, is a state of extreme depression, most unfavorable for his welfare during an epidemic. We advise non-smokers not to put their trust in pyridine during the prevalence of fevers, and to remember that their tobaccoloving friends owe their immunity to good health and strength, which enables them to stand tobacco and at the same time to resist infection."

DONESTIC BOICINE

HOT WATER AS A DRINK.

From careful observation for a number of years, we are satisfied that many people drink too little. Copious water-drinking is one of the best possible means of encouraging the action of the liver, kidneys, skin, and bowels. Invalids with weak digestion suffer discomfort from drinking cold water copiously, on account of the depressing influence of cold upon the functions of the stomach. Hot water, however, is not open to this objection, and hence is to be recommended to invalids, especially to those suffering with almost any form of disease of the stomach, liver, skin, or kidneys. Water is the universal cleansing agent; and water-drinking is one of the most effective means of cleansing the blood. When taken hot, it stimulates the action of the stomach and bowels, promotes the secretion of bile, encourages the action of the kidneys, relieves dryness of the throat, and

secures a healthy activity of the skin. Hence it is particularly valuable for dyspeptics, especially those suffering with acidity, and for persons suffering with torpid liver and inactive kidneys.

Hot water, as well as other drinks, should be sparingly used, if used at all, at meals. When the digestion is very slow, a few sips of hot water at the close of the meal will be found a useful aid to digestion; but hot milk may generally be substituted with advantage. The best time for taking hot water is one hour before the meal, and just before retiring at night. One or two glasses may be taken at a time. The temperature should be 105° to 108° F.

Hot water is not a panacea, and is not best for everybody. Persons suffering with painful dyspepsia, ulcer of the stomach, and organic disease of the heart, should not take it.

CURE FOR HICCOUGH.—The sufferer closes the ears with the tips of his fingers, making firm pressure, and at the same time is given water to drink in small swallows. Usually, the hiccough ceases at once.

Insanity after Mumps. — Two cases of this kind have been recorded lately, but it is suggested that both were accompanied by complications that were very exhaustive. In the face of the well-known liability to cerebral metastasis, it is unwise to make too light of this very common, and usually very innocent, malady.

Precautions against Consumption.— The contagiousness of consumption, or tuberculosis in any form, is now a well-attested fact. The microbe may lurk in the food; especially in flesh, milk, and blood of animals, used as food; most frequently in those of the cow, rabbit, and poultry. Hence the oftrepeated injunction—meat must be well cooked; milk should be boiled. Mothers afflicted with tubercular disease must not nurse their infants. The

following are the precautions to be recommended as safeguards against tubercular infection: —

- The expectorations of the consumptive should be received in proper vessels, and spittoon or spittingcup should be emptied into the fire, and cleansed with boiling water.
 - 2. The consumptive patient should sleep alone.
- 3. Be careful to remove from his neighborhood those in any way predisposed, particularly those who may be convalescing from predisposing diseases.
- 4. Disinfection (by boiling) of all linen, and every other article employed by the consumptive. Rooms that the patient has occupied should be whitewashed, and the carpets changed.

ELECTRICITY FOR DROPSY.—A French physician reports great success in the treatment of dropsy, with the faradic current. Electricity is applied to the abdominal muscles for fifteen minutes three times daily, with a current of sufficient strength to cause contraction of the muscles. We have seen good results from the use of this remedy in a number of cases.

MANAGEMENT OF CONSTIPATION.

An eminent English physician, Dr. Andrew Clark, in writing on the above subject, suggests the following management of simple cases of constipation:—

- "I. On rising or retiring, sip slowly from a quarter to a half pint of water, cold or hot.
- "2. On rising, take a cold or tepid sponge-bath, followed by a brisk general rubbing.
- "3. Clothe warmly and loosely; have no constriction at the waist.
- "4. Careful attention should be paid to diet. Avoid pickles, spices, curries, salted or otherwise preserved provisions, pies, pastry, cheese, dried fruits, nuts, and all coarse, hard, and indigestible food taken with a view of moving the bowels; likewise strong tea, and much hot liquid of any kind, with meals.
 - "5. Walk at least half an hour twice a day.

