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GOOD



DEEDS

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BY

J. H. KELLOGG M. D.

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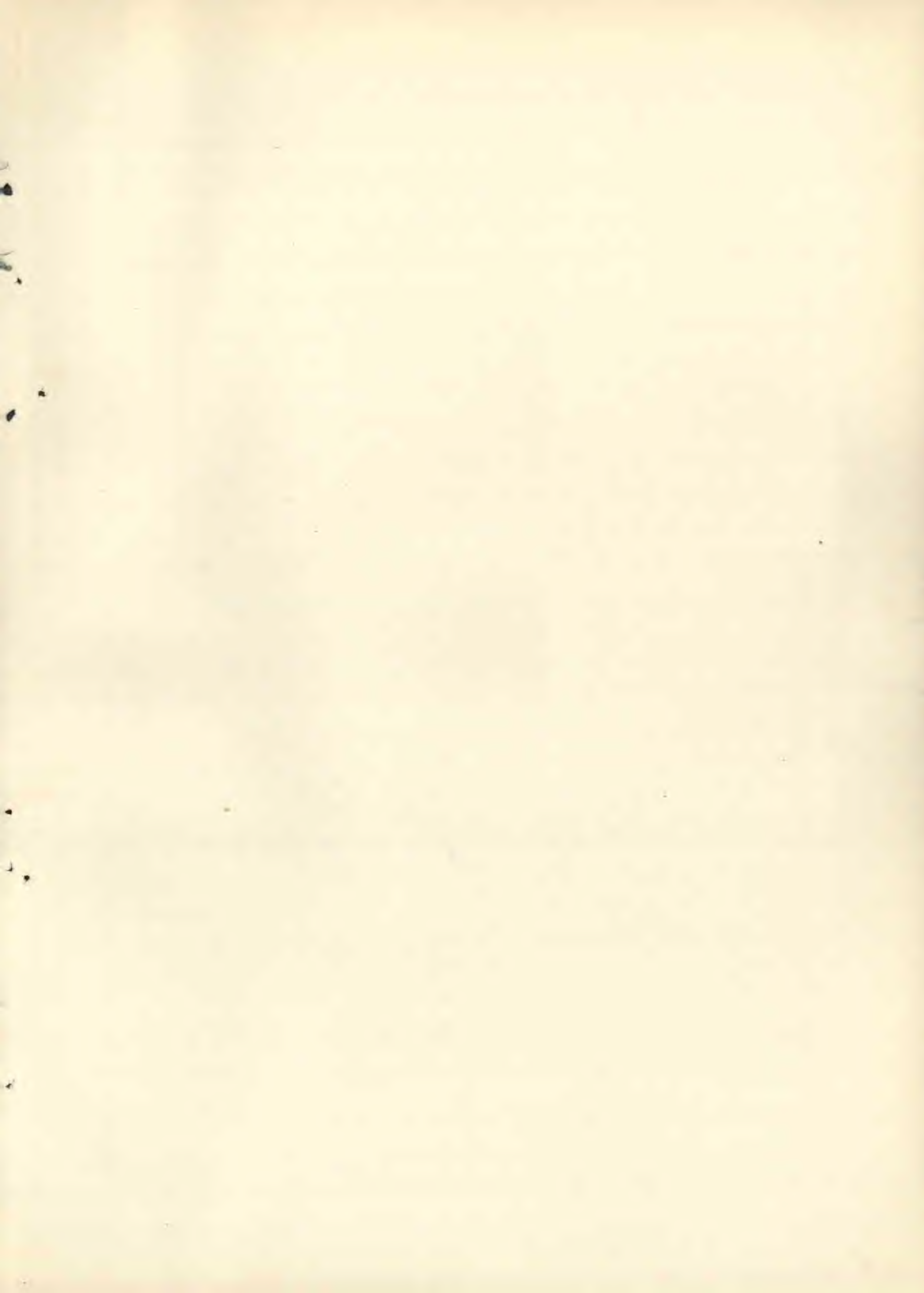
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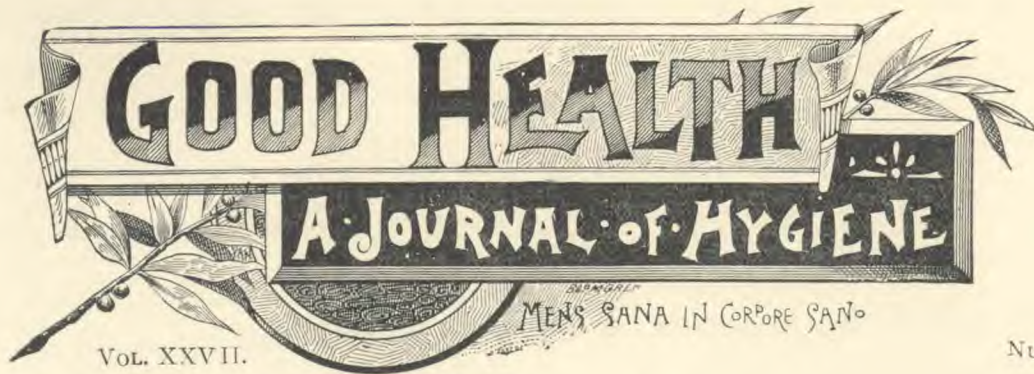
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### INTERNATIONAL HEALTH STUDIES.

BY FELIX L. OSWALD, M. D.

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

#### 34.—Guiana.

A FEW years ago I made the acquaintance of an American physician who had tried his luck both in Tampa and Vera Cruz, and was once asked to explain the large mortality of Caucasian settlements on the lower Gulf coast.

In reply, he asked his visitors to take a look at a troop of imported ponies on the pasture adjoining his Florida country home. "Those chaps came from Kentucky," said he, "and at first I used to send them to the uplands every summer, and lost six out of twenty in two years. Now I make them rough it out here, the year round, and have not lost one the last eighteen months. They know that they have got to stay, and have somehow managed to adapt themselves to the country. Now, my impression is that most of our ever-ailing two-legged colonists could be brought round in the same way. They would soon fit themselves to their surroundings if they had come to stay; but the trouble is that most of them are mere sojourners, intending to leave as soon as they have filled their pockets. Circumstances may postpone that time; but they are secretly aching to pack up and be gone, and in the meanwhile generally contrive to contract all sorts of other aches. A good plurality of them would soon be all right if they could somehow be compelled to give up the hope of leaving the country."

An experiment of that sort has actually been tried on a large scale in the penal settlements of French Guiana. Life sentences to the convict plantations proper are imposed only in exceptional cases, but all prisoners sent for more than ten years are obliged to reside for the remainder of their lives in the colony, where government lands, household outfit and all,

are assigned them on very liberal terms. They can choose between inland or seaboard homes; roads are kept in repair at government expense; settlers can engage in agriculture or commercial pursuits, may even be intrusted with municipal offices, but must not leave the country.

The French government disclaims the intention to "plant" those involuntary planters, and has published several pamphlets on the scenic beauty and the unequalled productiveness of the "tropical Siberia;" but there is no doubt that by the current standards of climatic hygiene, the Cayenne coast plain ought to be considered about the unhealthiest region of the American continent, if not of the world. The latitude is that of Dahomey, "the grave of Europeans," in a double sense of the word, only a few degrees north of the equator, and as level as a lake for fifty miles west of the ocean. The soil is a blue clay, impregnated with marine shells and mixed with decaying vegetable matter; and in the intervals of the rainy season (which here lasts from November till May), this *melange* begins to ferment, and malaria, in the form of a far-spread yellowish haze hangs over marshes and savannahs every morning till it dissolves under the rays of the brooding sun, and toward noon becomes less visible, though hardly less chemically effective. The dry heat, from July to the middle of September, is very severe. The average does not exceed 95° in the shade, but that temperature continues from 10 A. M. to 3 P. M., day after day, often for weeks together.

Nevertheless, the health of the colonists, especially of the permanent settlers, is better than that of the country population in many of the manufacturing

districts of France; far better, too, than that of the starving peasants in the uplands of the Cevennes. About fifteen per cent (Captain Vernier says twenty per cent) of new arrivals in convict garb die in the course of the first two years. It is the suddenness of the contrast that kills them,—heat, uncongenial food, uncongenial society, shame and rage, aggravated by homesickness. Of those who survive the critical period, about four-fifths become stout and thoroughly acclimatized. Morally, they cannot be said to improve. They are bitter, nihilistic and annihilistic, vindictive in their resentments, prizing a concealed weapon above a ticket-of-leave passport, and as reckless as Malay pirates



MAROON NEGRO.

in their vendettas. They gamble and cheat and vent their hatred of law and order by a cynical disregard of sexual ethics, but they are generally sane enough to leave strong drink alone,—a virtue which, even here, is not always facilitated by necessity,—and with rare exceptions, soon come to take a pride in their labor-bought increase of physical vigor.

Convicts are employed as much as possible in outdoor labors. The penal colony comprises several plantations; there is hoeing and harvesting to do; fences have to be repaired; wood decays in the moist climate, and new farming implements arrive with every government ship. There is no end of ditching. Invalids are indulged with an indoor, or at least under-roof, job, such as trimming fence pickets in

the shade of an airy shed. Altogether, that sort of training is a pretty good preparation for what an English traveler calls the "root hog or die ordeal" of independent squatter life. Within a week after the expiration of his term, the exile is made a homestead holder, is assigned to a productive tract of ground, and provided with food and husbandry implements enough to tide him over a limited number of months. He is apt to overeat in the first ardor of regained liberty; his social instincts may prompt him to interchange stolen visits with a traveling companion, and renew the pledge of friendship in a bumper of slightly fermented palm juice; but before the end of a month inevitable circumstances will make him too busy to be sick,—too busy, and, as a rule, too happy. The pleasure of founding one's own independence grows apace on a basis of bodily vigor and abundant elbow-room. Climatic conditions, outside of deserts, do not count for much against such factors of health.

"A sort of instinct soon reveals the available methods for counteracting the noontide heat," says Dr. Jules Margot, who stood the fiery test of the east Cayenne summers for eight years. "One learns the uses of cool water, one contrives means to supplement a natural deficiency of shade. A lair under an awning on top of a breezy hillock is worth a shipload of medicine. A fellow who has enjoyed a few hours' rest in a warm chimney-corner is far more able to weather the hardships of a march through arctic storms than he who has passed those hours in a frosty prison cell; and a good night's rest in an airy cabin, or better yet, an upland bivouac, is the best preparation for a day's work under the seething rays of the tropical sun."

Water will not keep cool in Guiana cisterns, and springs are rare in the coast plain, but the settlers have a trick of lowering a pail into a "cooling-pit," a deep and narrow shaft dug for that special purpose. Mosquitoes, too, become manageable entities, if their habits are once well understood. Next to heat and moist alluvium, their life-element is stagnant air, and the natives can find refuge from their torment either on the seashore or on a hill of moderate elevation overlooking a few acres of cleared ground.

Travelers learn to overcome their dread of draught, and choose a breezy bivouac whenever they can find it. Some eighty years ago, the British naturalist, Waterton, left his Yorkshire home and transferred his camping outfit to the banks of the Demerara River, in the English (northeastern) part of Guiana. That colony comprises some 65,000 square miles, four fifths of it pathless in the European sense of the

word; but in the course of the next ten years, Waterton explored the rivers from source to sea, together with all their principal tributaries. He could have published a tolerably correct map of the country, but his main object was the collection of zoölogical *curiosa*,—butterflies, beetles, stuffed beasts, birds, and reptiles—altogether some forty large boxes full of tropical miscellanies. To complete his museum, he had to ascend rivers where his boatmen had to ply axes and grappling hooks before they could push their canoe through the driftwood tangle. Now and then he passed whole days in the tree-tops to get a chance at butterflies frequenting only the topmost branches of flowering lianas. His native guides speared an alligator one day, and to prevent its escape, Waterton waded up to his armpits into a boggy lagoon, whacking away at his captive and disentangling the harpoon-rope, for nearly half an hour, before he could land his prize. A certain species of aquatic rodent proved too cunning for his traps; and to get specimens of their young, the enterprising naturalist dug down to the bottom of their burrows, some thirty feet below the surface of a root-bound river bank, where hillocks of moist dirt accumulated left and right of his bivouac, mingling their effluvia with that of the festering marshes. But Waterton's health stood all these tests. Even during the critical first two years he did not know a day's sickness. He generally confined his excursions to the dryer half of the year, passing the rainy season with literary labors and the arrangement of his collection, but for the rest, observed no hygienic prevention but temperance, having noticed that after June the native Indians considered one part of the country about as healthful as another. Their active manner of life enabled them to digest fish and venison without salt, and they were far more afraid of fire ants (whose sting is said to have often made strong men cry) than of fevers. Years after, when Waterton had succeeded to the possession of a fine English country seat, he often longed for the freedom of the Guiana wilderness, where he felt instinct-

ively sure he could have gotten rid of the melancholy which now and then would overcome him amidst the comforts of his Northern home.

Waterton's health had been hardship-proof since boyhood, but about fifty years later a nervous, dys-



NATIVES OF FRENCH GUIANA.

peptic Frenchman, the journalist Rochefort, was sentenced to expiate his political sins in the swamps of Cayenne. His friends doubted if he would survive the voyage; but he reached Guiana alive, worked off his dyspepsia in the repair-shops of the commissary depot, smuggled out supplies in moonlight nights, and at last escaped to the woods, where he had to

hide for weeks in hollow logs and canebrakes before he could complete his *hegira* in an open boat. The report of an attempted suicide could not have dismayed his sympathizers more, but Henri Rochefort reached Europe in the enjoyment of unprecedented health, and at this moment continues to hold the fort of life in the city of London, defying disease and decrepitude—"I do n't know how," he writes from his den in the city of perpetual fogs, "but I do believe it is due to the reserve fund of physical vigor accumulated during that era of bushwacker life in Cayenne."

His countryman Margot fully shares that opinion. "The climate is said to kill the weak and make the strong stronger," he writes from Port Salut, "but my impression is that it would benefit all but those who are resigned, or rather impatiently desirous of dying, and whose wish for that kind of rest is at last granted by accommodating Nature."

"The colonists," he adds, "are more vigorous than the Old World farmers by just so much as the climate enables them to put in more days of outdoor labor, which here, moreover, is stimulated by the compulsion of circumstances. How their descendants will fare I am unable to prognosticate; but I fear that they will rely on the productiveness of the soil, which will support the owners of a good fruit plantation with a minimum of toil, but is not able to yield a spontaneous crop of health. It is also likely enough that they will find means to evade the law against the importation of fire-water, and, as usual, blame the climate for the consequences."

Those consequences have been illustrated in certain colonies of Brazil, where North European immigrants abused their new liberty for the license of poisoning themselves with cheap brandy. On several arctic exploring trips it was proved that total abstainers can best sustain the hardship of a long tramp over storm-swept ice fields, and actual tests have established the

fact that alcohol lowers the temperature of the system. The rationale of its deleterious effects in warm climates might therefore seem rather obscure, if it were not for the circumstance that all toxic stimulants impair the disease-resisting power of the human organism. In the literal, thermal sense, fire-water cannot be said to add flames to the heat of a torrid climate, but it certainly weakens the system, and then aids the development of the myriads of disease germs, which, in the tropics, are ever ready to fasten upon the weak spots of animal and vegetable organisms.

One explanation of the comparative longevity of the Guiana colonist might be found in the subvention system of the French government, which will not suffer ex-convicts to perish from actual want. Industry is encouraged in every possible way, but if sickness or accident should disable a homestead holder, he can rely on a modicum of assistance, and pensioners are proverbially long lived.

Theories founded on that fact should, however, take cognizance of a phenomenon observed a few miles further northwest, in the Dutch portion of Guiana, where hundreds of runaway negro slaves have taken refuge in the forests of the Surinam River, and established a sort of rude republic of their own. The "Maroons," or refugees, as the Hollanders call them, are poor, and of course barbarously ignorant; but they are plucky enough to defend their leafy strongholds against all comers, and seem to have been equally successful in keeping disease at bay. Their ancestors were natives of the tropics; but we should remember that in New Orleans and Galveston their kinsmen succumbed by thousands to climatic fevers, and there seems little doubt that in the haunts of the Maroons, as in the forest plantations of the Cayenne colonists, the contagion of such diseases has been effectually counteracted by outdoor labor, wholesome food, and the stimulus of sunlight and liberty.

(To be continued.)

ACCORDING to the ancient Hindu Scriptures, the proper amount of food is half of what can be conveniently eaten.

IF families could be induced to substitute the apple—sound, ripe, and luscious—for the pies, cakes, candies, and other sweetmeats with which children are too often stuffed, there would be a diminution of doctor's bills, sufficient in a single year to lay up a stock of this delicious fruit for a season's use.—*Prof. Faraday.*

SAYS the *N. Y. Tribune*: "The objection to open display of bloody carcasses in front of butcher shops, because of its inducing cruel and slaughterous tendencies in children, is well founded. Children become what their surroundings and training make them, even to a swerving of their individual, natural tendencies, and the men and women of the coming generation will be what the children of to-day are guided to. Even strong men are influenced by example; children are brought up by it, so ardent is their desire to imitate."



## FROM THE DIARY OF A NURSLING.

A DR. GUSTER gives a German newspaper the brief but pathetic journal of a baby, who, after thirteen days in this world, departed, leaving these reflections for our instruction:—

*“First Day.*—Wonderful! heavenly! At last I am in this beautiful world! Who would have thought it, that one could breathe, freely breathe, and cry out what he thinks. I rejoice particularly in the sunlight and blue sky, in the fresh, pure air with its coolness. If I could only see and feel all this splendor!

*“Second Day.*—Oh this horrible heat! I have been deceived. This air, this water, this light; how entirely different have I imagined it would be! But patience, all will come right by and by. The old woman who cares for me does not seem to understand me.

*“Fifth Day.*—Still no solution! If it goes on this way, I cannot hold out long. The whole livelong day must I lie buried in feather cushions so that I can scarcely gasp down a bit of air. Two linen binders and one of flannel, a little shirt, a flannel slip, a long cushion filled with feathers, in which I am wrapped from head to foot; over this a coverlet filled with feathers, the curtains of my crib drawn to, the room darkened with double curtains, the windows closed,—so must I, poor worm, lie from morning till evening. My burning skin is worse off than the hot stove near me, which can at least, as I feel, give off its heat. Oh that I did know what I shall do! If I

An aged minister, well known for his laconic speech, once asked a blessing at a public dinner, as follows: “Adam sinned by eating, and Noah by drinking. Save us, Lord, from the sin of the one and the folly of the other. Amen.”

HEALTH IN THE HOME.—I want strongly to enforce that it is the women upon whom full sanitary light requires to fall. Health in the home is health everywhere; elsewhere it has no abiding place. I have been brought, indeed, by experience, to the conclusion that the whole future progress of the sanitary movement rests for permanent and exclusive support on the women of the country. When I enter a house where there is a contagious disease, I am, of course, primarily impressed by the type of the disease, and the age, strength, and condition of the sick person. From the observations made on these points, I form a judgment of the possible course and termination of

cry, it brings the old woman with her milk, which increases my misery; if my hands are cold while my brain and skin are burning, she brings a few more wraps. I turn my half closed eyes from side to side seeking help, and my tormentor says, “The baby shivers,” and really heats the horrible things at the stove. Will no one come to my relief?