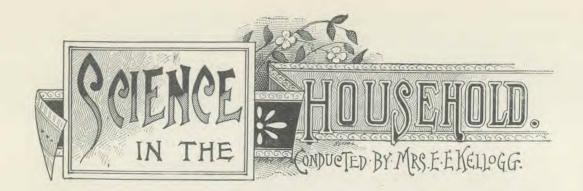
"6. Avoid sitting or working long in such a position as will compress or constrict the bowels.

"7. Solicit the action of the bowels every day, after breakfast, and be patient in soliciting. If unsuccessful the first day, continue the daily soliciting at the appointed time only. On the fourth day assistance may be taken. The simplest and best will be an enema of equal parts of olive-oil and water.

"If the use of all these means fails to establish the habit of daily, or of alternate daily, action of the bowels, artificial helps may be necessary. The object is to coax, or persuade, the bowels to act after the manner of nature, by the production of a moderate and more or less solid-formed discharge. On waking in the morning, try massage of the abdomen, from right to left along the colon; and a dessert spoonful of the best olive-oil may be taken at the greater meals of the day."

ANÆMIA. - Our knowledge of the constituents of the blood and its corpuscles is progressing slowly. L'Epine has recently summarized the latest conclusions, as follows: 1. In ordinary anæmia the number of the red globules is diminished, and possibly their size, with some modification of their chemical constitution; but in 2. Chlorosis, the form of anæmia usually associated with female irregularities, there is diminution of the number of red corpuscles, and also of the hæmoglobin, the oxygen carrier, together with certain changes and degeneration of the arteries. Niemyer observed that very obstinate chlorosis is apt to occur in young girls, whose menstrual functions are established at twelve or thirteen years of age, before the development of the breasts. 3. In cancer, an anæmia occurs, in which the mass of the blood is diminished, as also the number of the globules, and the percentage of hæmoglobin in the corpuscles. 4. In pernicious anæmia, on the other hand, the blood is pale and scanty, with great diminution of the number of the corpuscles, but the latter may contain a larger percentage of hæmoglobin. 5. Leucocythæmia is a very fatal disease, in which the white corpuscles, normally in the proportion of one to five hundred red, become greatly increased in number, and the red, diminished. These diseases comprise a branch of medicine in which modern appliances for counting the corpuscles, and otherwise ascertaining the actual constitution of the blood, are effecting a very positive advance in our knowledge.

How to Manage Corns. - If a corn has already formed, and become inflamed and tender, the first point is to reduce the inflammation. Thoroughly cleanse the foot by allowing it to soak in quite warm water, made soft with ammonia or Castile soap; then apply any good stick salve on a piece of linen, and remove all pressure, if possible. Allow the plaster to remain a day or two, and again soak the foot well. The plaster may now be removed, and the cuticle will be found to be soft and white. Now with a pin (the point of a needle might break) gently raise a layer of the skin, beginning at the outside edge of the corn, and thus remove layer after layer until no hardened cuticle remains. If the corn is still tender, it may not be possible to "cure" it at once, and it should not be made to bleed. After it has once been so reduced that the cuticle over the part is of no greater consistency than on other parts of the foot, keep it so. After every bath, look to the place, and if the cuticle is found to be thickening, remove a layer, and do not neglect it until it is forced to cry out with pain. A saturated solution of salicylic acid in flexible collodion is recommended to reduce inflammation, painting the corn twice a day, after which the cuticle may be peeled off; but it will stay cured only with regular and frequent attention, so long as the cause remains. Soft corns will yield to the same treatment. Cutting the corn with any sharp instrument is a pernicious practice, and should never be indulged in; for, while it may give temporary relief, it perpetuates the evil. - Sanitary Volunteer.



DAINTY DESSERTS FOR HOLIDAY DINNERS.