*“Tenth Day.*—Again a fearful night! I cry, but am not understood. I must drink, drink, and again drink, until the stomach overflows. A half hour later they give me something with a horrible taste, from a teaspoon. Air, air, pure, cool air, light, water! Shall I, then, have no help from this world?

*“Twelfth Day.*—Yesterday there was a great council of my aunts and cousins. Each one advised a different remedy for my sickness, but all agreed that its cause is a cold. Warmth was urgently recommended, and I received a new kind of infant food just discovered, and some strengthening wine which heated my brain yet a little more, so that I was deathly still. My body is wrapped so tightly with the roller that my stomach overflows every time a teaspoonful of anything is given. My feet are forcibly extended and enveloped, so I cannot bring them up to relieve the pain; but my feeling is gradually going. I am glad it is so, and hope that all will soon be over.

*“Thirteenth Day.*—Farewell, thou beautiful world! Thy light and thine air have been denied me, but thither, where I go, there are no fetters.”

the disease, and, at one time, I should have thought such observations sufficient. A glance at the appointments and arrangements and management of the house is now necessary to make perfect the judgment. By this glance is detected what aid the physician may expect in keeping the sick in a condition most favorable for escape from death; and by this is also detected what are the chances that the affection will be confined to one sufferer, or distributed to many. As a rule, to which there are the rarest exceptions, the character of the judgment hereupon is dependent on the character of the woman who rules over that domain. The women are conversant with every nook of the dwelling, from basement to roof; and on their knowledge, wisdom, and skill, the physician rests his hopes. How important, then, that they should learn, as a part of their earliest duties, the choicest sanitary code!—*B. W. Richardson, M. D.*

## SLEEPLESSNESS AND ITS CURE.

WE live in an age of nervousness. Weakness of nerves is the proof of an over-refined civilization, which overexcites the active life and weakens the negative. Whole nations have already been ruined on this account; Rousseau prophesied the ruin of all civilized Europe. This destruction will certainly be for some time deferred, but it is a melancholy fact that the number of those who suffer from nervousness and sleeplessness is greatly increasing. The animal life cannot continue an unbroken activity, either in work or enjoyment; from time to time the nerves are exhausted; life returns periodically into the condition of unconsciousness; man, in the natural order of things, needs sleep as well as food. Sleeplessness emaciates man, weakens him; and a continual loss of sleep leads, under great suffering, to death.

The celebrated physician and chemist, Max von Pettenkoffer, has ascertained, from careful experiments, that even by slight exertions proportionally more carbonic acid is secreted than the quantity of oxygen amounts to which is taken up in that time and used for the production of the outgoing carbonic acid. The now absolutely necessary balance is found in sleep, during which not only half as much oxygen is consumed, but twice as much is taken up. The need of sleep is thus the warning of nature that the time has come when the disproportion between the expenditure, supply, and stock on hand of oxygen has reached its extreme limit, and that it is necessary, through frugal use and heavy supply, to replenish the stock. This adjustment is most energetic during the first two or three hours, from which it follows that sleep is then soundest. A healthy, normal sleep ordinarily lasts seven hours.

The causes of sleeplessness may be different, but they always affect the brain, which is the evil to be kept in mind during an attempt at recovery. As already stated, every disturbance of the brain signifies a sleepless night; and nothing is more wretched and exhaustive than when one hunts for his nightly sleep as a pressing need, and fails to find it. Then arises a feverish heat and restlessness, a wild succession of phantoms appears, and if one falls at last into a short morning slumber, even this is not refreshing, but only exhausting. Even the disturbance of habits excites sleeplessness; for example, a strange bed, strange diet, or unusual events of the day. Though this is only temporary, it particularly affects such patients as suffer from chronic sleeplessness. This has its origin in continual physical and mental over-

exertion, in great trouble or anxiety. Further, intemperance and gluttony produce sleeplessness, as well as hunger and thirst. For too many attacks the best cure is a physical and mental strengthening by means of continued measured diet.

Sleeplessness arising through grief, care, or sorrow, must be cured by a strong will and recreation. Nurture and education of the mind are as necessary and wholesome as that of the body. The will is to be exercised and strengthened, for very much may be done by will power, through diverting the mind from the sorrows and disagreeable occurrences of the day, by compelling one's self to think of indifferent matters. One must not yield to despondency or despair, but consider that trouble and anxiety will not make things better, but weaken the health, which is the first necessity toward a joyful life of usefulness. One already enfeebled by sleeplessness must necessarily change his way of living. Change of place, other associates, other scenes will be helpful and quieting; but if the patient is already completely conquered, then, for entire physical and mental health, careful nursing and good nourishment are needed, and at intervals of from two to three hours, light digestible food must be brought. Also rubbing of the body has been proved healing in the highest degree, because the bodily activity is strengthened throughout, while the mechanical pressure on the brain, nerves, and bowels, accelerates the circulation of the blood and the digestion. Hippocrates learned, two thousand years ago, that the body was hardened by vigorous, softened by gentle, and made healthy by moderate rubbing.

Both in severe and light cases of sleeplessness opiates should be avoided. Sad to say, however, most men seize these forcible means of cure, rather than the natural way through dieting in the widest sense. Many take morphine or hydrochlorate, where some simple domestic means, such as cold water on the forehead and drinks of cooling fruit juices, would procure sleep. When, however, opiates are no longer to be avoided, they should not even then be used without a physician's prescription. To become accustomed to the use of opiates is in the highest degree objectionable, because the sleep which is thus recalled, is never refreshing like that which is natural, and because the doses must be continually increased if they remain effective. Complete destruction of the nervous system is the certain and enduring result of such habits.—*Public Opinion.*

REJOICING IN HIS STRENGTH. — Your strong, healthy, vigorous man is never irritable, never "nervous;" he is generous, and he sleeps at night. He is worth something to his country and to all mankind. He exercises his muscles; the blood flows freely in his veins; he is hungry; he digests his food; his brain is nourished, and his mental faculties are active. He lives, and the world is better because he lives. I love to look at a bright happy-faced man, who takes a full breath and expands his chest; who looks at the rising sun without blinking, and whose face glows with the animation lent it by a pure soul, unvexed by an irritable body. Think what glorious soldiers a regiment of such men would make! How the arts and sciences would flourish under the general stimulus of strong America! Our beloved country would indeed become blessed. Our new America, strengthened by exercise, made happy by good health, might easily outshine the glories of the golden age of Greece, and, "like a precious stone set in silver sea, flash its beauty to the sun." — *Prof. John B. Hamilton.*

THAT "RARE BEEFSTEAK." — For years I have refused to accept as articles of food what hunters call "wild game." It always seemed to me a sin to take the life of innocent creatures. Man's lower nature needs training, or cultivation from its cannibalism. My last lesson was taken a few weeks since, during a trip to our nearest railroad freighting point. Caring little for a morning meal, it has usually been my custom, through advice of so-called professionally advanced or educated minds, to take at most a small, rare beefsteak. Quite early one morning my peacefully slumbering hours were broken in upon by the most agonizing, pitiful bellowing of cattle. Being at a railroad hotel, I comprehended immediately the cause, — cars freighted with poor, helpless, thirsty cattle, packed so densely that there was no turning around or change of tired position, save as they stood upright and scrambled over each other in a wild affrighted manner. I was struck most forcibly with the lower life's great inconsistencies with higher growth.

Stopping on my way to breakfast, I inquired of a man if the cattle bellowed because of thirst. His reply was, "No, the law is now such that they are compelled to water twice a day; they used to go until they sometimes died on the way without water. But they seem to feel or know that they are destined for the slaughter, and so plead to be free." So it seemed to me. I felt sick in sympathy, a disgust with myself and all humanity, at such unmanly, cruel

deeds. Going in to breakfast, my usual small demand was brought, as the waiter had soon learned that it was always the same, but when it came, and I looked upon a slice of beef lying in its red juice, which a short time before had been its life blood, a feeling of such utter disgust at self came over me that I said, "Oh, take it away!" and since that morning I find that food which has quivered with the joy of life, and suffered with conscious agonies of death, is not for me, and cannot further aid my growth. I find that fruit, vegetables, milk, and eggs do me far better service. — *The Esoteric.*

THE diseases of wine drinkers are apt to be more acute and to tend more rapidly to putridity than those of persons who drink nothing but water. So it is with those who use animal food compared with those who use a diet exclusively vegetable and well selected. — *Dr. William A. Alcott.*

A SALUTARY HINT. — "Doctor," said a man who was notorious for laziness in general, and slovenliness of person in particular, — "Doctor, I have tried everything I can think of for my rheumatism — all sorts of remedies, regular and irregular, change of diet, change of climate, and all, without the least avail." After surveying his untidy linen for a moment, the doctor suggested, "Suppose you try a change of shirt."

It is not overwork, except at the table, that causes so many to break down. There is a great deal more softening of the liver than softening of the brain; too much exercise of the jaws, and not enough of the muscles. People are dying everywhere of physical excesses, of useless expenditures of vitality. Probably five sixths of the constitutional vigor of every man and woman is wasted, and the last twenty or thirty years of their lives are eked out miserably in consequent pain and discomfort.

THE nervous mother of a bright little boy was alarmed lest he should take the whooping-cough which prevailed in the neighborhood. She talked so much about it and worried so much over it that she gave the child her fears to such an extent that he would scarcely leave her side. One night, after the little fellow had been put to bed and was asleep, a donkey was driven past the house, and when just opposite, set up his he-haw. With a shriek, the little boy was out of bed, screaming at the top of his voice: "The whooping-cough is coming, mamma! The whooping-cough is coming!"

## A VETERAN REFORMER.

THE following letter received from a gentleman residing in California, will serve as a sufficient introduction to the account of the personal experience in simple habits of life which follows it:—

“A few days ago, while looking through a pile of manuscripts belonging to an old friend,—a philanthropist and sanitary reformer,—I was attracted by the first lines of a short paper, of which I have taken the liberty, with the permission of my friend Mr. Robbins, of sending you a copy, thinking that possibly you might consider it worthy of a space in your valuable paper.

“There are many who advocate or approve of simplicity in diet, but who do not practice it with so much faithfulness and success as does Mr. Robbins. If the following article is of service, you are at liberty to make any use of it:”—

“Though never very robust, I have managed to outlive most of those who thought I would starve myself to death in my younger days; and now at seventy I am an absolute epicure, and often think and even say to myself that no one lives so luxuriously as I, not even the nobles and royal personages of Europe. Is it the richness of the food, or my relish and appetite for it, that makes the luxury?

“I have three courses at every meal. First, I rise at five o'clock with a good appetite. I have for breakfast a dish of skimmed milk (skimmed for me because it agrees better with me so), with a slice of bread made of entire or whole-wheat flour, as that contains all of the nutritive elements of the grain—made in the simplest way, with no shortening or sweetening except what the Creator puts into it. Then I have a little piece of baker's brown bread as large as my two fingers, slightly toasted and crumbed in milk—this by way of dessert. Finally I have about one third of a cup of weak, black tea,<sup>1</sup> with a

crust of bread or a piece of water cracker. The last mouthful is taken with as good relish as the first. Dinner consists of the same; supper, ditto. I go to bed at eight with a good appetite, and often thinking or even saying, ‘What a delicious breakfast I will have in the morning!’ I get up with a good appetite, and eat my delicious breakfast, the same as above described,—the same from day to day and from month to month, with no desire for change. The squirrel eats his nuts, the cow her grass, the horse his oats, the same, day after day. A desire for change is the result of surfeit, or artificial food dishes. I commence my meals with a good appetite, I finish with a good appetite, and so my appetite never fails, and the enjoyment of my food is never lost,—and so I am an epicure.

“I have said that I live luxuriously. It is the appetite, the relish, and the naturalness and appropriateness of the food that make the luxury. Natural appetite, gusto, is life, enjoyment, pleasure. Satiety, surfeit, is death,—at least is death to enjoyment; and so those who wholly satisfy their appetites, especially artificial appetites for artificial food, if not absolutely dead, are dead to the enjoyment of the senses and the intellect, and must take refuge for a time in that semblance of death, sleep—an anaconda for a week; a man for an hour or twain.

“Eating only so much and of such kind as nature requires and can digest and appropriate, there is no surplus to be gotten rid of or clog the system, and so I have no headache. Breathing pure air, the carbonic acid gas and particles of disintegrated tissues are taken out of the system through the lungs, and so the blood is comparatively pure. In short, I have reason to be thankful that old age (threescore years and ten) comes on so comfortably and kindly.”

THE PHYSICAL ACTION OF ODORS.—The direct action of odors on the nervous centers is a subject of careful research and study. Goethe had a strong dislike to the odor of apples; Schiller liked the odor. Some persons are made absolutely ill by the odor of onions that are being cooked, while other persons rather like it. The odor of the lily has a most potent effect in many instances, and

<sup>1</sup>In regard to the taking of a little tea at the end of my meals, I would say that I think it would better not have been begun; but like some other unwise things, it was commenced in youth, and now in old age is difficult to quit entirely. However, it is but a very little.

I believe there is no person on whom it does not produce a sense of depression and nausea. I have known it to cause positive faintness. I am myself always disagreeably affected by the odor of carbolic acid, and can never remain many minutes in a room where a trace of it prevails. In cases where the effect of an odor is instantaneous, it is fair to suppose that the impression made on the olfactory surface is transmitted direct to the olfactory center of the brain; but there must also, in certain examples, be a further transmission to the sympathetic ganglia.

The central seat of the olfactory sense must be very near to the central seat of the memory, for it is noticeable that nothing recalls a past event like an odor. A little child was accidentally thrown out of a pony carriage in a country lane. Near the spot where the fall took place there was a manure heap, which gave forth the peculiar, dry, ammoniacal odor so often recognizable from such heaps—an odor distinctive yet not altogether unpleasant. The child was stunned by the fall, and on recovering and returning to consciousness, smelled this odor powerfully. Over fifty years have elapsed since that little mishap, and yet whenever the person referred to passes, in country lanes, a heap giving out the same odor, the whole scene of the accident recurs with every detail perfect, and sometimes with a recurrence of the giddiness and nausea which were experienced at the moment.

In some of the lower animals, memory by odors is often singularly exhibited. In the dog, the memory by odor seems a special part of the nature of the animal. The "scent" of the fox-hound and of the stag-hound is of this character. In the trained collie, the remembrance of an object hidden, a stick, for instance, may be retained for three quarters of an hour so perfectly that the animal will fetch the object at command. But if the object be coated with something giving an odor with which the animal is familiar, the time is infinitely prolonged.

Some odors lead to sleep, like the odor from dried hops; others lead to wakefulness, like the odor of dead flowers and leaves. Still others allow sleep but provoke the most terrible dreams, like the odors arising from a pillow in which feathers are decomposing. Habit modifies the effects of odor. Merciless smokers laugh at the "faddery" of women who become faint if the smoker charges the air they breathe in a small room or a railway carriage with tobacco smoke, and are ready to compare the objection of a lady unaccustomed to the odor from the pipe or cigar, with the carelessness on the matter shown by other women who have become accustomed to the effect.

But if a smoker gives up smoking and all contact with smoke for a few years, he is himself astounded at the unpleasantness of an air charged with smoke. I was once summoned professionally to a youth who was temporarily poisoned by inhaling the atmosphere issuing out of a small window of a club-room in which a number of men were smoking freely. They, in the body of the smoke, were not perceptibly affected. He, partly in the open air, was positively smitten to faintness by the empoisoned current from

the room, which flowed out of the window, and is still affected whenever he comes within the cloud of a pipe.—*Dr. B. W. Richardson, in the Asclepiad.*

A CHRISTIAN scientist asked a patient whether he had ever tried faith-cure for rheumatism. "Yes, I am trying it now. I've got in my pocket the left hindfoot of a rabbit that was killed in the dark of the moon, and I think it's helping me."

LUMINOUS BACTERIA.—Various phenomena of illumination in the darkness of night, in the woods, marshes, and the sea, have been noticed from time immemorial, and not very long ago they were attributed to supernatural powers—spirits, for instance—by the superstitious. It is now established that they are the result of some form of microbial vegetation. The phosphorescence of a rotting stump in a marsh, of a fish in the sea, is due to such low life. Mr. Giard, a French naturalist, has recently observed a bright phosphorescence in a crustacean, the *talitrus*, a specimen of which he found when slowly walking on the beach. He found that the luminous condition emanated from the diseased muscles which contained phosphorescent bacteria. By inoculation he reproduced the microbes and the same luminous appearance in the muscles of other crustacea.—*Bacteriological World and Modern Medicine.*

THE PROPER HOURS OF SLEEP.—Man, in common with most of the animal creation, has accepted the plain suggestion of nature that the approach of night should imply a cessation of effort. If he ignores this principle, his work is done against inherited habit, and, so far, with additional fatigue. It follows, too, that he must use artificial light and sustain its combustion at the cost of his own atmosphere. Naturally, therefore, when he does rest, his relief is not proportioned to his weariness. As in many cases, however, sensation is not here the most reliable guide to judicious practice. Established custom affords a far truer indication of the method most compatible with healthy existence. The case of the overworked and the invalid lends but a deceptive color to the argument of the daylight sleeper. In them excessive waste of tissue must be made good, and sleep, always too scanty, is at any time useful for this purpose. For the healthy majority, however, the old custom of early rest and early waking is certain to prove in future—as returns of longevity and common experience alike show that it has proved in the past—most conducive to health and active life.—*London Lancet.*

## THE ADVANTAGES OF OLD AGE.

THE *London Lancet* presents an address on this topic, delivered by Sir James Crichton-Browne:—

“It seems a physiological law that the functions of the body must be kept in exercise in order to maintain its efficacy, and it is as true of the body as of the mill, or of any other machine, that it will rust out from disuse sooner than wear out by employment. The fact is constantly observed in persons engaged in commercial pursuits, who retire at the age of sixty, and then fall into rapid decay, while professional men remaining at work preserve their vigor often for another twenty years.

“It is a sad thing to see the nerve centers decay with a corresponding weakness of body and mind; but it is still sadder to witness with a wrinkling of the skin a corresponding shrinking of the brain, allowing vanity, and some of the weakly passions which had been kept in suppression, to come again to the fore. How different is the spectacle when the organ is kept in its integrity by constant use, and the mental faculties preserved in all their pristine force. We have only to look around and to see our poets, bishops, judges, ministers of state, and medical men, long-lived and still in mental vigor while working at their respective avocations.

“It is clear that hard work does not kill. The toil, however, must be genial and diversified. The man of business often has no occupation besides his bread-winning, whereas, a medical man has a variety of subjects to interest him.

“A speaker at a recent International Congress showed by experiments upon school children, when three or four examples in arithmetic were given in succession, that each showed an inferiority to the previous one, both in correctness and as regards the time in which it was completed. The one faculty employed was gradually exhausted—a fresh piece of evidence showing the necessity of diversity of work. In the treatment of persons with mental trouble or worry, the very worst method is to rely too much on what is called rest, meaning thereby leaving the patient without other employment than to brood over his sorrows. True rest to the mind is only to be obtained by the occupation of other faculties roused into action by new surroundings.

“There is no reason why old age should not be as happy and enjoyable as any other period of life. If old persons be asked as to their consciousness of age, they will all, with one consent, declare that there exists nothing of the kind. An old person has a knowledge of his age in the same way as his friends; he sees it by looking in the mirror, by remembrance of past events, or the loss of contemporaries; but he is not constantly carrying about with him the conviction or feeling that he is old. He is thus still able to occupy himself in the business and pleasures of life.