RICE SNOW WITH JELLY. — Steam or bake a teacupful of best rice in milk until the grains are tender. Pile it up on a dish, roughly. When cool, lay over it squares of jelly. Beat the whites of two eggs and one-third of a cup of sugar to a stiff froth, and pile like snow over the rice. Serve with cream sauce.

LAYER PUDDING .- Heat to boiling, a pint of raspberry juice, sweetened to taste, and stir into it two tablespoonfuls of cornstarch rubbed smooth in a little cold water. Cook until thickened, then turn into the bottom of cups, previously wet with cold water, to the depth of an inch. Heat to boiling, a pint of milk flavored with cocoanut, to which a tablespoonful of sugar has been added, and thicken with two tablespoonfuls of cornstarch rubbed smooth in a little milk. When cooked, cool slightly, and turn into each of the same molds containing the pink portion, which should be sufficiently cool so that the two will not mix. Prepare a third layer by cooking two tablespoonfuls of cornstarch and one of sugar, in a pint of boiling milk, and stirring in, just as it is taken from the stove, thè wellbeaten yolks of two eggs. Flavor this portion with a little grated lemon rind. Serve cold with whipped cream.

Orange Baskets.— Cut as many oranges as you desire baskets, into such shape that the peel, when the inside is removed, will form a basket with a handle. To do this, cut around the orange through the center,

with the exception of about half an inch on opposite sides, for the handle. Shape the handle from this, and pare away the rind which is not needed. Carefully remove the pulp and juice, and put the baskets in a pan of broken ice, to keep fresh. Fill the baskets with blanched almonds and raisins, or squares of different colored fruit jelly, and sections of oranges.

Snow Pudding. — Pare and quarter some nice tart apples, and cook without the addition of water. Steaming, in a china dish over boiling water, is a good way. When the apples are perfectly tender, beat with a fork until smooth, add sugar to sweeten, and beat again. To one and a half cups of the apple thus prepared, add by degrees the well-beaten whites of three eggs, and beat all together thoroughly until very light and firm. Serve with a custard prepared with a pint of hot milk, a tablespoonful of sugar, and the yolks of the three eggs.

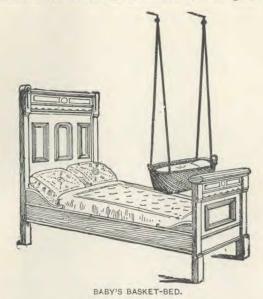
ORANGE FLOAT. — Heat to boiling, one quart of water, the juice of two lemons, and one and one-half cupfuls of sugar. When boiling, stir into it four tablespoonfuls of cornstarch, rubbed smooth in a very little water. Cook until the whole is thickened and clear. When cool, stir into the mixture five nice oranges sliced, taking care to remove all seeds and white portions, or the oranges will have a bitter flavor. Meringue, with the beaten whites of two eggs and a tablespoonful of sugar, and serve cold.

SEVENTY-FIVE parts of India rubber, dissolved in sixty parts chloroform, with fifteen parts gum mastic added, makes a purely transparent paste, which can be used in the most delicate kinds of decorative work.

ONE and one-half ounces common soda, two and one-half ounces Vandyke brown, and one quarter ounce bichromate of potassium, dissolved in one quart water, makes a fine walnut stain for deal. Boil ingredients together, for ten minutes.

BABY'S BASKET-BED.

WE are indebted to a writer in *Babyhood*, for the unique idea of a baby's bed, which is at once simple, inexpensive, and convenient. Many a mother who is limited as to room and means, will give this



cunning little innovation upon old-time customs a glad and eager welcome. Infants are much better off, sleeping in their own little beds at night, and the tired mother surely gets double rest without the little one, so long as she is assured of its entire safety and comfort. A couple of strong hooks, a few feet of rope, and an ordinary willow basket of suitable size and shape, together with a few minutes' time, will make a delightful little hammock of a bed for baby, who can thus be kept all night long within reach of mamma's loving hand.