“Buffon spoke of his green old age as one of the happiest periods of his life, although the kind of pleasures then experienced are, of course, different from those of youth. And even when decay comes, and a man is becoming free from the remembrance of all earthly things, then, as Sir James Paget says (and no better example could be found of full mental activity by continued work), it may be so ordered on purpose that the spirit may be invigorated and undisturbed in the contemplation of the brightening future.

“Another writer, speaking of old age, in reference to the disease of an eminent barrister, also maintained that the highest faculties are kept keen by constant exercise, and the brain vigorous by constant action and renewal. The understanding has often been in the highest perfection in quite advanced old age; and that has been the best period of human life. It is the time when the rage and storm of passion have died away, when the jealousies and cares of a career have ceased and been forgotten, when memory lingers upon all that is bright and charming in the past, and when hope scatters her most glowing tints over a fast approaching future, or we are able to see in old age glimpses of the truth that its chief glory consists not in the remembrance of feats of prowess, nor in the egotistic exercise of power, but in the conquest of peevish weakness, in the brightness of hope, and in the distribution of happiness around. Depend upon it, the best antiseptic against senile decay is an active interest in human affairs, and those keep young longest who love most and study most. Cato learned Greek at eighty, and Sophocles wrote his ‘Lives of Men’ after reaching threescore years and ten.”

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SOUTHEY wrote in a letter to a friend: “There is a story of a man who always put on his spectacles when about to eat cherries that they might look

bigger and more tempting. In like manner, I make the most of my enjoyments, and pack away my troubles in as small compass as I can.”

WORK AND OVERWORK.—Overwork is often denounced as a characteristic American folly. Yet, in attacking it, the vast difference between work and overwork should never be forgotten. The first is as much to be desired as the second is to be shunned. Perhaps this point was never made clearer than in the following anecdote which Samuel Smiles tells of Charles Lamb:—

When Charles Lamb was released for life from his daily drudgery of desk work at the India office, he felt himself the happiest of men. "I would not go back to my prison," he said to a friend, "ten years longer for ten thousand pounds." He also wrote in the same ecstatic mood to Bernard Barton: "I have scarce steadiness of head to compose a letter," he said; "I am free! free as air! I will live another fifty years. Would I could sell you some of my leisure! Positively, the best thing a man can do is—nothing; and next to that, perhaps, good works."

Two years—two long and tedious years—passed, and Charles Lamb's feelings had undergone an entire change. He now discovered that official, even humdrum work—"the appointed round, the daily task"—had been good for him, though he knew it not. Time had formerly been his friend; it had now become his enemy. To Bernard Barton he again wrote:—

"I assure you, *no* work is worse than overwork; the mind preys on itself—the most unwholesome of food. I have ceased to care for almost anything. Never did the waters of heaven pour down upon a more forlorn head. What I can do, and overdo, is to walk. I am a sanguinary murderer of time. But the oracle is silent."—*Sel.*"

PREVENTION OF THE MULTIPLICATION OF DISEASE GERMS.—"In regard to the disease-producing or pathogenic germs," says the *Sanitary News*, "it is important to understand what forces or agencies will retard their multiplication or wholly destroy them. In emergencies, chemistry is resorted to, and antiseptics and disinfectants are employed; but in the proper prevention of disease, such emergencies should not be allowed to arise. Sunlight, pure air, and thorough cleanliness are natural enemies to disease germs. They cannot flourish where they have not their proper food, and that is found in dampness, darkness, mold, and filth. Keep the habitation flooded with sunshine and pure air, keep away all filth and dampness, and the germs of disease will find no foothold, no nidus in which to breed or food on which to grow. Nature is struggling all the

time to keep her domain healthful, and a fit habitation for man; but man shuts out the air and light, contaminates all things about him, and disease is the reward of his recklessness and neglect. There is more health in a sunbeam than in drugs, and more life in pure air than in the physician's skill. The sunlight may fade your parlor carpet, but better that than have disease fade your cheeks. The wind may tan and freckle the face, but it is better tanned and freckled than thin and sallow. Help nature to keep your habitation healthful by allowing her forces an opportunity to operate. There is more health about you than disease. Health is man's natural condition. He has to violate some law before the penalty of disease is inflicted. He can place about him such conditions that disease germs will invade his system, or he can live amid surroundings so pure that health will bless him both in his freedom from physical ills and in the sweet consciousness of right living."

IN Turkey, where the women are represented to be the most beautiful on earth, they have a proverb that "Beauty is first-born of the bath."

JOHN HABBERTON tells the story of a preacher who said to a sick man, the air of whose house was poisoned by the foul gases emanating from a neglected drain, "You do n't need to use more faith, but you do need to use some chloride of lime on that drain if you want to get well."

PHYSICAL SINS.—Perhaps nothing will so much hasten the time when body and mind will both be adequately cared for, as a diffusion of the belief that the preservation of health is a duty. Few seem conscious that there is such a thing as physical morality. Men's habitual words and acts imply the idea that they are at liberty to treat their bodies as they please. Disorders entailed by disobedience to nature's dictates they regard simply as grievances, not as the effects of a conduct more or less flagitious. Though the evil consequences inflicted on their dependents, and on future generations, are often as great as those caused by crime, yet they do not think themselves in any degree criminal. It is true that in the case of drunkenness, the viciousness of a bodily transgression is recognized; but none appear to infer that if this bodily transgression is vicious, so, too, is every bodily transgression. The fact is, that all breaches of the laws of health are physical sins. When this is generally seen, then and perhaps not till then, will the physical training of the young receive the attention it deserves.—*Herbert Spencer.*



### THE TOTAL STRENGTH OF THE BODY.

THE total strength of the body is a question upon which there must always have been much speculation and more or less experiment; but so far as we know, the problem of determining the total strength of the body was never solved until recently. Some ten years ago, recognizing the unsatisfactory character of the old method of measuring various parts of the arms, legs, and other portions of the body, as the means of determining a person's physical condition, the writer undertook experiments for the purpose of perfecting, if possible, some means by which the strength of the various groups of muscles might be determined.

The difficulty encountered in testing the strength of the muscles of the body lay in the want of a proper registering apparatus to which the strength of the muscle or group could be applied. After numerous disappointing experiments running through several years, the attempt being several times abandoned as hopeless, then again renewed, as a new idea offered a means of escape from some perplexing difficulty, a somewhat imperfect apparatus was finally completed. By means of this crude apparatus the muscular tests of several hundred persons were taken, and it was clearly demonstrated that this method of determining the strength of the muscles was vastly more accurate than the old method of measurement, it being sometimes found that muscles had doubled their capacity, although there had been no increase in their size whatever, and in some instances there was an actual decrease in size with a simultaneous increase in strength,—a circumstance probably due to a diminution of adipose tissue with the development of the muscle, sufficient in amount to overbalance the increase in the volume of the muscle.

The apparatus first constructed was found, after some considerable experience, to contain elements of error too serious to render it sufficiently accurate for scientific purposes, and a new apparatus involving the same principles, but more perfect in construction, and embodying improvements which had long been contemplated, was finally perfected a few months ago, and has since been in constant use and has proved itself equal to all requirements and constant and accurate in action.

By means of this perfected apparatus I have made, or have had made by persons instructed for the purpose, measurements of several hundred persons, men and women, and from these measurements have compiled tables of averages, collecting for the purpose the measurements of one hundred men and an equal number of women. The only point considered in the selection of these cases was that the individual should not be either crippled or so seriously diseased as to be considered decidedly below the average; the aim being to select such persons as should be fairly representative of average healthy individuals. It should be stated, in fairness, however, that quite a number of these persons were more or less out of health in one way or another, although not seriously ill, and hence the figures shown may, on the whole, be considered somewhat below the average which would be given by persons of the laboring class in robust health. The table prepared, and which is shown in connection with this article, may perhaps be regarded, however, as more accurately representing the physical condition as regards the muscular strength of the average American than would a table prepared from the laboring class. We think those who are interested in this subject will find a careful



TABLE OF STRENGTH MEASUREMENTS.

Arranged from the measurements of 100 adult men, taken and compiled under the direction of J. H. Kellogg, M. D., Battle Creek, Mich.

EXCEPT WHEN OTHERWISE INDICATED, QUANTITIES ARE EXPRESSED IN POUNDS AVOIRDUPOIS.

| PER CENT. | HEIGHT (inches). | WEIGHT. | ARMS.            |                  |                    |                    |                       |                       |                        |                        |                 |                 |                   |                   |             |             |               |               |                         | LEGS.                   |                  |                  |                    |                    |                 |                 |                   |                   |                   | TRUNK.            |                     |                     |                     |                     | RESPIRATION.        |                     |                 |                  |                   | TOTAL STRENGTH.   |                |                 |                  |                  | PER CENT. |                    |                    |                                   |                                   |                                     |                                    |       |       |        |        |              |
|-----------|------------------|---------|------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|------------------------|------------------------|-----------------|-----------------|-------------------|-------------------|-------------|-------------|---------------|---------------|-------------------------|-------------------------|------------------|------------------|--------------------|--------------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------|------------------|-------------------|-------------------|----------------|-----------------|------------------|------------------|-----------|--------------------|--------------------|-----------------------------------|-----------------------------------|-------------------------------------|------------------------------------|-------|-------|--------|--------|--------------|
|           |                  |         | R. Hand Flexors. | L. Hand Flexors. | R. Hand Extensors. | L. Hand Extensors. | R. Forearm Pronators. | L. Forearm Pronators. | R. Forearm Supinators. | L. Forearm Supinators. | R. Arm Flexors. | L. Arm Flexors. | R. Arm Extensors. | L. Arm Extensors. | R. Deltoid. | L. Deltoid. | R. Pectorals. | L. Pectorals. | R. Shoulder Retractors. | L. Shoulder Retractors. | R. Foot Flexors. | L. Foot Flexors. | R. Foot Extensors. | L. Foot Extensors. | R. Leg Flexors. | L. Leg Flexors. | R. Leg Extensors. | L. Leg Extensors. | R. Thigh Flexors. | L. Thigh Flexors. | R. Thigh Extensors. | L. Thigh Extensors. | R. Thigh Abductors. | L. Thigh Abductors. | R. Thigh Adductors. | L. Thigh Adductors. | Trunk Anterior. | Trunk Posterior. | Trunk R. Lateral. | Trunk L. Lateral. | Neck Anterior. | Neck Posterior. | Neck R. Lateral. | Neck L. Lateral. |           | Inspiration—Waist. | Inspiration—Chest. | Inspiration—Waist Expansion (in). | Inspiration—Chest Expansion (in). | Expiration—Pneumometer (Cubic In.). | Expiration—Spirometer (Cubic In.). | ARMS. | LEGS. | TRUNK. | CHEST. | ENTIRE BODY. |
| 1         | 71.2             | 186     | 180              | 160              | 50                 | 45                 | 90                    | 85                    | 105                    | 105                    | 90              | 90              | 100               | 100               | 90          | 90          | 175           | 160           | 155                     | 150                     | 95               | 90               | 320                | 320                | 115             | 125             | 140               | 140               | 190               | 195               | 240                 | 245                 | 150                 | 140                 | 130                 | 130                 | 195             | 700              | 190               | 180               | 60             | 95              | 90               | 90               | 270       | 330                | 4.34               | 7.97                              | 380                               | 2020                                | 2765                               | 1600  | 602   | 6987   | 1      |              |
| 2.5       | 71.1             | 179     | 160              | 154              | 42                 | 37                 | 86                    | 81                    | 102                    | 99                     | 86              | 86              | 92                | 94                | 90          | 86          | 151           | 140           | 143                     | 134                     | 89               | 84               | 292                | 304                | 115             | 115             | 136               | 138               | 180               | 181               | 228                 | 233                 | 140                 | 138                 | 118                 | 120                 | 187             | 628              | 182               | 180               | 54             | 91              | 80               | 82               | 262       | 322                | 4.14               | 5.85                              | 360                               | 1863                                | 2611                               | 1484  | 586   | 6544   | 2.5    |              |
| 5         | 71.0             | 165     | 142              | 140              | 35                 | 31                 | 82                    | 78                    | 93                     | 93                     | 76              | 77              | 82                | 77                | 83          | 80          | 131           | 126           | 124                     | 115                     | 80               | 77               | 279                | 281                | 110             | 108             | 125               | 128               | 169               | 173               | 205                 | 196                 | 132                 | 130                 | 111                 | 110                 | 177             | 554              | 175               | 172               | 48             | 83              | 74               | 76               | 253       | 289                | 3.94               | 0.80                              | 344                               | 1665                                | 2414                               | 1359  | 544   | 5982   | 5      |              |
| 10        | 70.5             | 157     | 131              | 131              | 30                 | 29                 | 76                    | 72                    | 90                     | 86                     | 70              | 68              | 72                | 71                | 74          | 74          | 118           | 118           | 104                     | 104                     | 73               | 69               | 270                | 268                | 100             | 97              | 115               | 118               | 156               | 158               | 186                 | 189                 | 122                 | 127                 | 103                 | 104                 | 167             | 496              | 165               | 161               | 41             | 79              | 69               | 69               | 218       | 257                | 3.73               | 6.74                              | 324                               | 1518                                | 2255                               | 1247  | 477   | 5497   | 10     |              |
| 15        | 70.0             | 152     | 127              | 127              | 28                 | 27                 | 71                    | 68                    | 86                     | 81                     | 65              | 65              | 68                | 68                | 72          | 70          | 114           | 115           | 96                      | 97                      | 68               | 67               | 260                | 262                | 93              | 92              | 112               | 113               | 150               | 152               | 177                 | 182                 | 116                 | 117                 | 100                 | 101                 | 159             | 468              | 159               | 155               | 38             | 76              | 65               | 65               | 204       | 239                | 3.53               | 3.71                              | 315                               | 1445                                | 2162                               | 1185  | 444   | 5236   | 15     |              |
| 20        | 69.4             | 148     | 124              | 122              | 27                 | 25                 | 66                    | 65                    | 82                     | 76                     | 61              | 60              | 66                | 66                | 69          | 67          | 112           | 111           | 92                      | 89                      | 65               | 63               | 252                | 255                | 88              | 88              | 109               | 110               | 145               | 147               | 170                 | 174                 | 109                 | 113                 | 98                  | 96                  | 149             | 443              | 153               | 150               | 35             | 73              | 62               | 62               | 193       | 223                | 3.33               | 1.68                              | 305                               | 1380                                | 2082                               | 1127  | 417   | 5006   | 20     |              |
| 25        | 68.8             | 145     | 121              | 119              | 25                 | 24                 | 64                    | 63                    | 78                     | 73                     | 59              | 56              | 64                | 64                | 66          | 65          | 108           | 108           | 88                      | 86                      | 63               | 62               | 245                | 249                | 85              | 85              | 107               | 107               | 141               | 149               | 164                 | 167                 | 106                 | 110                 | 95                  | 95                  | 142             | 417              | 148               | 145               | 33             | 72              | 60               | 60               | 183       | 214                | 3.22               | 9.66                              | 298                               | 1331                                | 2024                               | 1077  | 398   | 4830   | 25     |              |
| 30        | 68.5             | 142     | 118              | 115              | 24                 | 22                 | 61                    | 61                    | 74                     | 70                     | 56              | 53              | 63                | 62                | 64          | 63          | 105           | 105           | 85                      | 82                      | 60               | 60               | 239                | 241                | 82              | 82              | 103               | 104               | 137               | 140               | 156                 | 158                 | 104                 | 107                 | 93                  | 92                  | 136             | 392              | 141               | 140               | 31             | 69              | 57               | 57               | 172       | 202                | 3.02               | 8.63                              | 289                               | 1283                                | 1958                               | 1023  | 375   | 4639   | 30     |              |
| 35        | 68.3             | 140     | 116              | 112              | 23                 | 21                 | 60                    | 60                    | 72                     | 68                     | 54              | 51              | 61                | 62                | 63          | 61          | 103           | 102           | 83                      | 79                      | 59               | 59               | 235                | 234                | 80              | 80              | 101               | 101               | 133               | 136               | 151                 | 151                 | 101                 | 103                 | 90                  | 89                  | 131             | 375              | 137               | 137               | 29             | 67              | 54               | 55               | 164       | 193                | 2.82               | 7.61                              | 281                               | 1251                                | 1903                               | 985   | 358   | 4497   | 35     |              |
| 40        | 68.0             | 138     | 112              | 109              | 22                 | 20                 | 58                    | 58                    | 69                     | 66                     | 52              | 48              | 59                | 60                | 61          | 58          | 100           | 100           | 80                      | 76                      | 57               | 57               | 227                | 227                | 76              | 77              | 98                | 98                | 129               | 131               | 145                 | 145                 | 99                  | 100                 | 87                  | 86                  | 126             | 354              | 133               | 132               | 27             | 64              | 52               | 53               | 156       | 183                | 2.72               | 6.58                              | 274                               | 1208                                | 1839                               | 941   | 340   | 4328   | 40     |              |
| 45        | 67.7             | 136     | 109              | 106              | 21                 | 19                 | 56                    | 56                    | 67                     | 64                     | 49              | 47              | 58                | 58                | 59          | 57          | 98            | 98            | 77                      | 74                      | 56               | 56               | 222                | 221                | 74              | 74              | 94                | 95                | 126               | 128               | 140                 | 140                 | 96                  | 97                  | 85                  | 84                  | 122             | 339              | 129               | 129               | 26             | 62              | 50               | 51               | 149       | 177                | 2.62               | 5.56                              | 268                               | 1173                                | 1788                               | 908   | 327   | 4196   | 45     |              |
| 50        | 67.4             | 134     | 105              | 102              | 20                 | 18                 | 55                    | 54                    | 65                     | 62                     | 47              | 44              | 55                | 56                | 57          | 55          | 95            | 94            | 75                      | 73                      | 54               | 54               | 219                | 214                | 71              | 72              | 91                | 91                | 122               | 123               | 134                 | 134                 | 93                  | 94                  | 82                  | 82                  | 118             | 321              | 124               | 124               | 24             | 60              | 48               | 49               | 142       | 169                | 2.42               | 4.54                              | 260                               | 1132                                | 1730                               | 868   | 312   | 4042   | 50     |              |
| 45        | 67.1             | 131     | 102              | 99               | 18                 | 16                 | 53                    | 53                    | 62                     | 60                     | 45              | 42              | 53                | 54                | 55          | 53          | 91            | 91            | 72                      | 69                      | 52               | 52               | 209                | 206                | 69              | 69              | 87                | 87                | 118               | 119               | 128                 | 127                 | 91                  | 91                  | 80                  | 80                  | 113             | 302              | 119               | 120               | 23             | 57              | 45               | 47               | 134       | 160                | 2.32               | 3.51                              | 253                               | 1088                                | 1665                               | 826   | 295   | 3874   | 45     |              |
| 40        | 66.9             | 129     | 99               | 96               | 17                 | 15                 | 51                    | 51                    | 60                     | 58                     | 43              | 40              | 52                | 53                | 54          | 51          | 89            | 89            | 70                      | 67                      | 51               | 51               | 197                | 199                | 66              | 67              | 84                | 84                | 114               | 115               | 124                 | 123                 | 88                  | 88                  | 76                  | 78                  | 110             | 288              | 115               | 117               | 21             | 55              | 48               | 45               | 128       | 154                | 2.22               | 2.50                              | 247                               | 1055                                | 1605                               | 794   | 283   | 3737   | 40     |              |
| 35        | 66.6             | 127     | 95               | 93               | 16                 | 14                 | 50                    | 49                    | 58                     | 56                     | 40              | 38              | 49                | 50                | 51          | 49          | 87            | 86            | 67                      | 65                      | 49               | 49               | 195                | 195                | 63              | 65              | 81                | 79                | 110               | 110               | 118                 | 118                 | 83                  | 84                  | 75                  | 76                  | 106             | 271              | 110               | 112               | 19             | 53              | 41               | 42               | 121       | 147                | 2.12               | 1.47                              | 241                               | 1013                                | 1550                               | 754   | 269   | 3586   | 35     |              |
| 30        | 66.3             | 126     | 91               | 90               | 15                 | 13                 | 48                    | 48                    | 55                     | 54                     | 38              | 36              | 47                | 48                | 50          | 47          | 82            | 82            | 65                      | 64                      | 47               | 47               | 189                | 187                | 61              | 63              | 78                | 76                | 107               | 106               | 113                 | 113                 | 81                  | 81                  | 72                  | 74                  | 103             | 258              | 106               | 108               | 18             | 51              | 40               | 40               | 115       | 142                | 2.02               | 0.46                              | 236                               | 973                                 | 1495                               | 724   | 258   | 3450   | 30     |              |
| 25        | 66.0             | 123     | 88               | 86               | 13                 | 11                 | 47                    | 46                    | 52                     | 51                     | 36              | 34              | 45                | 45                | 48          | 45          | 78            | 78            | 63                      | 61                      | 44               | 45               | 177                | 179                | 58              | 60              | 74                | 71                | 102               | 101               | 107                 | 106                 | 77                  | 77                  | 70                  | 71                  | 98              | 240              | 101               | 103               | 17             | 48              | 37               | 38               | 107       | 136                | 1.81               | 8.44                              | 230                               | 927                                 | 1419                               | 682   | 244   | 3274   | 25     |              |
| 20        | 65.5             | 121     | 85               | 83               | 12                 | 10                 | 45                    | 44                    | 49                     | 49                     | 33              | 32              | 42                | 43                | 45          | 43          | 74            | 75            | 61                      | 60                      | 42               | 43               | 174                | 172                | 56              | 56              | 70                | 67                | 98                | 96                | 101                 | 99                  | 72                  | 72                  | 67                  | 69                  | 95              | 224              | 97                | 98                | 16             | 45              | 36               | 35               | 101       | 131                | 1.81               | 7.42                              | 225                               | 885                                 | 1354                               | 646   | 233   | 3118   | 20     |              |
| 15        | 64.8             | 118     | 81               | 78               | 10                 | 9                  | 42                    | 42                    | 45                     | 44                     | 30              | 30              | 39                | 40                | 43          | 40          | 71            | 71            | 58                      | 58                      | 39               | 40               | 163                | 164                | 51              | 52              | 65                | 63                | 92                | 91                | 91                  | 91                  | 61                  | 65                  | 66                  | 63                  | 65              | 88               | 206               | 91                | 90             | 14              | 41               | 33               | 32        | 92                 | 123                | 1.61                              | 6.39                              | 218                                 | 831                                | 1261  | 595   | 216    | 2903   | 15           |
| 10        | 64.2             | 114     | 78               | 75               | 8                  | 8                  | 40                    | 39                    | 41                     | 39                     | 28              | 29              | 37                | 38                | 41          | 39          | 68            | 67            | 54                      | 55                      | 36               | 38               | 154                | 155                | 46              | 46              | 60                | 59                | 84                | 84                | 81                  | 82                  | 61                  | 61                  | 57                  | 59                  | 81              | 191              | 84                | 82                | 13             | 38              | 31               | 30               | 85        | 115                | 1.51               | 5.36                              | 202                               | 784                                 | 1163                               | 550   | 201   | 2698   | 10     |              |
| 5         | 63.3             | 110     | 72               | 68               | 6                  | 5                  | 37                    | 35                    | 38                     | 35                     | 24              | 25              | 32                | 33                | 36          | 33          | 61            | 59            | 49                      | 49                      | 33               | 33               | 121                | 132                | 40              | 38              | 47                | 50                | 63                | 69                | 66                  | 68                  | 54                  | 54                  | 49                  | 47                  | 61              | 160              | 72                | 71                | 11             | 32              | 26               | 26               | 73        | 102                | 1.21               | 3.30                              | 181                               | 697                                 | 964                                | 459   | 176   | 2296   | 5      |              |
| 2.5       | 62.6             | 106     | 70               | 60               | 5                  | 5                  | 31                    | 29                    | 35                     | 33                     | 20              | 21              | 30                | 30                | 26          | 25          | 52            | 53            | 42                      | 42                      | 31               | 27               | 90                 | 92                 | 33              | 34              | 40                | 39                | 56                | 57                | 54                  | 60                  | 42                  | 44                  | 39                  | 38                  | 47              | 134              | 65                | 58                | 9              | 26              | 19               | 21               | 52        | 79                 | 1.01               | 1.26                              | 154                               | 609                                 | 776                                | 379   | 132   | 1896   | 2.5    |              |
| 1         | 61.6             | 105     | 70               | 60               | 5                  | 4                  | 25                    | 25                    | 35                     | 30                     | 20              | 20              | 28                | 28                | 19          | 20          | 50            | 45            | 40                      | 40                      | 30               | 25               | 70                 | 70                 | 30              | 32              | 40                | 30                | 50                | 45                | 40                  | 55                  | 40                  | 40                  | 25                  | 22                  | 35              | 130              | 45                | 42                | 5              | 20              | 15               | 15               | 38        | 65                 | 8                  | 9                                 | 20                                | 140                                 | 564                                | 644   | 307   | 103    | 1618   | 1            |

study of this table instructive as well as interesting. A little explanation of the chart may be of interest.

The figures between the two horizontal lines, opposite and included between the two numbers 50 in the "per cent" columns, represent the average of 50 per cent of the one hundred persons, excluding the 25 weakest and the 25 strongest in the list. The per cent numbers above and below 50 represent similar groups of the smaller number of persons chosen above and below the middle of the column, in which are arranged in regular order, from the weakest at the bottom to the strongest at the top of the column, figures showing the results in each of the one hundred cases tested. Such a column was made, of course, for each group of muscles tested. This explanation as to the meaning of the per cent numbers is not, we are aware, perfectly lucid, neither is it technically correct; but we have not space here for a more elaborate explanation of the method by which the table is made.

In comparing the figures in a horizontal line opposite any of the per cent numbers, it will be noticed that the columns are for the most part in pairs, representing the right and left sides of the body. As will be expected, the left side is almost invariably found to be weaker than the right; as, for example, the upper right hand figures, the "right hand flexors," that is, the muscles which close the fingers, are found to be capable of lifting 180 lbs., whereas the "left hand flexors" only lift 160 lbs. The next two columns represent respectively the right and left hand extensors, which lift 50 and 40 lbs. respectively, only a little more than one fourth the amount lifted by the hand flexors.

For lack of space we must omit many points of interest to which we would like to call attention,

respecting the relation of different groups of muscles, but would draw attention especially to the columns exhibiting the total strength of the arms, the legs, the trunk, and the chest, and finally of the entire body. It will be noticed that the strength of the arms is about two thirds that of the legs. This rule prevails throughout the entire series, with the exception of the weakest and the strongest. The strength of the trunk is a trifle more than one half that of the legs, while that of the chest is, on the average, only a little more than one third that of the trunk. The fact that the total strength of the entire body in a strong man is nearly 7,000 lbs. — and in some instances we find it to be even more than that — will doubtless be a surprise to some of our readers. It must not be imagined, however, that a strong man can lift this amount. Dr. Winship lifted nearly 3,000 lbs., and another champion lifter succeeded in elevating nearly two tons, but this represented the strength of only a comparatively few groups of muscles. The total strength of those men of marvelous muscular capacity would doubtless have been at least double that of the highest figures shown upon the chart.

In some future number we shall make a comparative study of the chart furnished by one hundred men and that obtained by compiling the *data* obtained from the measurements of one hundred women, in which many points of great interest will be discovered.

I shall take this opportunity to state my indebtedness to Mr. W. A. George, one of the Sanitarium medical students, for the mathematical work involved in the preparation of this chart, which was a task by no means inconsiderable.

J. H. K.

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### PHYSICAL CULTURE FOR WOMEN.

PHYSICAL culture means better bone and brawn, better tissue and nerve; hence it means children better born, and homes more permanent and happy; stimulants at a discount, and God's laws loved. It is the gospel of peace literally written upon the fleshly tablets of the heart.

Therefore no greater good can be accomplished by us for the human race than to raise the standard of bodily health among women. There is no physical reason why women should be more feeble or diseased than men, and among savages, if there is a difference, the woman has occasion to and does endure the most physical stress and hardship.

Health writers tell us that when Stanley went to the interior of Africa, they gave him two hundred negro women to carry his supplies, and he declared that they were the best porters he employed. We all know that in Europe the heaviest work is done by women, who carry on their heads loads of vegetables and other material that the average man in this country could hardly lift. This is because the muscles of the waist and trunk in these women are thoroughly developed, and they do not suffer from the characteristic ailments of wealthy women of their own and other nations. Indian women carry all the household goods and two or three babies into the bargain,

while their husbands walk beside them, pipe in mouth and gun in hand.

Of an equal number of male and female infants there will be found at the end of the first year a larger number of girls alive than boys. This discrepancy continues up to the age of fifteen or sixteen, after which the mortality becomes greater among girls. At the age of forty or fifty the death-rate is about equal in both sexes, and finally "the oldest inhabitant" is always a woman, thus showing that her constitutional vitality is naturally the greater. How could a Supreme Intelligence permit it to be otherwise, in view of what is to be her work in life? There need not be any falling off during those years from sixteen to forty, and there will be none when the reforms now begun have held sway over this country for a single generation.

It is well known that nerve-force comes to its climax among women. In strong and powerful women, where the nerves are well sheathed, this puts them

on a pinnacle as to the highest forces by which spirit controls matter, their nerve-force being the largest that any organism discloses in relation to their muscular and other forces. In weak women this superabundant nerve-force, uncontrolled, bears down the other forces of the body, just as the mighty engine jars to pieces the weak house in which it may be placed. Reason teaches us that this is nothing against the engine. It only shows that we must build up the house in which it is environed, so that the due proportion between them may be maintained. Dress reform and health teaching will thus build up the mother of the race. Then shall the nobler race be born, and not till then.

Physical culture is the question of the future for Americans. All true progress is built upon physical lines. Crude and modern as our bodies are to-day, they shall be as beautiful to-morrow as those of Diana and Hebe, of Mercury and Apollo.—*Frances E. Willard.*

"THE best plan of education" says Goethe, is that of the Hydraotes, the Greek trading sailors, who take their infant boys out to sea, and let them sport around amid oakum and belaying pins before they learn to handle them with a business purpose. Such a school has graduated the heroes who with their own hands could grapple the fire-boat to the flag-ship of the enemy."

A RACE FOR BEAUTY.—Since beauty is really one of the proper objects of effort, the forms of exercise which bestow most symmetry of outline and grace of movement are to be studied. Running is the great beautifier of figure and movement. Running gives muscular development, strong heart action, and free lung play. The muscle comes where it ought to be, the shoulders go back, the loins hold the trunk well balanced, and the feet take their correct positions. It was running which made the Greek figure a model for all time. The more active tribes of American Indians have been runners from time immemorial, and from the chest to the heels they are much more beautifully built than the average of white men. Running peoples have usually the firm but elastic texture which is the beauty of flesh. We know infinitely more about taking care of the human body than Greeks or Indians, and if we would train our children to regular and wisely supervised running exercise, supplemented with other exercises for the hands, arms, and shoulders, we could surpass both Greeks and Indians in beauty and activity. Fashion-

able people will pay high prices for grooms and riding-masters to teach correct horseback movements, but who ever saw a man, woman, or child with an instructor in walking? Yet horseback riding is a trifle beside good walking in its effect either on health or on those qualities of figure and carriage which the whole world holds in high estimation.—*Sel.*

"THE best exercise and pastimes," said Luther, "are music and gymnastics; the former dispelling mental care and melancholy thought, the latter producing elasticity of body and preserving health."

THE GREATEST ACCOMPLISHMENT OF ALL.—"Yes, my wife is learning Delsarte, my daughter is learning elocution, and my boy is learning the mandolin. Oh, we shall soon be the most accomplished family in town."

"We? What are *you* learning, pray?"

"To endure."—*Indianapolis Journal.*

It is a very common but quite erroneous notion that the burly strength of the human hand impairs its capacity for delicate manipulations; the iron-fisted *Gemsenjäger* of the Tyrolese Alps are the nicest marksmen; and Leonardo da Vinci, who could draw a perfect circle without a compass, could not the less break a silver *piaster* between his two thumbs and two forefingers.—*Oswald.*



## SOME SENSIBLE VIEWS ON DRESS.

To one who reads his newspaper with a comprehensive eye, the inferiority of the female is not a feature of the times in any line of life. Though I never go to the circus, I scan the columns of the newspaper, and find that women are the most ethereal acrobats. I know, too, that among daring balloonists women take high rank. I never go to the race-course, and do not approve of it, but by some subtle affinity my eye seeks out the head-lines where Nancy Hawkins, Sunol, and Maud S. are set forth as the three swiftest coursers of the turf. In exploration woman has won laurels. Mrs. Lieutenant Peary, the beautiful young American who shares her husband's adventurous trip to Greenland, and thence to the farthest North, is one of the latest comers. The wife of Dr. Livingstone, of Sir Samuel Baker, Lady Brassey, Florence Marryatt, Lady Duff-Hardy,—all these are among the bravest of the brave; and I do not forget the pleasure it was to read, over thirty years ago on a Wisconsin prairie, of the achievements of Madame Ida Pfeifer, who even then went around the world alone. Miss Adelia Gates, who paints the souls as well as the bodies of flowers, in this beautiful pursuit has penetrated the Desert of Sahara and the heart of Iceland, going alone, and finding everywhere that men were kind, and to a woman self-respectful and considerate, showed the same traits—Arabs and Norsemen bending alike in the homage that a son might pay his mother. All these illustrate that the earth being the Lord's and the fulness thereof, it is also woman's whom the Lord loves, and to whom he intends to give her fullest heritage. But the pipe-stem-waisted women will never enter in. They kill God's life, and no one has ever yet done this with impunity, no matter how ignorantly the result was wrought. The death-line in the waist is the death-line of the intellect. . . . High heels, narrow shoes, tight collars and tight gloves, and all kinds of corsets are a sin even more than they are a shame in this day of popular education and enlightenment.

If ever there was a mania with which the law might be allowed to interfere, it is the mania of trailing

one's garments in the gutters. About such a law there would be nothing sumptuary. Its provisions would be simply in the interests of decency, not to say of public health.

We have already legislation concerning the sort of garments that men and women respectively must wear if they would keep outside the rigors of the law. Surely, if men proposed to walk the street with coat skirts trailing after them six or eight inches or a foot, the law would deal with them as a monstrosity, and nothing in the world but the newness of the idea would prevent its being recognized as reasonable to tell women that they shall wear skirts in the street that do not thereby become part and parcel of all its parasitic and expectorant deposits.

The law already declares how we must dress, in order to be presentable in public places; let it go a step further, and forbid women to mop the streets with trailing dress skirts, or to deform their figures by compression of the floating ribs. If ever there was a legitimate subject of legislation in the interest of public propriety, public health, and an improved humanity, this is one. . . .

It is the belief of dress reformers that nothing would so surely lead to health and happy maternity as clothing that would permit complete freedom of movement. The tragedy of birth will become an almost painless sacrament when women learn to live wisely, insulated by an armor of wool from a thousand dangers of environment, clad in modest, healthful garments that give full play to heart and lungs and offer no impediment to motion, but invite to exercise and a free life in the sun's vitalizing rays and the broadening beauty of God's great outdoors.

It has been well said that it is merely a technical and conventional but not a real modesty that insists on the concealment of the ankle, and one that should be relegated to the same category as the Mohammedan concealment of a woman's face.

When Emma Willard introduced the study of physiology into her school in Vermont, the delicate-minded wives of deacons and well-to-do business

men, arose in a body and left the school-room as soon as the examination in this class was announced. It was a woman then that had to take the lead and dare their criticism, but she will live forever in the love and reverence of all right-minded men and women. The old story is evermore told over again, and women have themselves to thank or blame for every good and every ill that makes them smile or weep, and it will always be so. "He who would be

free, himself must strike the blow." It was a bright woman who said that men would not so much frequent the theater (which will tolerate upon its stage none but fine figures) if the women at home were not such effigies; and it was a bright thought also of another, who said, "Women are certainly superior to men, if the doctrine of the survival of the fittest is correct, for no man could survive in the garments that we are forced to wear."—*Frances E. Willard.*

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### DRESS FROM AN ARTIST'S STANDPOINT.

MRS. E. L. S. ADAMS, of Chicago, who has probably given more study to the subject of women's dress from an artistic standpoint than any other woman in America, recently contributed to *Harper's Bazar* a very excellent paper on this subject, of which the *Christian Union* makes the following abstract:—

"Much has been said of the inartistic effects of tight lacing, but never was it more forcibly expressed from the artistic side than by Mrs. E. L. S. Adams, in a recent number of *Harper's Bazar*. This artist claims that the reason peasants who can lay no claim to beauty of expression, are more attractive to the eye of the artist, is because, as a whole, they present more harmony than do the 'conventional dolls.' She claims that the majority of women would prefer being 'stylish' to having merely a beautiful face; they recognize the greater effect of the whole than of a part, and she says what we all know to be true, that nothing can be ideally beautiful unless it is the best of its kind, and proportion is a larger element in artistic effects than color. A beautiful woman presupposes a healthy body, in perfect condition for its use. This embraces color, texture, animation, motion, intelligence, and inspiration, unimpaired. If disease exists, if there is a lack of any of these elements, then the ideally beautiful has not been reached. She refers to the stage for types of womanly perfection, contrasting Sara Bernhardt and Mrs. Langtry, one with her body untrammelled by braces, the other with broad shoulders and a waist so small as to be noticeable.

"The English woman, she tells us, can walk well and stand passably, but it is impossible for her to use more than one half of her lung power in any situation. She claims that the flexible part of a woman's body—that which may really be termed the center of grace—is, by our modern system of dressing, entirely eclipsed. She says what we all know, that action, to be perfectly expressed, is expressed from head to foot; but in the modern style of dressing, action ceases from the waist line to the neck. And she claims also that this trammeling of the center of the body makes self-forgetfulness impossible. It is also startling but probably true, that it would be impossible for a great artist to paint a womanly soul having a great motive power in life, in a laced bodice. She refers to what many of us have noticed—the perfectly ridiculous figure a girl tightly laced makes when playing tennis. It is ridiculous till one thinks of the physical injury, and then indignation is aroused. To quote directly from the article: 'In the personal opinion of the writer, there is no excuse for the corset. It is not beautiful, but the wrong thing in the wrong place. No woman can be trusted with it, and if she could, the lines in it are inartistic. The body can be most easily molded to its false shape, because there is no bony framework where it is worn. When one has learned what a good body really is, a beautiful body, the corset will not even be considered. Corset lines are only to be found in caricatures, in ephemeral drawings, and other bad art, but representations of beautiful natural forms are the same through all the ages.'"