This snug little berth may be furnished as daintily as one wishes, with warm, light covers, and the bottom provided with soft bedding. We would suggest that these covers be tied back with ribbons to the basket on either side, that baby may not be able to throw them off, and thus leave his naughty little self uncovered in the night while mamma is fast asleep. A gentle, oscillating movement may easily be imparted to the aerial nest from time to time, as needed, and almost any wearied mother will grow to appreciate it that her own tired arms and aching back need no longer, night after night, furnish the motive power necessary to soothe her baby's slumbers. This restful little contrivance may be further utilized throughout the day, by transferring both cords and basket to some stout hooks in the ceiling, in the immediate vicinity of mamma's work table or easy chair. E. L. S.

IRON or steel will not corrode, even under water, if primed first with oxide of magnesia, with a good coating of paint over it.

A GOOD way to straighten the fringe of towels before ironing, is to comb them while damp with an inch length of coarsest toilet comb.

THE following makes a fine polish for hard woods: Shellac, three pounds; wood naphtha, three pints. Another recipe is, two pounds shellac, one ounce each of powdered gum mastic and gum sandarac, one-half pint copal varnish, mixed well, and shaken until dissolved, in one gallon spirits of nitre.

THE hardness, smoothness, and glossiness of surface necessary for decorating purposes, can be obtained in the following manner: To gum shellac dissolved in alcohol, add drop ivory until it is sufficiently thick to use with a brush. After putting on several coats and rubbing down with rotten stone, wipe off with a woolen rag, and coat with some thin, transparent varnish.

Teaspoons, discolored by contact with cooked eggs, may be brightened by a vigorous rubbing with common salt.

To renovate plush goods, sponge carefully with chloroform. This is also excellent for restoring the color to goods that is faded.

In an old English cook-book is the following recipe for restoring oil-cloth: Melt one-half ounce beeswax in a saucer of turpentine. Rub the surface of the oilcloth all over with it, afterward rubbing it dry with a soft cloth.

The Popular Science News gives an excellent method of protecting plants from frost. A successful amateur plant-grower fills a gallon jug with hot water, sets it upon a table, and places her plants around it; first coating the jug with several layers of paper to keep in, and also modify, the heat. Over the whole she throws something light and large,— a sheet, for instance,— and the plants are safely protected.

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.]

THE NUTRITIVE VALUE OF FOODS.—A subscriber wishes to know the nutritive value of the foods most commonly used.

Ans.—We have not space to answer this question in this number, but will do so in a later number, in a series of articles entitled, "Short Talks about the Body, and How to Care for It."

Nuts as a Food.—The question is asked, "Are nuts hard to be digested?"

Ans.—If thoroughly masticated, nuts are easily digested. But if they are just crushed and swallowed in hard lumps, they are hard to digest. The oily matter of nuts is in the form of cream, and if reduced to the consistency of cream, they are no harder of digestion. They should be taken at regular meal-times, and never just before going to bed. They are best eaten with crackers, to insure thorough mastication.

Constipation. — A subscriber, Mass., asks if there is any cure for constipation.

Ans. — This condition is nearly always curable, provided the cause can be removed. It is necessary, first of all, to discover what are the particular causes in any given case. There are many forms of inactivity of the bowels. We cannot consider the whole subject here, but will refer the questioner to the "Home Hand-Book of Domestic Hygiene and Rational Medicine," where the subject is fully discussed; or, if desired, we will send a home prescription upon receipt of a full description of the case.

TANNIN FOR CONSUMPTION. — H. C. P., Mass., wishes our opinion in reference to the use of tannin for consumption, the amount to be taken, etc.

Ans. — This is a newly suggested remedy, and we are not at all certain that it will prove to be of value. Personally, we have but very little confidence in it. If any one wishes to make a trial of the remedy, however, they can easily do so by obtaining capsules of tannic acid from any druggist. Two or three grains may be taken as a dose three times a day. It can best be taken two or three hours after eating.