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A WRITER in the *Woman's Journal*, Boston, quotes the editor of the *N. Y. Witness* as saying that, "a great victory for common sense would be achieved if only the dress-reform agitators could be made to realize that the whole dress problem would be secured

by cutting off the skirts just above the ankles," and adds: "This remark is so nearly true that I wonder why so many wise women should not have found it out, without waiting for a man to tell them." Many women do realize this, but dare not take the initiative.

# SOCIETY PURITY

## A LITTLE WAY DOWN STREET.

My boy, you came in rather late last night, and this morning, when your mother asked where you were, you said, "Down street." Then when she wanted to know whereabouts down street, you said, "Oh, just a little way."

Now, I do n't think you intended to lie to your mother. As a rule, you are a truthful boy, and your mother can believe you. But I wonder if you know how far down street you were last night? You were right when you said you were "down street;" whenever a boy comes home late at night, and is afraid or ashamed to tell just where he has been, and what he has been doing, I know as well as he does, and his mother knows, and everybody who knows anything about boys knows, that he has been "down street."

And more than that, my boy; I know that he has been a long way down street. A long, long way. Have you a map of your route last evening? No? Well, never mind; we know you were down street, and we can make a map in a minute or two. Sit down here, and we'll see how far a boy travels when he leaves home after supper, and goes "down street a little way," and does n't get back until ten o'clock, or later.

Here is your home, this bright little spot like a star on the map. The sweetest, purest, safest place this side of heaven; the home where, from father to baby, they love you better than all the rest of the people in all the big, wide world. Now, you start from here and go "down street;" somehow the street always has a down grade from home when you sneak out after night. See how far you get from respectability and self-respect, when you reach this corner, "just a little way down," where you loafed — eh? Well, I'll say "loitered" if you prefer it — where you "loitered" last night. Here are the fellows with whom you loitered. You had to meet them here, because you can never meet them in your own home, for two reasons: In the first place, your father would not permit one of them to come into his house; and in the second place, you would be ashamed to invite them there, whether your father forbade it or not.

Sweet "gang" for your father's son to "loiter" with, is n't it? It's a long way from your respectable home, from your mother's friends and your father's guests, to this corner "down street," is n't it?

Then, look on the map, my boy — see how far it is from manliness and decency. Two ladies hurried past this corner — friends of your mother. Possibly they had been spending the evening at your home. Thank Heaven they did not see you as you slunk back into the dark doorway, feeling like the sneak that you were; and, as they passed by, one of the loafers with whom you were loitering shouted an insulting remark after them. Your cheeks burned in the dark, at that. Didn't your home and mother and sisters seem to be a thousand miles away just then?

See, too, how far you were away from purity? Some of the boys told some stories; do you think you could repeat them to your sisters? Don't you wish this morning that you could forget them forever? Don't you wish you had never heard them? Your mind will never again be as pure and innocent as it was before you went "just a little way down street" last night. While you were listening to these stories, punctuated with profanity, the dear ones at home gathered in the sitting-room; your father opened the Book, and read; they knelt at the family altar and commended themselves to the keeping of the heavenly Father, and tenderly remembered the boy who was "just a little way down street." Then the lights went out one by one, the house was still, and only the loving mother waited anxiously and sleeplessly for the boy who was "down street." It was more than ten million miles away from the sweet old chapter that your father read, down to the stories that you heard, my boy. And what a steep grade — all the way down!

And it was a long, long way from the truth. When you evaded your mother's question, and said you were only "a little way down street," the lie in your false heart looked guiltily out of your eyes as it rose to your cowardly lips. Just see where you were; you — ordinarily a brave, manly, truthful

boy—turned into a liar and a coward. You would fight, I know, if any boy called you such names, but just tell yourself the truth; do n't lie to yourself. Were n't you ashamed to tell your mother where you were? Yes. Well, does n't that make you a sneak? And were n't you afraid to tell your father? Yes. Well, what does that make you? And did you tell the honest truth when your mother asked you where you were? No. Well, what are you, then? And let me tell you that the "half truth" and "half lie" you told your mother is like all half breeds; it has all the worst traits of the vilest race and none of the virtues of the best.

"But," you say, "a boy does n't have to go with toughs and ruffians when he goes 'down street'; there are some mighty nice boys who go down street at night." My boy, I know it; there are some

"mighty nice boys" who go out of nights, but they are not so nice when they come back. You can't select your company on the street. The corner is free to everybody. There is no exclusiveness in street company. There is no safe "corner" after midnight, except the chimney-corner. And when you leave that, and spend the evening on the street, and can give no account of your doings on your return, beyond the bald statement that you were "just down the street a little way," we know, with pain and sorrow, that our boy has locked up in his mind and heart, shamefully guilty things that he dare not tell in his home. Keep off the street after night, my boy. Other people will think better of you, and, what is a far more important thing, you will think much better of yourself.—*R. J. Burdette, in Ladies' Home Journal.*

THE PRODIGAL DAUGHTER.—The minister had preached an excellent sermon on a text taken from the parable of the "Prodigal Son," and everybody at the church door had praised the sermon. Overtaking a well-known lady of his congregation on the way home, the minister thought that she would certainly burn a little incense in his honor. He talked about the weather at first; then he paused to allow his companion to turn the conversation in his direction. But she said nothing. So he broke the ice with: "And how did my sermon please you?"

"Oh, it was very good, no doubt, from a man's standpoint. The prodigal son is always returning, and the fatted calf is continually being killed. But I think it is time that something was said and done for the prodigal daughter. If a girl falls into evil company and squanders her substance in riotous living, there is no prospect of a welcome and forgiveness if she returns home. She is condemned without mercy by her own sex, and woe betide her if she leans for support upon the other. The next time you want a topic for a stirring sermon, think of the hopeless fate of the prodigal daughter."—*Woman's Chronicle.*

His strength was as the strength of ten,  
Because his heart was pure.—*Tennyson.*

THOUSANDS of poor, homeless, spurned, scorned, and erring women throng the streets of our great cities, and they will remain upon the streets until we make a place for them somewhere else. How much they need the pitying love of the disciples of Him who dealt so gently with the Magdalene of old! We ask, What can we do for them? A late writer an-

swers this question by tersely saying, "*Go after them.*" If the Christian women of the great cities would seek out and *each save one* poor, erring creature, there would not be enough to go around."

To prevent crime we must give children daily and hourly proof that a clear conscience, an unsullied name, and honesty in word and deed are dearer to us than acres of land or millions of gold. It must be line upon line and precept upon precept, but more than all a living example.—*Kate Tannatt Woods.*

GIVE THE CHILDREN YOUR COMPANIONSHIP.—Parents do not, as a rule, sufficiently appreciate the value of their own personal companionship as a factor in the bringing up of their growing girls and boys. A parent is apt, while giving his children a great deal of many other things to give them but little of *himself*. But the little girl who is so favored through the years as to have her mamma for friend, playmate, and companion, rarely, if ever, goes wrong when she grows up; and the boy feeling the subtle tie of the *camaraderie* between his parents and himself, is "grappled" to home and its pure and ennobling associations as with "hooks of steel." John Habberton, in a late article, relates the following incident of a preacher, who, when consulted by a father about a bad son over whom he had expended great agonies of prayer but whom otherwise he left to his own devices, said, "My friend, your prayers won't do that boy any good unless you give him a great deal of your own *companionship*. Make yourself actively his friend, taking an interest in all his affairs, and he won't ask for bad company."



### THE ELECTROPOISE INTERVIEWED.

A FEW weeks ago we happened to be riding along in a hack, and noticed the sign "Electropoise." We thought it a good opportunity to have a personal interview with the promoters of this scheme for defrauding the public, and so stopped. Upon ringing the door-bell, we were shortly met at the door by a woman who claimed to be in charge of the business at the time. After some general inquiries, we asked:—

"Does the electropoise produce electricity?"

"If it does, we have never been able to discover it."

"How, then, does it operate?"

"It acts by induction, as explained in the pamphlet of instruction which accompanies each instrument."

"Is this electropoise the same as that sold at Nashville, Tennessee?"

"Yes; we all get them from the same place, Birmingham, Alabama."

"Is it the same instrument as that invented and made by Dr. Sanche?"

"Yes [laughing]; he did n't know how to explain his instrument; he went to Washington and tried to get it patented, but he could n't. They thought him a crank. After awhile he was taken sick, and when he thought he was going to die, he made an assignment of his interest in the electropoise to his secretary, Mr. Webb. Mr. Webb is a very smart man, a *very* smart man [nodding the head significantly], and he finally succeeded in getting it patented. Dr. Sanche got well, and is now very angry because Webb is doing so well with the electropoise, and he is left out in the cold. Here is a little book that we sell with the instrument which explains all we know about it."

"Can you loan me the book for a few days?"

"Yes, if you will return it. This little book explains all about it."

We had a copy made of the little book, and returned it as agreed. We shall perhaps have oc-

casion hereafter to quote some of the interesting things which the "little book" says about the electropoise.

The reader will readily see by the above, that the electropoise now in the market is the same article as that which was advertised by Dr. Sanche, which we so thoroughly exposed a year or two ago, only it is now made and sold by Mr. Webb, Dr. Sanche's "secretary," while the poor old "doctor" is left out in the cold. More than one instance has occurred in which robbers have quarreled over their booty, with the result that the robber himself has sometimes been robbed of his ill-gotten gains, so we shall waste no sympathy on Doctor (?) Sanche, although evidently his shrewd secretary took advantage of the old gentleman's mental enfeeblement resulting from his disease, to forward his own personal interests. How unfortunate that the doctor forgot to utilize his powerful electropoise which cures, according to the little book above referred to, everything from "apoplexy" to "worms!" Possibly his wicked secretary substituted a wooden dummy in place of the real instrument, so that the patient was not properly "electropoised." This thing certainly looks bad for Webb.

There is another thing which would certainly suggest that there is some ancient thing secreted in Denmark about this business.

Dr. Sanche, the original inventor, knew all about the thing, from the tiny and timid infantile electropoise, which only ventured to cure corns and ingrowing toe-nails, up to the stalwart adult electropoise, which is recommended for the cure of inebriety, cancer, consumption, gall-stones, whooping-cough, and snake-bite. How did Webb succeed in getting a patent when Sanche could not? By what sort of reasoning did he persuade himself that he could take a solemn oath that he was the inventor of the electropoise, when well knowing that the name of the instrument and every essential feature of it was an invention of Dr. Sanche, as recognized in his own



pamphlet, in which he says that the instrument is the result of a life-study and a long series of experiments by a physician (Dr. Sanche)? Webb is not a physician, and he admits that the instrument of which he claims to be the inventor and patentee, was discovered or invented by somebody else. This is exactly what we should expect of a man who is palming off upon the public a worthless trinket consisting of nothing more than a hollow piece of metal filled with charcoal and sulphur, or sulphur and black lead, attached to another piece of metal by a copper wire.

We have still more convincing evidence of the shameless character of the fraud practiced upon the

public by the manufacturers of the electropoise; but we will not devote more space to this subject at present. Meantime we will patiently wait for the "swift" retribution which these people threaten to bring down upon our head. Probably the prevalence of *la grippe* in Nashville and elsewhere, has kept them so busy in making their bank deposits, that they have not had time to answer our charges against them. When the epidemic subsides, they will doubtless roll up their sleeves and attack us without mercy. Meanwhile, we will reserve for the future a few more interesting facts which we are prepared to publish about this business.

### THE ELECTROPOISE SWINDLERS GETTING FRIGHTENED.

SOME time ago the following notice appeared in a Nashville, Tenn., newspaper, and was kindly sent to us by some friend who knows of our work in exposing the fraudulent business of the manufacturers of this worthless toy:—

"THE ELECTROPOISE.

"*To Our Friends Everywhere:—*

"Owing to the fact that certain articles have appeared from time to time in public print with the evident intention of injuring us and doing detriment to the Electropoise, we have seen fit to announce that for the present they must pass unnoticed by us, because our business has been and is so large that all of our time is consumed in attending to the same. But we beg to state that in a short while we will so arrange matters as to be able to pay our respects to these unjust attacks and the party or parties who indited them, and the friends of the Electropoise everywhere may rest assured that the vindication of the just claims of the merits of the Electropoise will be swift and overwhelming, and its defamers put to open shame and silence in a manner that will more than compensate for any delay that may have been occasioned by the causes cited above.

"Very truly,

"DU BOIS & WEBB,

"*For the Electrolibration Co.*"

Since the appearance of the above, we have, as the reader may imagine, been not a little disturbed. Living in momentary expectation that something "swift and overwhelming," and "open shame and silence" might come down upon us like a Florida buzzard upon a dead 'possum, might well put a man into a state of terror and nervous exhaustion. We will not tell the reader how much we have suffered during these weeks of anxiety; suffice it to say, that for weeks we have not known what it was to have a

good night's rest. A raging fever has preyed upon us day and night for weeks in succession. Our strength has wasted until we were scarcely able to drag about our emaciated form, and we are still on the ragged edge of expectancy. But the great "Electrolibration Co." has mercifully spared us thus far; and to tell the truth, if it had not been for a pretty severe attack of *la grippe*, followed by two severe relapses, we should be to-day in our usual health. It is really very amusing to see how the "short while" lengthens out from days to weeks, although we have not missed any opportunity of denouncing in the very strongest terms the motives and the methods of men who will adopt such shameful means of robbing the pockets of the public.

We know of no form of dishonesty which reaches a lower depth of depravity than that which takes advantage of the helpless anxiety of a sick man, to fleece him of what may be the last remnant of his scanty savings which might, if judiciously employed, procure him some few comforts, if not a complete restoration to health; but when invested in such an absolutely inert and worthless trinket as an electropoise, serves no other purpose than to line the pockets of men, the nature of whose business places them fairly on the level of the footpad, the safe-blower, or the highway robber. Criminals of the sort last named, exhibit qualities of bravery and daring which one is sometimes compelled to admire, notwithstanding the nefarious purpose which has led to their exhibition; but the manufacturer and seller of a sham cure-all like the electropoise, is comparable only to the sneak-thief who gets access to one's dwelling under the guise of a Bible distributor or a city missionary, or the confidence man who makes love to an unsophisticated maiden only to secure an opportunity to rob her jewel-case.

# GOOD HEALTH

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

BATTLE CREEK, MICHIGAN.

## AMERICAN FEAR OF DRAFTS.

THE average American hives himself up in such a torrid temperature in cold weather, that the moment he is out doors he appreciates cold to its fullest intensity, and finds himself exceedingly susceptible to the assaults of Boreas. With the Englishman this is not true. The average temperature of the English house in winter is not above  $60^{\circ}$ ; we have found this to be true of the hospitals as well as of the private houses, even in the great "Consumption Hospital" at Brompton, where the invalids, many of them pale and emaciated, were wandering about in thinnest white cotton garments. The temperature of the ward was never above  $58^{\circ}$  or  $60^{\circ}$ , yet no one complained of discomfort, neither was there any evidence that any person was in the slightest degree inconvenienced by the temperature, which to a similar class of invalids in this country would be considered almost deadly. It is not an uncommon practice for Americans, especially invalids, to keep their rooms in winter time at a temperature of  $78^{\circ}$  to  $80^{\circ}$ , and we have not infrequently found the thermometer to indicate  $85^{\circ}$  to  $90^{\circ}$  in the room of an invalid to whom we are very sure a lower temperature would be absolutely intolerable; so high a temperature in the summer time would be pronounced "roasting." The dryness of the air, of course, renders a high temperature more tolerable in cold weather, if one chooses to subject himself to it; but this cold weather oven-baking, to which so many Americans subject themselves, has the effect of rendering them exceedingly susceptible to colds, which are contracted

as the result of exposure to even slight changes of temperature, and drafts of air by which some part of the body is chilled, and to the weather changes against which even the predictions of the weather clerk do not always render adequate protection possible.

The Englishman, accustomed to a lower temperature, finds himself thereby to a very considerable degree protected from a large class of the petty ailments of which many Americans constantly complain, and which render the lives of not a few almost inconceivably wretched. The proverbial American fear of drafts is coming to be much talked and laughed about by our cousins across the Atlantic. Just now, a ridiculous, but, to say the least, very impressive joke intended to satirize this particular feature of the American temperament, is going the rounds of the American papers. This story relates to a certain Yankee who died, requesting on his deathbed that he should be cremated. Accordingly, soon after his death, his friends proceeded to carry out his request. After suitable preparations, his body was placed in the crematory, and the door was closed. After the fierce, consuming flames had continued their work for a half hour or more, one of the company ventured to open the door to observe how the combustion was progressing. According to the account, for the varacity of which we cannot vouch, however, no sooner was the door opened than the defunct Yankee sat up amid the flames, stark, blue, and shivering, and exclaimed, "Please shut that door! You know very well I never could stand a draft!"

**CELIBACY IN THIBET.**—In Thibet, the majority of males are consecrated to Buddha, which requires them to become celibates. There is also a corresponding class among women who devote themselves to single-blessedness. The consequence is that there

is a decrease in the population of this country, and many families are becoming extinct. The Chinese are taking advantage of this fact, to encroach upon the country and occupy it as fast as allowed by the decrease in the native inhabitants.

## DANGER IN FONDLING PET ANIMALS.

Under the heading, "Beast to Beast," the *Medical Journal* calls attention to the danger of contracting the serious diseases, diphtheria and hydatid, the former from catching pigeons, and the latter from dogs, by the habit which many have of kissing these animals, when fondling them as pets. The writer has not infrequently seen an aristocratic lady whose exquisite toilet indicated that she doubtless belonged to some wealthy family, complacently allowing her cheeks and even mouth to be rubbed by the nose and licked by the tongue of a lap-dog that was treated with all the gentleness and caressed with all the fondness which the tenderest mother would manifest toward an infant. The good woman was doubtless in blissful ignorance of the fact that her canine fondling might, at every lap of his little tongue, be planting upon her face and lips the eggs of a hideous parasite which might thence be easily transferred to her interior, and there, after hatching out and developing to a higher stage, work their way into the liver, lungs, and muscles, even to the brain, and there form cysts and sacks which in time might develop to such prodigious size as to result in dropsy and even in death.

Pet cats are now recognized by skin specialists as being a common source of ringworm and favus, two very obstinate and loathsome parasitic diseases of the skin. Favus is supposed to originate in mice. Cats, in catching mice, themselves catch the disease, and communicate it to those who fondle them.

In times when diphtheria and scarlet fever are prevailing, the house-cat must be regarded as a constant source of danger. Cats not infrequently make visits

to other families, neighbors, with the children of whom it has become acquainted, or perhaps makes a social cat-call upon some neighboring cat; and in case the house visited is infected with diphtheria or scarlet fever, there is necessarily an exposure of the animal to the disease. Cases have occurred in which the origin of a fatal attack of scarlet fever or diphtheria could be directly traced to the family cat, as the means by which the contagion was conveyed from the infected family to the little ones of a household, which, in careful seclusion and fancied security, was thus taken unawares by the dreaded malady.

House-dogs may be also regarded as in no small degree dangerous. The habit of dogs wandering about the neighborhood visiting other dogs, and engaging now and then in combat with other belligerent canines, exposes the household constantly to the invasion of microbes of a dangerous character. Dogs are not by any means very cleanly in their dietetic habits; it is not an uncommon thing to see even a well-bred dog dragging home a bone with a mass of carrion attached, in which germs of many sorts are holding high carnival. It is doubtful whether pets of any sort, especially household pets belonging to the brute creation, should be tolerated, unless kept caged. If a watch-dog is considered necessary or desirable, the animal should be housed out of doors, and should never be admitted to terms of too great familiarity with members of the family. Many a child has lost its life through infection from a kitten or some other household pet. This is by no means a mere matter of scientific sentimentality, but one to which parents should give serious attention.

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 TOBACCO USING AND PHYSICAL DEVELOPMENT.

WE quote the following from the *Bacteriological World and Modern Medicine*:—

"Dr. Jay W. Seaver, medical director of the Yale gymnasium, and professor of physical culture in Yale University, has been making a careful study during the last eight years, of the influence of tobacco upon development. His statistics show that non-smokers are 20 per cent taller than smokers, 25 per cent heavier, with a lung capacity 66 per cent greater. These figures are wonderfully significant, especially the last. A man who has a lung capacity two thirds greater than that of another man has an immense physical advantage. His prospects for long life are greater, and his physical efficiency

will be certainly as much greater as his breathing capacity. A man with small lung capacity is like a furnace with a small draft. All his vital activities must be inferior to those of a man of greater lung capacity.

"Similar observations have been made at Amherst College, with like results. In a recent graduating class, the non-smokers were found to have gained in weight over the smokers nearly one fourth. The non-smokers surpassed the smokers by a gain in height of 37 per cent, in chest circumference 42 per cent, and lung capacity 8.36 cubic inches.

"*Science* recently published the results of an experimental inquiry into the condition of thirty-eight

boys of all classes of society, of average health, who had used tobacco for different periods, ranging from two months to two years. Of the thirty-eight, twenty-seven showed severe constitutional injury and stunted growth. In thirty-two there were irregularities of the heart action, stomach disorders, cough, and a craving for alcoholic liquors. Thirteen had intermittent pulse, and one had consumption. All were induced to discontinue the use of tobacco, and as a result, in six months one half were free from their former symptoms, and by the end of the year the entire number had recovered, thanks to nature's recuperative forces. Suppose these young men had continued the use of tobacco for a series of years longer; the disorders which were so clearly defined would have become more or less permanent, and the return to health after a discontinuance of the drug

would not have been so speedy and complete. Hundreds of thousands of persons are living in a state of chronic poisoning from the use of tobacco. Their vital powers are depressed to such an extent that their physical, mental, and perhaps moral efficiency are vastly inferior to what they might be without the depressing influence of this toxic incubus.

"The evidence of these statistics is overwhelmingly convincing, and ought to set every intelligent young man who is beginning to patronize the pipe or cigar, to thinking earnestly whether he can afford to subject himself during the best part of his life to chronic nicotine-poisoning. Physicians might do more than any other class of men to eradicate the enormous evil of tobacco-using, if they would discountenance its use by precept and example."

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KILLED BY CHRISTIAN SCIENCE.—Burlington, Iowa, has recently waked up to the mischievous consequences of trusting to a vague mysticism like "Christian Science" for the cure of grave disease. According to the *New York World*, several cases of death have recently occurred as the result of the "Christian Science" craze in that city, and the authorities have determined to take the matter in hand, as will be seen by the following, quoted from the *World*:—

"The coroner's jury, called to investigate the death of Clarence Lay, under Christian Science treatment, returned a verdict of gross neglect, severely censuring the parents, denouncing the 'science' as a dangerous fallacy, and ordering the coroner to begin suit against Miss Vanderwater, the local 'healer.'"

A number of cases have come to our knowledge, in which persons have died as the result of trusting to Christian Science. A lady who was suffering from violent hemorrhages placed herself in the hands of one of these so-called "healers," who assured her that the hemorrhage was nothing more than a morbid idea, and that it would cease at once if she would cease to think of it; and she accordingly dismissed the matter from her mind, and put her trust in Christian Science, and as the result, at the end of three or four weeks was so nearly dead that her friends then decided to bring her to the Sanitarium, but were barely able to get her here alive, and were obliged to take her back in a coffin.

Persons suffering from simple functional ailments, or from diseases which are chiefly the result of a morbid imagination—and there are thousands of such—are often cured by "mind cure," "Christain Science," "metaphysical healing," "faith healing,"

etc. It is this class of cases which furnishes the remarkable success which now and then attends the employment of this mental medicine, and which furnishes the foundation for the "crazes" which now and then prevail in communities where this delusive system is introduced. But the cures wrought by mind cure in its different phases are no more remarkable than those which the voodoo doctor of Africa accomplishes by his mystical incantations and prayers to his fetich. We have met many persons who claimed to have been cured of some disease by mind-cure doctors; but we have seen a still larger number cured by patent medicines which were without medical potency, or by means of bread pills, or the most attenuated of homœopathic dilutions. The influence of the mind in the cure of disease is not a new idea either to the medical profession or the lay public. The mind-cure doctors owe their success to this principle which they have dressed up with a new garb, and surrounded with a mass of fantastic mysticism which they denominate "metaphysics," although the real mental pabulum with which the teachers feed their pupils and the worse than senseless twaddle with which their books are filled, are no more like real metaphysics than the turbid water of a mud-puddle is like the crystal drops which trickle from the iceberg.

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FATY HEART.—The tendency to obesity which often results from sedentary habits and excessive eating, and especially from the excessive use of fat and saccharine food substances, is attended by greater dangers than are generally understood by the public. A careful study of the relation of obesity to heart disease by Prof. Kisch has shown that sudden death

in these cases is frequently due to fatty degeneration of the heart, the exciting cause being a heavy meal, some violent mental emotion, inflammation of the lungs, or allied causes. In a case where marked irregularity of the pulse exists in connection with obesity, especially when the pulse is slow, and in which there are occasional attacks of pain in the region of the heart, there is danger of instant death at almost any time, whenever the existing morbid conditions may happen to be aggravated by some of the causes referred to.

EFFECTS OF ALCOHOL ON PLANTS.—A plant watered with alcohol soon dies; its leaves quickly begin to turn yellow, fall off, and leave the plant dead—poisoned. When used in small quantities, the poisonous qualities of alcohol are indicated by the lessening of the vital activities of the plant, hindering its development. Dr. Ridge, an eminent English physician, found that the germination of seed was prevented by alcohol, and that even in quantities proportioned so small as  $\frac{1}{4}$ –1 per cent, when applied to the roots of plants, it hindered growth and the production of chlorophyl.

ALCOHOL AND BRAIN WORK.—It is a general impression that alcohol produces temporary ability for increased activity. Dr. Lauder Brunton asserts that “the influence of alcohol upon psychical processes is curious, for while it renders them much slower, the individual under its influence believes them to be much quicker than usual.” The same fact is true of all stimulants. They give the individual the impression of greater vigor and strength, but this is simply a deception. Truly “wine is a mocker.”

MIND-WANDERING.—This very common disorder is responsible for much of the mental weakness, lack of memory, and general intellectual inefficiency which is observable in old and young. Dr. Guye, of Amsterdam, has recently called attention to the fact that this condition is, in children, associated with mouth-breathing and snoring, which, as is well known, are the result of disease of the nose and upper air passages. Dr. Guye, as well as Drs. Fox and Hill, of England, has observed that feebleness of memory and a tendency to headache are also associated with these cases; and Dr. Hill observed in the Earlswood Asylum for Idiots, that nearly all the children are mouth-breathers and night-snorers, suffering from obstruction of the nasal passages. All of them were afflicted with mind-wandering.

Dr. Guye has given the name “aproxesia” to the mental condition in which there is inability to fix the attention upon abstract subjects. The ultimate results of mind-wandering are often exceedingly grave, involving such modifications of character and deterioration of original intellectual capacity as not infrequently destroy an individual’s capacity for usefulness.

This is certainly a matter to which parents and teachers should give their attention. If a child is found to breathe through the mouth habitually, and snores loudly when asleep, sleeping with the mouth open, medical advice should be sought, and proper means for relief applied. If a child shows lack of intellectual vigor or development, attention should be given to the child’s mode of breathing both when awake and asleep.

AN APOLOGY.—We have taken such scrupulous care to avoid personalities of every description in conducting this journal, that during nearly twenty years of our editorial work in connection with it, we have never been called upon to make any personal apology. However, we now find ourselves convicted of an inadvertent misrepresentation in the November number of GOOD HEALTH, and are ready to make an ample apology therefor. In the number referred to, we published an article entitled, “Burned their Corsets,” in which, relying upon the correctness of an article published in the *New York World*, we quoted and commented upon that article, describing a graphic scene which was said to have occurred at a Free Methodist camp-meeting held at Sydenham, Ont. Whether this scene occurred at any camp-meeting or not, or whether the statement is in any respect correct or not, we cannot say; but our friend, Rev. James Craig, a Free Methodist minister of Ontario, assures us in a letter received from him, that there are no Free Methodists at Sydenham, and that no Free Methodist camp-meeting has ever been held there, and, furthermore, that no such scene as described, ever to his knowledge occurred at any Free Methodist camp-meeting.

Mr. Craig also takes us to task for our remarks with reference to the unseemly excitement prevalent at Free Methodist camp-meetings, in which he makes us wholly in error. We are frank to admit that we have never attended a Free Methodist camp-meeting, and, in respect to the methods of conducting such meetings, have depended wholly upon information received from others, and which, it appears, was incorrect. We gladly make this apology for an inadvertent misrepresentation.



**FOR NIGHT-SWEATS.**—An eminent German physician recommends for the relief of night-sweats of consumptives, an ice-bag placed over the stomach. Patients bear the treatment well, and it is recommended by Prof. Rosenbach to be superior to any medicinal agent for the purpose named.

**FOR HICCOUGH.**—Hiccough can generally be stopped by taking a teaspoonful of sugar dissolved in strong vinegar. In obstinate cases in which other remedies fail, chloroform may be used, ten or fifteen drops at a dose, taken in a little sweetened water and repeated at an interval of fifteen or twenty minutes until three or four doses have been taken, if relief is not obtained sooner.

**ONE OR TWO IN A BED?**—Persons often ask: "Is it healthful for two persons to sleep in the same bed?" This same question is varied thus: "Is it healthful for an aged and a very young person to sleep together? If not, which suffers most, the aged or the young person?" We have always answered these questions by saying No to the first question. It is always unhealthful for two persons to sleep together in the same bed and under the same covers. The air under the bed-covers immediately surrounding the body of the sleeper is exceedingly impure, becoming more and more impregnated with poisonous substances escaping through the excretory glands of the skin, from the moment the person retires until he arises. The odor of the bed-clothing, after having been occupied for a night, is often positively offensive to the nostrils of a person with an unimpaired sense of smell,—especially one who has just come in from outdoors, where the fresh, pure air has been breathed.

The poisonous character of this under-the-bed-clothes air would be somewhat more likely to affect the susceptible constitution of a child than that of an

adult. In elderly persons, the amount of the impurities in the air surrounding the sleeper, must be greater than in young persons, consequently, while both persons would be more or less injured, the proportion of harm would doubtless be greater to the young person than to the person of more advanced years. Mr. Treves, of the great London hospital (London, England), has recently called attention to the fact that wounds, especially of the lower limbs, heal much sooner when kept exposed to the open air, instead of being covered by bed-clothing. He remarks that the air under the bed-clothing is foul and almost hot, and hence likely to be very harmful to wounds with which it may come in contact. This seems to be a very ample demonstration of the correctness of the views above expressed, and to which we have before often given expression.

**SKIN GRAFTING.**—The process of skin grafting, although for a score of years considered one of the most marvelous of recent advances in surgery, is now quite generally known even among the laity. It consists simply in covering any surface which has been denuded of skin with small bits of healthy skin furnished by the patient, or by some other person. Only the minutest particles of skin are required, and it is not necessary that the whole thickness of the skin should be included in the small fragments, termed "grafts," which are employed. Recent experiments have shown that the skin of a frog answers as well as human skin. Of course great pains should be taken that the skin of the animal used be thoroughly disinfected, although the germicidal solution should not be of sufficient strength to destroy the vitality of the skin. It is well to keep this fact in mind, as the healing of large surfaces which have been denuded by destruction of the skin through contact with fire or some caustic solution, is sometimes an exceedingly tedious process.

ANTIDOTE FOR VIPER WOUNDS.—According to the *Journal D' Hygiene*, Dr. Kauffman, Professor in the veterinary school of Alfort, near Paris, recently obtained a prize from the Academy of Medicine for a memoir upon viper poisons. The learned naturalist states that chromic acid is a sovereign remedy in cases of poisoning by the viper. According to his experiments, the acid must be introduced into the wound. It should be employed in a one-per-cent solution. When used in this proportion, no caustic effect upon the tissues is observed. The remedy has been tried with success.—*Bacteriological World and Modern Medicine*.

CHRONIC SORE EYES.—Chronic sore eyes, accompanied by thickening and redness of the lining membrane of the eyelids, more particularly termed chronic granular conjunctivitis, is one of the most frequent of all disorders of the eye, and has been considered one of the most difficult to cure. It is also a disease which not infrequently gives rise to complete destruction of the eye-sight. The old method of treating cases of this sort, with strong irritating lotions, or by rubbing the granulations with "blue stone," are little employed at the present time by scientific oculists. It has been found that the disease may be successfully treated by other much more speedy and satisfactory means. These measures, however, are such as can be employed only by skillful oculists, hence are not practicable for popular use. Any person suffering from granular lids should not delay giving attention to the matter at the earliest possible moment, as the sight is not infrequently irreparably injured by delay.

ACNE.—Acne, a form of skin disease in which small pimples appear upon the affected part, is a very common affection of the face, and it sometimes appears upon the chest and other parts of the body. The writer has sometimes seen cases in which not only the face but the chest and back were thickly covered with red pimples and blotches producing a most unsightly appearance. Simple local treatment of this disease is insufficient to effect a cure. Dr. Barthelmy, an eminent French specialist, believes that acne of the face and chest is always due to chronic dyspepsia, with dilatation of the stomach, and insists that the skin disease cannot be cured without first removing the digestive disorders. Dr. Barthelmy found dilatation of the stomach in 165 out of 169 cases of acne. Dr. Barthelmy's theory is that indigestion results in the formation of poisonous substances which irritate the fat glands of the

skin and cause them to produce an abnormal amount of secretion, in consequence of which the duct becomes obstructed, resulting in irritation and the production of acne.

Acne is directly caused by germs. Simple acne is produced by a germ named acnogene, which is found upon the surface of the skin. This germ finds, in the accumulated fat in the obstructed gland, just the sort of food it requires for vigorous growth, and extends from one sebaceous, or fatty, gland to another. It will thus readily be seen that the disease is in a true sense contagious. Other germs, especially those which give rise to the formation of pus, must often, according to Gilbert, be associated with the acnogene microbe, thus complicating the disease with suppuration.

In the treatment of this disease it is necessary, first, to correct the digestive disorder; and, secondly, to destroy the microbes which are its immediate cause. Solutions of carbolic acid, salicylic acid, saturated solutions of camphor or tannin in ether, and similar germicides are useful as local applications. When there is much redness and irritation of the surrounding skin, a powder consisting of equal parts of oxide of zinc and starch may be advantageously applied after the use of the germicide lotions.

HEADACHE CURED BY MASSAGE.—We quote the following from the *Bacteriological World and Modern Medicine*: "Massage of the head is one of the very best remedies for certain forms of headache. Headache affecting the back part of the head, is particularly amenable to this mode of treatment. In some cases of chronic headache which are persistent, and resist all other methods of treatment, there will be found to be certain points at which the tissues are thickened and indurated, chiefly located about the base of the skull, sometimes midway between the skull and the *vertebræ prominens*. Careful manipulation of the affected parts, giving particular attention to the nodosities, should any exist, is one of the best means of relieving occipital and various forms of persistent headache.

"In applying massage to the head, the fingers should not be allowed to slip over the surface of the scalp, but they should be pressed firmly upon the surface, so that the whole scalp will be moved, down to the bone. By this means the rigidity of the subcutaneous tissues, which is frequently found in these cases, will be overcome, and as the tissues become more pliable, the headache will disappear. We have often secured relief from a persistent headache by this means, within fifteen or twenty minutes."

**COLD WATER IN DYSENTERY.**—Dr. H. C. Wood calls attention to the value of a large enema of cold water in the treatment of dysentery. We have made use of this valuable remedy for the last fifteen or sixteen years, and with excellent success in many cases. In some instances we find the use of hot water preferable. Our practice is to employ hot water first, as the best means of cleansing the diseased surface. If this does not give prompt relief, cold water, or even ice water, is employed in as large a quantity as the patient can readily retain. This remedy is especially valuable when the disease is located in the lower part of the colon. Dr. Wood sometimes employs ice suppositories, which he introduces in rapid succession, usually one every three to five minutes until eight or ten have been introduced. — *Bacteriological World and Modern Medicine.*

**SPEAKING WITHOUT A LARYNX.**—The following is from the *Bacteriological World and Modern Medicine* for December: "At a meeting of the Royal Society of Physicians, at Vienna, an interesting discussion recently occurred respecting the existence of the function of voice without a larynx. A man was present from whom the entire larynx and part of the œsophagus had been removed for carcinoma. He was able to speak very well by the aid of an artificial larynx. Schroetter related a case in which, after removal of the larynx, there was a sort of reproduction of the vocal cords, or, rather, a production of folds of mucous membrane which served the purpose of vocal cords sufficiently to enable the patient to speak. Schroetter and Stoerk also reported each a still more remarkable case, in which not only the larynx but a considerable part of the pharynx was removed, so that there was no communication whatever between the mouth and the trachea, the patient breathing by means of a tube placed in the trachea. These patients were able to talk, notwithstanding. Schroetter thinks that in these cases a sufficient amount of air may be forced out from the stomach and œsophagus to enable the organs of voice and the mouth to form words."

**UNFERMENTED BREADS FOR DYSPEPTICS.**—We quote the following from the *Bacteriological World and Modern Medicine*: "The inability of dyspeptics to digest bread, so frequently observed, is often wrongly attributed to an incompatibility of farinaceous substances with this disease. As a rule, farinaceous substances are particularly wholesome for the majority of the subjects of dyspepsia. The dilated stomach is unable to deal successfully with food

substances which require much disintegration, and which require long digestion in the stomach. Farinaceous foods are readily disintegrated in the stomach, and quickly reduced to a state proper for admission to the small intestine, where their digestion is chiefly performed.

"The reason for the disagreement of breads with dyspeptics has been clearly pointed out by Bouchard, Dujardin-Beaumetz, and others. It is not that the bread contains starch, but that it contains microbes capable of converting starch into a variety of irritating acids and other poisonous products. Speaking of the use of fermented bread by dyspeptics, especially those with dilated stomachs, Bouchard remarks:—

"In the use of bread, the crust alone should be permitted, or the toasted crumbs. The reason for this is that the baking of the bread has interrupted the fermentation of the dough, but has not permanently arrested it; so that fermentation begins again as soon as warmth and moisture present the favorable conditions. In torried bread (zwieback) fermentation is, on the contrary, permanently arrested."