IN-SOLES. — A patient wants to know if there is any objection to wearing cork in-soles in shoes.

Ans. — None at all. An in-sole promotes warmth and dryness, and this has given rise to the manufact-

ure of articles denominated "magnetic in-soles," and other "magnetic" goods, which have acquired a great reputation. A man puts on a pair of these in-soles, and he finds his feet warmer, and he attributes the change wholly to magnetism in the article. A number of these articles have been thoroughly tested by us, without finding magnetism enough in them to move a needle. The apparently beneficial effect comes from the non-conducting property of the in-soles, which makes the feet warmer.

FLESH-PROMOTING DIET. — C. N. G., Conn., wishes to know what diet will give him added flesh?

Ans.—The best diet for increasing flesh, which means, in other words, encouraging the development of adipose tissue, is a diet consisting of milk, grains, and fruit. The free use of water, and plenty of sleep, are also helpful in this direction.

METHOD OF VENTILATION.—With the cold weather, accompanied by the closing of doors and windows, comes the usual inquiry, "What is the best way to ventilate an ordinary dwelling-house heated by steam or stoves, where ventilating fans are not used?"

Ans.—It is only necessary to use ventilating fans in cases where a large number of persons are congregated in a single room. To secure good ventilation, all that is necessary is to have an opening for the fresh air to enter, and another for the foul air to escape. Have the fresh-air supply connected with the heating apparatus, and let the foul-air shaft be in some inner wall, and extend to the roof.

CHANGING UNDER-CLOTHING.—M. B. S. writes, "How often does cleanliness require a change of the woolen garments worn next to the body?"

Ans.—Every day. Some people have a notion that under-garments should not be changed very often, because they absorb vitality, and that every time a fresh garment is put on it has to be charged from the body, and so the person who changes his clothing frequently sacrifices his vitality. There is nothing in this theory. Vitality does not get away from us so easily. By a change every day, is meant laying off at night all the garments which have been worn during the day, that they may be thoroughly aired. Clean clothes are warmer than soiled ones, as well as healthier.

LITERARY NOTICES.

Babyland, the magazine that brings happy hours for baby and restful hours for mamma. For 1890 there will be twelve charming stories, by Margaret Johnson, with delightful pictures, "Polly Pry and Toddlekins." Twelve stories of a baby and his "happenings," "Wonder Days of Baby Bun," by Emilie Poulsson. Stories, poems, jingles, pictures. Large type, heavy paper. Fifty cents a year. D. Lothrop Company, Boston.

READY FOR BUSINESS, OR, CHOOSING AN OCCUPATION. —A series of Practical Papers for Young Men and Boys, by Geo. J. Manson, 108 pp, 12mo, extra cloth binding, price 75 cents. Fowler & Wells, New York. In this work the author gives an outline of all the principal professions, businesses, and trades, placing before a young man in choosing his life-work, just what he has to contend with in each, and also what to do to succeed.

The Pansy for 1890 will have a new serial by Mistress Pansy, entitled, "Miss Dee Danmore Bryant." Pansy's Golden Text Stories will have for their title, "Helen the Historian." Margaret Sidney will have a serial story, "Aunt Philena;" a story for boys and girls. Mrs. C. M. Livingston will continue the popular Baby's Corner. Felix Oswald, M. D., will give a series of papers. "When I was a Boy," by a new friend of the Pansy, and "When I was a Girl," by Pansy herself, are rich in personal reminiscences, and brim full of real happenings. The Queer Stories, and Bible Band Reading and other departments will be continued. \$1.00 a year. D. Lothrop Company, Boston.

THE Woman's World for November, has for its frontispiece the portrait of Ginevra dei Benci, a famous Florentine beauty of the fourteenth century. This picture properly belongs among the illustrations of the opening article, "Woman's Dress in Florence," which treats of the dress of Italian women in the earlier ages. There is an illustrated article, "Sketches from an Out-of-the-Way Corner," or rather glimpses of an out-of-the-way country - the kingdom of Siam - by Beatrice M. Green. An article of exceeding interest is "Our Queens in the Abbey," being incidents from the lives of the fourteen queens of England, who have been entombed in Westminster Abbey, with many fine illustrations of their tombs. There is much other matter which we have not space to mention. Cassell & Co., New York.

The National Magazine for December will contain an interesting article by Prof. Schele de Vere, of the University of Virginia, entitled, "A Chat about Numerals," giving many curious historical facts. Quite a noteworthy contribution to the poetic literature of America will be "The Nativity; a Christmas Carol," by F. W. Harkins, Chancellor of the National University of Chicago, whose Shakespearean essays are continued in this number. "The University Extension System of England" will prove a timely article; being supplemented by a description of a benevolent society for similar work lately organized in Chicago, called "The University Extension and Home Culture Society." \$1.00 per year. Published by the National University of Chicago.

THE Christmas number of Demorest's Family Magazine contains over two hundred illustrations, and every member of the family is thought of. Especially noticeable is one about "Uncle Sam's Money," giving a description of how our coin is made, the illustrations starting with a view of the Mint, and going through every process until the coin is put into circulation. Everybody will be interested in this. The "Day Nurseries" takes us among the worthy poor, and shows us what can be done for their little ones. Every father and mother will appreciate this comprehensive and finely illustrated article. The frontispiece is a beautiful oil picture, "Christmas Morning," which is indeed worthy a frame. There are other stories and illustrated articles in great variety. \$2.00 per year. Published by W. Jennings Demorest, 15 East 14th St., New York.

Many departments of life particularly interesting to women, are covered in the November number of The Ladies' Home Journal. Mrs. A. D. T. Whitney's new story opens most promisingly in this issue. "Josiah Allen's Wife" has an illustrated story; Margaret E. Sangster contributes a Thanksgiving poem; Mrs. John Sherwood, the authority on such matters, has an article on social ethics; Edward W. Bok tells us about literary affairs; the different styles of clothing for the season are carefully given, while the household, the garden, the kitchen, the nursery, the boudoir, each has its own department, conducted by skillful and well-known writers. In brief, woman's domain has especial attention, and for women, therefore, it is a most interesting magazine. \$1.00 per year. Published at 435 Arch St., Philadelphia.

PUBLISHERS' PAGE.

THE publishers of Good Health are determined to make the journal for 1890 superior to any preceding volume. Several writers have been secured to contribute to its columns, and various attractive features have been arranged, which which will make their appearance in the January number.

**

WE are pleased to note that the Rural Health Retreat, of St.
Helena, Cal., and the health institution established by Dr.
Burke, at Napa City, Cal., have been consolidated, and trust
that the union of effort secured by this concentration of energies will result in a still further increase of the prosperity of
this institution, which was the pioneer of rational health
institutions on the Pacific Coast.

The number of subscribers to Good Health in Great Britain has steadily increased within the past two years, until it has become necessary to make an extra set of electrotypes each month to be forwarded to England for use in publishing the edition for that country. A similar arrangement will soon be necessary for Australia, in which country the journal is constantly growing in favor, as well as in New Zealand, and in fact wherever the English language is spoken.

**
THE recent annual meeting of the American Health and Temperance Association was one of the most interesting and successful conventions of this body which has ever been held. Many important steps were taken for the furtherance of the work of the organization, among which were the election of a vice-president for each of the foreign countries in which the work of the Society is being carried forward, and the appointment of a Field Secretary, who will devote his entire time to traveling from State to State in the interests of the Association.

** AGENTS WANTED

To canvass for Good Health, "Sunbeams of Health and Temperance," and other health works, in all parts of the United States, Canada, and all English-speaking countries of the globe. Address for terms, and further information, Good Health Publishing Co., Battle Creek, Mich.