**NUTRITIVE ENEMATA.**—The value of a nutritive enema when suitably prepared and administered, is probably not so well appreciated by the general public as it ought to be. Doubtless thousands of persons have been allowed to starve to death, as the result of ignorance of this important means of alimentation. The fact that the introduction of food into the lower part of the alimentary canal, is a means by which the nutrition of the body may be maintained, has been known to physiologists for many years. Many experiments have been made for the purpose of determining the best method of preparing food to be thus used. Meat juices, beef tea, pulverized pancreas, peptonized beef, and various other similar preparations have been used for this purpose, but, according to Huber of Zurich, the best food substance for use by enemata, is raw egg, with the addition of common salt in the proportion of fifteen grains of salt to each egg. The purpose of salt is to facilitate the absorption of albumin. Two or three eggs are the proper quantity for use at one time. After the addition of the salt, the eggs should be thoroughly beaten, and then the enemata should be slowly injected by means of a soft rectal tube carried as high up in the bowels as possible. Three or four such enemata should be used daily. An hour before administering the enema, the bowels should be emptied by means of a water enema. Care should be taken that all the water passes off.



## ANSWERS TO CORRESPONDENTS.

PEROXIDE OF HYDROGEN—TAKING COLD—T. P. R., Tennessee, asks, "Do you think Marchand's Peroxide of Hydrogen beneficial in that class of catarrhal troubles affecting the lungs?" This correspondent complains that she takes cold upon the most trifling exposure, and wishes to know whether there is any help for it.

*Ans.*—Yes, this is an excellent remedy when used according to directions, in all forms of colds, but of course is not a panacea. Persons who are subject to colds should employ such means as will harden the system and overcome the susceptibility to taking cold. Daily baths is one of the best means of accomplishing this. A simple dietary and keeping the stomach and bowels in good condition is another means of importance.

BAKING-POWDER, ETC.—H. D. J., Missouri, wants to know the purest brand of baking-powder made. He also asks for the quantity (in pounds) when bicarbonate of soda and cream of tartar exactly neutralize each other.

*Ans.*—The only agents efficient for the raising of bread, which we can thoroughly recommend, are cold water and egg albumin. Cold water alone is sufficient, if properly combined with any of the ordinary bread-making materials, to make light, wholesome, and very toothsome bread; but if something better is desired, the addition of the white of egg beaten to a stiff froth, to the batter properly prepared, will secure as great a degree of lightness as could possibly be desired. Full directions respecting the making of unleavened bread will be found in Mrs. Kellogg's work, "Science in the Kitchen," now nearly through the press. There are no chemical baking-powders which are fit to enter the human stomach.

PRESSURE AND BURNING IN SIDE—COATED TONGUE, ETC.—F. J. M., Cal., has a pressure and burning sensation, accompanied with pain, extending from right side of back, just above the hip, through the body; is unable to lie on that side. This trouble has lasted for between one and two years. Has considerable headache, and tongue has a burnt, seared feeling, with streaks of coating around the point and edges. Would like to know what the trouble is, and what treatment it is best to pursue.

*Ans.*—The pain in the side may be the result of any one of a considerable number of causes. Which

particular cause is active in this case, we have no means of knowing. The symptoms presented by the tongue suggest the possibility that the case may be one of extreme disturbance of digestion. However, this is merely conjecture; and in view of the insufficiency of *data*, we do not feel justified in making a prescription. We would recommend the patient to consult in person some thoroughly reliable physician.

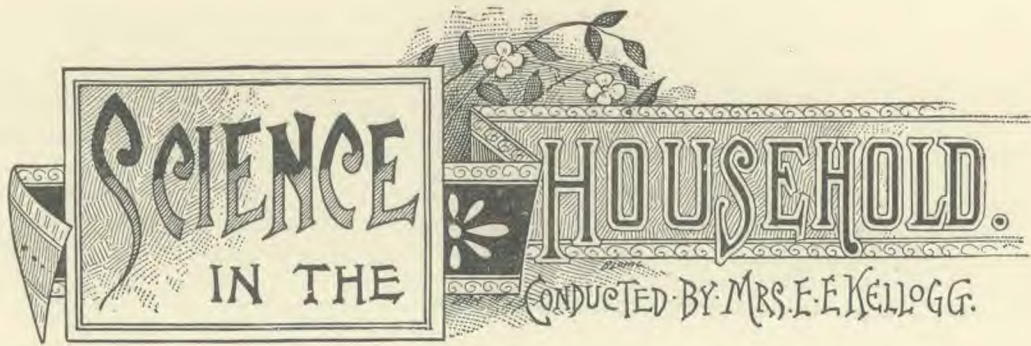
NEURALGIC HEADACHE.—A lady correspondent, Kansas, inquires, "Is there any cure for a neuralgic headache?" and asks for suggestions as to treatment.

*Ans.*—Yes; the patient is probably suffering from what is known as nervous headache, or migraine. The characteristic of this form of headache is that it usually attacks but one side of the head, or at any rate usually begins upon one side, gradually extending to the other side, or to the whole head when a larger area is involved. Observation of this disease for a good many years has convinced us that the real cause is disorder of the stomach, and recent observations made by physicians in this country and Europe have confirmed us in this opinion. There is found in the majority of cases of this sort, dilatation and prolapse of the stomach, and an irritable condition of the sympathetic nerves of the abdomen. In the study of some scores of cases of this sort, we have found almost invariably a sensitive condition at a point two inches to the right or left of the umbilicus on the side corresponding to that upon which the headache most frequently occurs.

The treatment consists of a careful regulation of diet; it should be as simple as possible, consisting chiefly of milk, with a moderate allowance of fruit and grains, no meats, butter, cheese, condiments, or rich or indigestible foods. For temporary relief, flannels wrung out of hot water, or rubber bottles filled with hot water applied to the seat of pain, are generally efficient as palliatives. In many cases, an inactive state of the bowels exists, which requires the employment of large enemata or coloclusters every day, or every other day. The latter measure is an excellent means of preventing a recurrence of an attack. This is a palliative measure only, and more radical means must be employed for permanent relief.

WHEN TO DRINK.—A correspondent asks, "Which is the more healthful, to drink before, or after meals?"

*Ans.*—Dyspeptics should drink an hour before meals.



### SOME SEASONABLE DESSERTS.

**DATE PUDDING.**—Turn a cup of hot milk over two cups of stale bread crumbs, and soak until softened; add one half cup of cream and one cup of chopped and stoned dates. Mix all thoroughly together. Put in a china dish and steam for three hours. Serve hot with lemon sauce.

**LEMON PUDDING SAUCE.**—Heat to boiling in a double boiler a pint of water in which are two slices of lemon, and stir into it a dessertspoonful of cornstarch; cook four or five minutes, or until it thickens. Squeeze the juice from one large lemon, and mix it with two thirds of a cup of sugar. Add this to the cornstarch mixture, and allow the whole to boil up once, stirring constantly; then take from the fire. Leave in the double boiler, surrounded by the hot water, for ten minutes. Cool to blood heat before serving.

**LOAF CAKE.**—Scald a cup of rather thin cream, and cool to blood heat. Add one and one half cups of warm flour, one half cup of sugar, and one half cake of compressed yeast dissolved in two tablespoonfuls of thin cream, or a gill of liquid yeast. Beat very thoroughly, and let it rise until perfectly light; then add one half cup more of sugar mixed with one half cup of warm flour. Beat well, and set away to rise a second time. When again well risen, add the

whites of three eggs beaten to a stiff froth, one half cup of warm flour, and a little grated lemon rind or two teaspoonfuls of rose-water to flavor. Turn into a brick-loaf bread pan lined with oiled paper, allow it to become perfectly light again, and bake. This cake, like other articles made with yeast, should not be eaten within at least twenty-four hours after baking.

**SQUASH PIE WITHOUT EGGS.**—Bake the squash in the shell; when done, remove with a spoon and mash through a colander. For one pie, take eight tablespoonfuls of the squash, half a cup of sugar, and one and one third cups of boiling milk. Pour the milk slowly over the squash, beating rapidly meanwhile to make the mixture light. Bake in one crust.

**CORNSTARCH FRUIT MOLD.**—Wash, stone, and stew some nice French prunes, add sugar to sweeten, and if there is not an abundance of juice, a little boiling water. For every two thirds cup of the fruit, add a rounded tablespoonful of cornstarch rubbed smooth in a little cold water, and boil three or four minutes. Pour into cups previously wet in cold water, and mold. Serve cold with whipped cream. Other dried or canned fruits, as apricots, peaches, cherries, etc., may be used in place of prunes if preferred.

### HOUSEWIFERY.

THOUGH housekeeping methods have changed, and the area of foresight and good management is more circumscribed than heretofore, the difference between good housewifery and ill remains as marked as ever, and the discomfort ensuing from the latter is as great as it used to be. For the human mind has essentially the properties of a Nasmyth hammer. It can meditate on the grandest problems of life, or worry over the smallest pin-pricks. It can manipu-

late impartially the boulders of historic tragedy or the most fragile little teacup wherein was ever brewed a domestic tempest. Hence, owing to this elasticity,—this power of feeling, irrespective of size,—the annoyances caused by the ill housewifery of to-day are to the full as pungent as when this slipshod management included the week's spoilt baking, or the cask of home-brewed turned sour. Grant that the store closet is of less importance now than in

the days when groceries were ordered for a month's supply, and the week's marketing was the shortest term of storage,—the nearest approach to hand-to-mouth management a good wife allowed herself,—still, the ill housewifery which allows the stores to run short, and so has to send out at the last moment for a screw of sugar or a pound of rice for the day's dinner, is quite as reprehensible as when the result of such carelessness was graver. The sense of scrambling is just as annoying; the absence of forethought is as manifest.

A good housewife needs no mean equipment of faculties, both intellectual and moral; and ill housewifery has the smirch of disgrace belonging to sluttishness and selfishness, to want of consideration for

others, and to want of regard to duty all through her work.

It has become the fashion to vilify housekeeping as beneath the consideration of a fine mind and a heroic temper. It is the "button" beyond which the gifted soul must soar to be worthy of its talents. History belies this high-stepping theory. English women were never grander than they were in the days when they were practical housekeepers and the active rulers of the household—when sex determined function, and that man was most honorable who did his masculine work in the world with most vigor; that woman most lovable who performed her womanly duties with most thoroughness and conscientiousness.—*English Paper.*

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MRS. STOWE'S IDEAS OF HOUSEWORK.—Mrs. Harriet Beecher Stowe, who in her early life was accustomed to do each and every branch of the work of the household with her own hands, thus growing into a most notable housekeeper, in one of her published works thus speaks of housework:—

"A woman cannot work at dressmaking, tailoring, or any other sedentary employment, ten hours a day, year in and out, without enfeebling her constitution, impairing her eyesight, and bringing on a complication of complaints; but she can sweep, cook, wash, and do the duties of a well-ordered house, with modern arrangements, and grow healthier every year. The times in New England when all women did housework a part of every day were the times when all women were healthy. At present, the heritage of vigorous muscles, firm nerves, strong backs, and cheerful physical life has gone from American women, and is taken up by Irish women. A thrifty young man I have lately heard of, married a rosy young Irish girl, quite to the horror of his mother and sisters, but defended himself by the following very conclusive logic: 'If I marry an American girl, I must have an Irish girl to take care of her, and I cannot afford to support both.'"

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HOUSEHOLD BAGS.—An exchange says: "The weekly mending is robbed of half its terrors if you know just where to find all the pieces needed, and do not have to waste valuable time hunting for them. The most satisfactory way of securing this result is to have a goodly supply of bags. Make one of muslin, in which to put all pieces of white goods when you are cutting out garments; another of gingham or calico, in which to keep the pieces of your own and the children's cotton dresses and aprons;

another of heavy linen or ticking, in which to keep pieces of the boys' suits; one of dress lining to hold the pieces of wool dresses; and as many others as you may need, only let each bag be different and suggest what kind of pieces are kept in it. Keep these bags in a convenient closet, and you will soon wonder how you kept house without them."

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SPOTS of rust on knife blades or other bright surfaces may be removed by oiling them with sweet oil, letting it remain on a day or two, and then rubbing with a lump of fresh lime.

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AN exchange describes a pretty and convenient darning basket. It is an ordinary peach basket lined with bright red calico, and has pockets around its sides for holding balls of yarn, a gourd darning, darning needles, etc.

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WALL-POCKETS.—A late household writer gives the following excellent suggestion:—

"Some stout pockets on the closet door make a good place to put cloths of various kinds for washing windows, paint, and floors. When cutting up old garments, bear these pockets in mind. Cotton stocking legs, when cut open, are good for paint and windows, and the best parts of woven underwear for floors and oil-cloths. Old calico serves well for dusters for ordinary use.

"Another pocket for small scraps of muslin or calico is convenient. Often they can be used to remove some daub and then dropped into the stove. Newspapers are also useful, to prevent soiling a table or to wipe up some accidental bit of grease, etc., thus obviating the necessity of using and washing a cloth or towel."

## LITERARY NOTICES

"THE SUPREME PASSIONS OF MAN," by Paul Paquin, M. D. This little work is No. 1 of the Blue Book Series published by the Little Blue Book Co., Battle Creek. In this work of 150 pages the author has given the results of his personal observations and researches, and we confess that in reading the book we have been more than agreeably surprised to find ourselves perfectly in accord with so many of the views of one who has arrived at his conclusions from a standpoint remote from our own, and to a considerable degree upon a different line of reasoning. To say that we indorse every idea expressed in the work would be a statement which would be untrue respecting almost any book which has ever been noticed in these columns; but the purpose and hygienic teaching of the book we thoroughly and heartily indorse, and believe that any one who will read the book with an intelligent desire to find and appropriate every good and true thought—the mental state in which one should hold himself in the perusal of any work which has been written with an honest purpose—can scarcely fail to be benefited thereby.

The author writes of "the passions of the flesh," which he considers as the abnormal outgrowths of natural appetites capable of great stimulation through the influence of physical causes and of control by careful regulation of the physical conditions of life.

That the author is not by any means orthodox in his religious views, the reader may easily discover; but a like fact does not debar any intelligent man from the perusal of numerous works which treat upon scientific questions. The author writes from the standpoint of a scientist, and certainly presents scientific facts the cogency of which must be admitted. That he refers somewhat deprecatingly to the value of religion or Christianity as a reformatory force is unfortunate, both for the book and for the cause which it advocates, but is certainly due, not to the author's opposition to true religion, as we know by personal acquaintance with him, but to the fact that his own observations have been such as to justify the conclusions to which he has arrived. He evidently writes about the Christianity and the religion with which he has been made acquainted by personal contact, and it must be admitted that the conclusions which he draws from the *data* before him are not unjustifiable. It must further be admitted that a mere blind trusting to religion or the aids through which it helps humanity, without a practical utilization of the physical helps which the Creator has given to man, as truly as he has prepared the way of salvation from sin, might result as disastrously as an opposite course. It is the duty of every human being to give attention to those matters which collectively we might term physical means of grace as well as to spiritual means of grace; and he who seeks to attain to the highest state of moral perfection possible to humanity, will certainly fall short of his purpose if he fails to recognize this fact.

We cannot agree with the too sanguine view of the author, that a simple following of hygienic rules, even though every principle of hygiene be lived up

to in a most scrupulous manner, would suffice to bring under absolute and complete control the evil passions and tendencies of humanity. Six thousand years of bad heredity have created such abnormalities and deformities of mind and character, all of which have a real physical basis, that even though a man might pursue such a course as to keep the cells and structures of his body in a condition as good as bequeathed to him by his parents, his standard of character would still be very remote from that of the normal man viewed from an abstract standpoint. In other words, while a great share of the vice, sin, and depravity in the world is a direct outgrowth of bad hygiene, and especially bad diet, after making allowance for all the immorality that originates in bad physical surroundings and conditions, there is still a residuum of wickedness which is the natural result of mental and moral deformities which have been transmitted by heredity. We do not believe in total depravity, nevertheless, there is a certain amount of inherited depravity, which, while mixed with certain elements of good in the character of each individual, is amply sufficient to sink him in perdition, even though it may not be augmented by vices growing out of his own personal neglects to supply conditions favorable for mental and moral rectitude.

A superficial examination of the work might lead a believer in that excellent Bible doctrine, "Righteousness by Faith," to condemn it as pernicious in its purpose; and we can but regret that the author has in numerous instances laid himself widely open to attack from a theological standpoint, and to the adverse criticism of those who, overlooking the excellent purpose of the book, might, in consequence of the theological errors which it contains, be led to content themselves with criticising its faults, and neglecting to mention its many excellent features and its evident good and pure purpose. Some criticisms of the work which have been offered remind us of the story of the old lady who visited the pyramids, and on going home reported that the great monument of Cheops was a failure, as she had found several scratches on its stones, and numerous corners knocked off!

Dr. Paquin's book is certainly not without serious faults, but it contains a great number of good, sound stones, and we cannot possibly see how any candid person can unqualifiedly condemn it. If the reader has no religion, the book will certainly not make him a Christian, but if he follows its teachings, it will make him a purer and better man. If the reader has enough religion to do him any good, he need not be afraid to peruse this volume, and if his Christianity is genuine, he will be certain to assimilate some good truths from it. Any one possessed of so puny a faith that he cannot read Dr. Paquin's book without danger, should be forbidden to peruse the newspapers, should never be allowed to go upon the street or in other public place without a chaperon, and he would probably be safer—if such a person could be safely trusted anywhere—in a monk's cloister or sequestered in some vast wilderness. We hold

## LITERARY NOTICES.

up one hand for the "Little Blue Book," and if the author will modify some expressions upon theological subjects, which we have reason to know do not fairly represent his own views, we will hold up both hands.

J. H. K.

WITH the January number, the *Sanitarian* enters upon its twentieth year as the champion of the art or science of sanitation, and with the purpose, as heretofore, of rendering the subject a popular theme of study and investigation. Two volumes yearly, beginning January and July. \$4 per annum. Address all communications to A. N. Bell, M. D., Brooklyn, N. Y.

THE February number of *Babyhood* has much valuable matter. Among the topics to be discussed are, "Ought Obedience to be Enforced?" "The Tyranny of Whims," "Talking about Children in their Hearing," etc. The "Nursery Helps and Novelties," contains a large number of useful hints regarding "Baby's Corner," "Baby's Bunk," etc. \$2 per year. Babyhood Publishing Co., Beekman St., New York.

"STEPS TO CHRIST," by Mrs. E. G. White; Chicago, Fleming H. Revell Co. Those who are already familiar with the writings of Mrs. White will warmly welcome the latest product of her prolific pen. Although the subject upon which Mrs. White writes is always the same, "Christ and him crucified," the treatment of her theme is always so fresh and striking that the interest of the reader never flags. There are few writers whose productions have been so widely read as have those of Mrs. White. There is a peculiar charm in whatever she writes, which is in part due to the force, beauty, and simplicity of her language, and in part to the fact that the reader is

continually and forcibly impressed that the writer has herself been near enough to the heavenly altar to light her lamp from the eternal fire. However old the subject may be, new and striking thoughts stand out on every page, new light gleams from every paragraph, impressing the appreciative reader almost irresistibly with the thought that the writer's insight has been quickened and her understanding enlightened by that same divine power which indicted the writings of inspired teachers in olden times.

J. H. K.

WE would call attention to a most timely article in the February *Century*, by C. C. Buel, assistant editor, entitled, "The Degradation of a State; or the Charitable Career of the Louisiana Lottery." Mr. Buel goes back to the time when the lottery interests of the country were centered in New York City, and shows that the Louisiana Lottery was established for the benefit of New York gamblers and lottery dealers. This article records the results of a personal investigation into the history, methods, and designs of this notorious institution, and exposes the system of bribery and political corruption by which the franchise was originally obtained, and, it is now feared, is to be extended. The Century Publishing Co., New York.