* * MRS. KELLOGG'S SYSTEM OF SCIENTIFIC COOKERY. - As the result of many years' experience in the management of a School of Cookery and an "Experimental Kitchen," Mrs. Dr. J. H. Kellogg has developed a system of cookery, the leading features of which are so entirely novel and so much in advance of the methods heretofore in use, that it may be justly styled, A New System of Cookery. It is a singular and lamentable fact, the evil consequences of which are wide-spread, that the preparation of food, although involving both chemical and physical processes, has been less advanced by the results of modern researches and discoveries in chemistry and physics, than any other department of human industry. Iron-mining, glass-making, even the homely art of brick-making, and many of the operations of the farm and the dairy have been advantageously modified by the results of the fruitful labors of modern scientific investigators. But the art of cookery is at least a century behind in the march of scientific progress. The mistress of the kitchen is still groping her way amid the uncertainties of mediæval methods, and daily bemoaning the sad results of the "rule of thumb." The chemistry of cookery is as little known to the average housewife as were the results of modern chemistry to the old alchemists; and the attempt to make wholesome, palatable, and nourishing food by the methods commonly employed, is rarely more successful than that of the misguided alchemists in transmuting lead and copper into silver and gold.

The new cookery brings order from out the confusion of mixtures and messes, often incongruous and incompatible, which surround the average cook, by the elucidation of the principles which govern the operations of the kitchen, with the same certainty with which the law of gravity rules the planets.

Those who have made themselves familiar with Mrs. Kellogg's system of cookery, invariably express themselves as trebly astonished; first, at the simplicity of the methods employed; secondly, at the marvelous results both as regards palatableness, wholesomeness, and appearance; thirdly, that it never had occurred to them "to do this way before."

This system does not consist simply of a rehash of what is found in every cook-book, but of new methods, which are the result of the application of the scientific principles of chemistry and physics to the preparation of food in such a manner as to make it the most nourishing, the most digestible, and the most inviting to the eye and to the palate.

Of the scores who have studied this system in the Sanitarium Cooking School, under Mrs. Kellogg's instructions, all are most enthusiastic in its praise, and their success in the employment of the methods taught, has created a demand for instruction, to be given in such a manner as to allow ladies who cannot leave their homes, to avail themselves of the advantages of this new system. A course of instruction, consisting of six lessons, will be given in this city, beginning at the date named below. The six lessons will comprise the following subjects:—

- 1. Soups.
- 2. Grains.
- 3. Unfermented Bread.
- 4. The Possibilities of Yeast.
- 5. Vegetables.
- 6. Desserts.

Several of the graduates of the School of Domestic Economy have met with great success in the organization of popular cooking schools for giving instruction in this system of cookery. A special course of cookery will be carried on in connection with the Training School for Health and Temperance Missionaries, which will open the first week in December, at the Sanitarium. Persons who would like to acquire a special training for this work, should address at once, Mrs. L. M. Hall, Matron, Sanitarium, Battle Creek, Mich.

* *

We beg to remind those of our patrons whose subscriptions expire with the present number, that now is the time to renew for another year. The subscription price of the journal, \$1.25, is a trifle when compared with the great utility of a magazine of this kind in any household. Not a single number has appeared in the last year which did not contain invaluable information, worth many times the annual subscription price.

Send in your subscriptions, friends, at once, so they may begin with the first number of the year, and thus make no break in the volume.

GOOD HEALTH

Edited by J. H. KELLOGG, M. D.



VOLUME XXIV.



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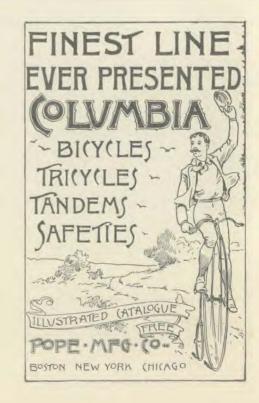
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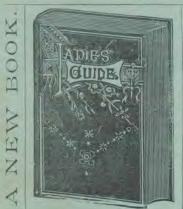
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