THAT old and reliable journal, the *American Agriculturist*, celebrated its fiftieth anniversary with the January number. So wide and far-reaching has been the influence of this remarkable monthly, that its entrance upon its second half century is a marked event in the agricultural world. Surely, congratulations are now in order from all its contemporaries, as well as hearty wishes for its continued popularity and success. Address the *American Agriculturist*, 52-54 Lafayette Place, New York City.

## PUBLISHERS' DEPARTMENT.

MR. W. H. Hall, steward of the Sanitarium, reports the finest ice crop ever harvested. Two hundred tons of fine crystal ice from Spring Lake were stored away in the ice-houses of the institution in a single week.

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WE are informed that there has recently been a change in the medical management of the Rural Health Retreat, the Drs. Maxson, from Oakland, California, having taken the place of the former superintendent.

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CHANGE OF ADDRESS.—The Drevet Manufacturing Co., manufacturers of Charles Marchand's medicinal preparations, whose full-page advertisement we publish in this journal, have lately removed their laboratory from 10 West 4th St., bet. Broadway and Mercer St., to 28 Prince St., New York City.

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MRS. ANNIE JENNESS MILLER, the famous lecturer upon dress reform, will deliver a lecture at the Sanitarium, Friday afternoon, February 12, at 3:45. Mrs. Miller has doubtless done more than any other woman in the country for the promotion of the princi-

ples of correct dress among women. She has accomplished what none of her predecessors have done, in awakening an interest in the subject among the aristocratic classes. In other words, she has made dress reform fashionable among fashionable people, and in so doing has accomplished the best thing possible for those members of society who move in humbler spheres, through the good example set them by those to whose dictum they bow in matters pertaining to social and fashionable customs.

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BACK NUMBERS WANTED.—There is such a demand for the back numbers of GOOD HEALTH for 1891, from January to May inclusive, which we cannot supply, as our entire stock of back numbers was burned up last spring, that we have decided to make the following offer: To any person who sends us a complete file of GOOD HEALTH in good order, from January to May, 1891, inclusive, we will send a like number of copies of the journal for 1892. In other words, we will make an even exchange. This offer is not made for an indefinite time, but is good until notice is given to the contrary. In sending the journals they should be securely wrapped in manilla paper, but should not be sealed. The postage required for the five numbers is seven cents.

## PUBLISHERS' DEPARTMENT.

"NEW FACTS ABOUT THE DAKOTAS" is the title of the latest illustrated pamphlet issued by the Chicago, Milwaukee & St. Paul R'y regarding those growing States, whose wonderful crops the past season have attracted the attention of the whole country. It is full of facts of special interest for all not satisfied with their present location. Send to Harry Mercer, Michigan Pass. Agent, 82 Griswold Street, Detroit, Mich., for a copy free of expense.

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DR. ROBERT C. BEEBE, the physician in charge of the Philander Smith Memorial Hospital of Nankin, China, recently spent a few days at the Sanitarium, and gave the patients and the missionary band some very interesting talks respecting his work, and medical missionary work in general, among the Chinese. Dr. Beebe has had a long experience in this field, and has met with most remarkable success in his work. His post is one of the most important in China, being located at the old capital — one of the most influential cities; and the method of work which he has adopted is one of the most powerful factors in the civilization and evangelization of the Chinese. We hope to have the pleasure of meeting the Doctor again, and wish him God-speed in his good work for humanity.

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EVERY mail brings its burden of letters, many of which at this season of the year read as follows:—

*"Publishers of Good Health:—*

*"Inclosed find \$1.00, for which please renew my subscription to GOOD HEALTH for 1892."*

This is the sort of letter which gladdens the heart of the publisher of a periodical. A monthly magazine like GOOD HEALTH cannot be published without the expenditure of many thousands of dollars annually, and the publisher considers himself very fortunate if he receives back an amount equal to that which he expends. A magazine which, like GOOD HEALTH, attacks popular foibles, and advocates unpopular reforms, never pays in cash. The only compensation which anybody receives is the satisfaction of having done something for the advancement of humanity. Every subscriber to the journal is a contributor to its success, hence the publisher is always grateful to receive subscriptions, and especially renewals, which bring to the publisher not only the needed financial support, but something which he values much more — the encouragement of an implied indorsement of his work and the principles which the journal advocates. If you have not yet renewed your subscription for 1892, now is just the time to do it. If you put it off, you will be likely to forget it, so you would better do it at once.

\* \*

THE JAMES WHITE MEMORIAL HOME. — The committee in whose hands has been placed the task of erecting a building for the James White Memorial Home and organizing the work, are making strenuous efforts to secure funds sufficient to begin the erection of the needed buildings this spring. The necessity for a building is very great indeed. So many urgent cases have been brought to the attention of the committee, they have felt to take under their care a considerable number of children. The family at present, including those expected within a few days, numbers about 20, who are cared for in the wooden building which formerly constituted the main building of the Sanitarium, the use of which for a few months has been generously donated by the Sanitarium managers, although they are compelled already to rent a number of buildings to furnish room for their family of patients and helpers — numbering in all about 500 persons.

In a visit to the "Sloyd" room we found the little ones hard at work with saws, planes, files, and various other tools, dexterously working out models which very few adults who had not had a training in the use of tools would be able to reproduce. This form of manual training is one of the interesting features of the Home. The enthusiasm with which the children engage in this work is wonderful, and the results of the manual training which they receive are far-reaching, giving not only marvelously increased ability in the use of the hands, but training the reasoning powers, developing the ability to judge of form, distance, size, etc., and, in fact, stimulating and developing almost every faculty of the mind. The system of instruction in Sloyd also includes training in correct bodily carriage. The left hand is trained as well as the right, so that the child becomes ambidextrous — able to use the left hand as well as the right in whatever he does. A person who has studied thoughtfully the subject of child-training and education, could not witness a more interesting sight than a room full of little folks working at Sloyd.

\* \*

QUESTIONS OFTEN ASKED. — Q. What is Alabastine?

A. Alabastine is a DURABLE coating for walls and ceilings.

Q. Is it the same as calcimine?

A. It is entirely different from all other preparations on the market.

Q. Wherein does it differ from these calcimines on the markets?

A. It is made from a cement that goes through a process of setting on the wall, and grows harder with age.

Q. What are calcimines made from?

A. From whittings, chalks, clays, or other inert powders for a base, and are entirely dependent upon glue to hold them on the wall.

Q. Why do calcimines rub and scale?

A. Because the glue, being animal matter, decays in a short time by exposure to air and moisture, and the binding qualities of the material are then gone.

Q. Does the Alabastine contain any injurious substance?

A. Alabastine has been most carefully tested, and is recommended by leading sanitarians throughout the country, on account of its sanitary nature.

Q. What has the same investigation shown regarding wall-paper?

A. Sanitarians condemn, in strong terms, the use of wall-paper for walls of living rooms, on account of the poison used in its manufacture.

Q. Can anything but plain work be done with Alabastine?

A. Any kind of work, from plain tinting to the most elaborate decorating can be done.

Q. How can I learn to do this work and decorate my house?

A. By writing the Alabastine Company, Grand Rapids, Mich., for book of instructions and suggestions, and illustration of stencils; also showing six sets of tinted wall designs.

M. B. Church, Manager for the Alabastine Company.

DEAR SIR: At your request I have analyzed specimens of Alabastine, manufactured by the Alabastine Company and find no traces of poisonous or injurious materials. The material was carefully tested for arsenic and copper, but none could be found. My study has been "Alabastine," and I am very well pleased with the result. The Alabastine makes a very firm and durable covering to the wall, and seems to be free from any tendency to crack or scale. It is also free from any disagreeable odor.

Yours truly,

R. C. KEDZIE, Prof. Chem.



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**DR. ROBERT T. MORRIS**, of New York. "The Necessary Peroxide of Hydrogen." *Journal of the American Medical Association*, Chicago, Ill.

**DR. S. POTTS EAGLETON**, Resident Physician in the Children's Hospital of Philadelphia, Pa. "Résumé—Hydrogen Peroxide in Surgical Affections." *Medical and Surgical Reporter* of Philadelphia, Pa.

**DR. GEO. B. HOPE**, Surgeon Metropolitan Throat Hospital of New York. "Some Clinical Features of Diphtheria and the Treatment by Peroxide of Hydrogen." *N. Y. Medical Record*.

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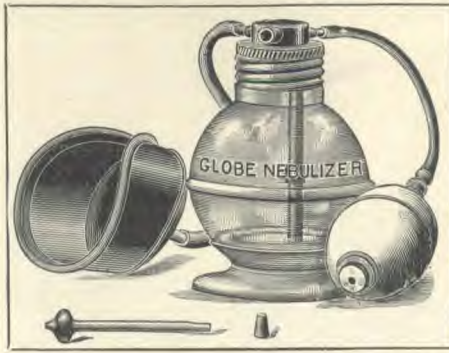
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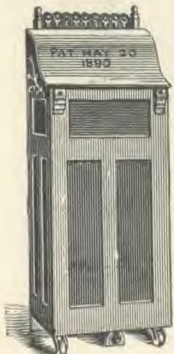
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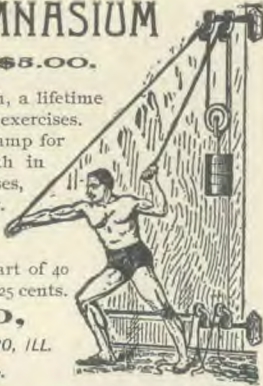
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Time Schedule of Passenger Trains, in effect July 8, 1891.

| Going North and West. |       |      | STATIONS.             | Going South and East. |      |       |
|-----------------------|-------|------|-----------------------|-----------------------|------|-------|
| P.M.                  | 1.30  | P.M. | Ar.... Allegan....Lv  | A.M.                  | P.M. | ....  |
| ....                  | 8.15  | .... | ....                  | 7.40                  | 2.35 | ....  |
| A.M.                  | A.M.  | P.M. | Ar.. Battle Creek..Lv | A.M.                  | P.M. | A.M.  |
| 1.45                  | 11.45 | .... | ....                  | 9.14                  | 4.12 | 5.45  |
| P.M.                  | A.M.  | .... | Lv.... Toledo....Ar   | ....                  | P.M. | P.M.  |
| 6.30                  | 7.35  | .... | ....                  | ....                  | 8.35 | 12.10 |
| ....                  | A.M.  | P.M. | Ar.... Bryan....Lv    | A.M.                  | P.M. | ....  |
| ....                  | 12.13 | 3.11 | ....                  | 6.20                  | 1.32 | ....  |
| ....                  | P.M.  | A.M. | Lv... Cincinnati...Ar | P.M.                  | P.M. | ....  |
| ....                  | 5.00  | 7.30 | ....                  | 1.45                  | 8.55 | ....  |

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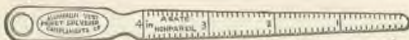
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# Chicago & Grand Trunk R. R.

Time Table, in Effect Dec. 6, 1891.

| GOING WEST. |      |      |     |     | STATIONS.         |      | GOING EAST. |      |      |       |     |
|-------------|------|------|-----|-----|-------------------|------|-------------|------|------|-------|-----|
| p m         | a m  | p m  | p m | p m |                   |      | a m         | p m  | p m  | p m   | p m |
| 3 00        | 9 00 | 7 00 |     |     | Boston            |      | 6 15        | 9 50 | 9 25 | 7 30  |     |
| p m         | p m  | p m  |     |     | New York          |      | p m         | a m  | p m  | a m   | a m |
| 5 00        | 6 30 | 8 00 |     |     | Buffalo           |      | 9 55        | 7 40 | 5 07 | 10 10 |     |
| a m         | a m  | p m  |     |     | Niagara Falls     |      | a m         | p m  | a m  | p m   |     |
| 6 20        | 6 30 | 1 00 |     |     | Boston            |      | 8 40        | 5 30 | 4 20 | 9 00  |     |
| a m         | a m  | p m  |     |     | Montreal          |      | a m         | p m  | a m  | p m   |     |
| 7 45        | 8 00 | 2 45 |     |     | Toronto           |      | 7 30        | 4 10 | 3 10 | 7 10  |     |
|             |      |      |     |     | Detroit           |      | a m         | p m  | a m  | p m   |     |
|             |      |      |     |     | Dep.              | Arr. | 8 15        | 9 50 |      | 7 33  |     |
|             |      |      |     |     | Port Huron        |      | p m         | a m  |      | 7 40  |     |
|             |      |      |     |     | Port Huron Tunnel |      | 8 20        | 7 40 |      | 7 40  |     |
|             |      |      |     |     | Lapeer            |      | a m         | p m  |      | p m   |     |
|             |      |      |     |     | Flint             |      | 7 35        | 5 25 |      | 7 35  |     |
|             |      |      |     |     | Bay City          |      | p m         | a m  |      | a m   |     |
|             |      |      |     |     | Saginaw           |      | 9 25        |      |      | 9 25  |     |
|             |      |      |     |     | Durand            |      | Mail        | Mail |      | Mail  |     |
|             |      |      |     |     | Lansing           |      | 9 25        |      |      | 9 25  |     |
|             |      |      |     |     | Charlotte         |      | Mail        | Mail |      | Mail  |     |
|             |      |      |     |     | BATTLE CREEK      |      | 9 25        |      |      | 9 25  |     |
|             |      |      |     |     | Vicksburg         |      | 9 25        |      |      | 9 25  |     |
|             |      |      |     |     | Schoolcraft       |      | 9 25        |      |      | 9 25  |     |
|             |      |      |     |     | Cassopolis        |      | 9 25        |      |      | 9 25  |     |
|             |      |      |     |     | South Bend        |      | 9 25        |      |      | 9 25  |     |
|             |      |      |     |     | Valparaiso        |      | 9 25        |      |      | 9 25  |     |
|             |      |      |     |     | Chicago           |      | 9 25        |      |      | 9 25  |     |
|             |      |      |     |     | Arr.              | Dep. | 9 25        |      |      | 9 25  |     |

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# MICHIGAN CENTRAL

"The Niagara Falls Route."

Corrected Jan. 31, 1892.

| EAST.             |          | † Mail. | † Day Express. | * N. Shore Limited. | * N. Y. Express. | * Atlantic Express. | † Eve'g Express. | † Kal. Accom'n |
|-------------------|----------|---------|----------------|---------------------|------------------|---------------------|------------------|----------------|
| STATIONS.         |          |         |                |                     |                  |                     |                  |                |
| Chicago           | am 7 05  |         | am 9 00        | pm 12 20            | pm 3 10          | pm 10 10            | pm 9 25          | pm 4 55        |
| Michigan City     | 9 10     |         | 11 10          | 2 00                | 4 48             | am 12 25            | 11 20            | 7 00           |
| Niles             | 10 20    |         | pm 12 48       | 2 52                | 5 50             | am 12 25            |                  | 8 25           |
| Kalamazoo         | 12 00    |         | 2 20           | 3 55                | 7 04             | 3 37                | 2 00             | pm 10 05       |
| Battle Creek      | pm 12 55 |         | 2 50           | 4 25                | 7 37             | 4 29                | 2 45             | am 7 10        |
| Jackson           | 3 05     |         | 4 30           | 5 32                | 8 52             | 6 25                | 4 20             | 9 45           |
| Ann Arbor         | 4 42     |         | 5 25           | 6 22                | 9 45             | 7 45                | 5 43             | 10 55          |
| Detroit           | 6 15     |         | 6 45           | 7 20                | 10 46            | 9 20                | 7 15             | am 12 10       |
| Buffalo           | am 3 00  |         | am 3 00        | am 3 00             | am 6 25          | pm 5 05             | pm 5 05          | pm 8 15        |
| Rochester         |          |         |                | am 5 00             | 9 55             |                     |                  | 10 00          |
| Syracuse          |          |         |                | 8 00                | 12 15            | 10 20               |                  | am 1 00        |
| New York          |          |         |                | pm 3 45             | pm 8 50          | am 7 00             |                  | 7 45           |
| Boston            |          |         |                | 5 40                | 11 05            | 10 45               |                  | 10 45          |
| WEST.             |          |         |                |                     |                  |                     |                  |                |
| STATIONS.         |          |         |                |                     |                  |                     |                  |                |
| Boston            |          |         | am 8 30        | pm 2 15             | pm 3 00          | pm 6 45             |                  |                |
| New York          |          |         | 10 30          | 4 30                | 6 00             | 9 15                |                  |                |
| Syracuse          |          |         | pm 7 30        | 11 35               | am 2 10          | 7 20                |                  |                |
| Rochester         |          |         | 9 35           | am 1 25             | 4 20             | 9 55                |                  |                |
| Buffalo           | pm 11 00 |         | 11 00          | 2 20                | 5 30             | 11 50               | am 8 45          |                |
| Suspension Bridge |          |         |                | 3 15                | 6 25             | pm 12 50            |                  |                |
| Detroit           | am 8 20  |         | am 7 40        | 9 05                | pm 1 20          | 9 15                | pm 4 45          | pm 8 00        |
| Ann Arbor         | 9 35     |         | 8 40           | 9 59                | 2 19             | 10 32               | 5 52             | 9 15           |
| Jackson           |          |         | 11 25          | 9 40                | 10 58            | 3 17                | 12 01            | 7 15           |
| Battle Creek      | pm 1 00  |         | 11 12          | pm 12 02            | 4 25             | am 1 20             | 8 47             | am 12 05       |
| Kalamazoo         |          |         | 2 17           | 11 55               | 12 39            | 5 00                | 2 22             | pm 9 30        |
| Niles             |          |         | 4 15           | pm 1 12             | 1 48             | 6 17                | 4 15             | 7 40           |
| Michigan City     |          |         | 5 37           | 2 14                | 2 42             | 7 20                | 5 35             | 8 55           |
| Chicago           |          |         | 7 55           | 3 55                | 4 30             | 9 00                | 7 55             | 11 15          |

\* Daily. † Daily except Sunday. ‡ Daily except Saturday.  
 Accommodation train for Jackson and all intermediate points leaves Battle Creek at 6.16 p. m., arriving at Jackson at 7.55 p. m., daily except Sunday.  
 Accommodation train for Niles and all intermediate points, leaves Battle Creek at 7.53 a. m., arriving at Niles at 10.05 a. m., daily except Sunday.  
 Trains on Battle Creek Division depart at 8.03 a. m. and 4.35 p. m., and arrive at 12.40 p. m. and 7.00 p. m., daily except Sunday.  
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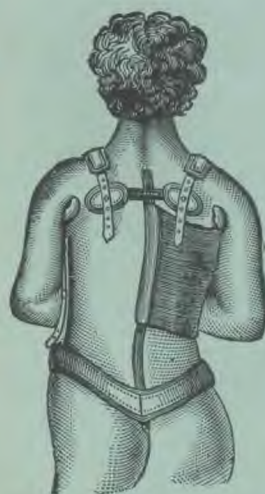
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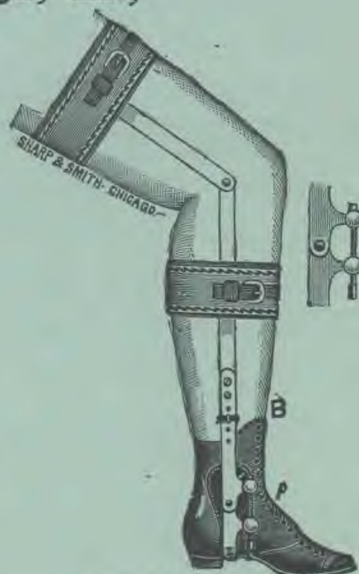
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