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GOOD



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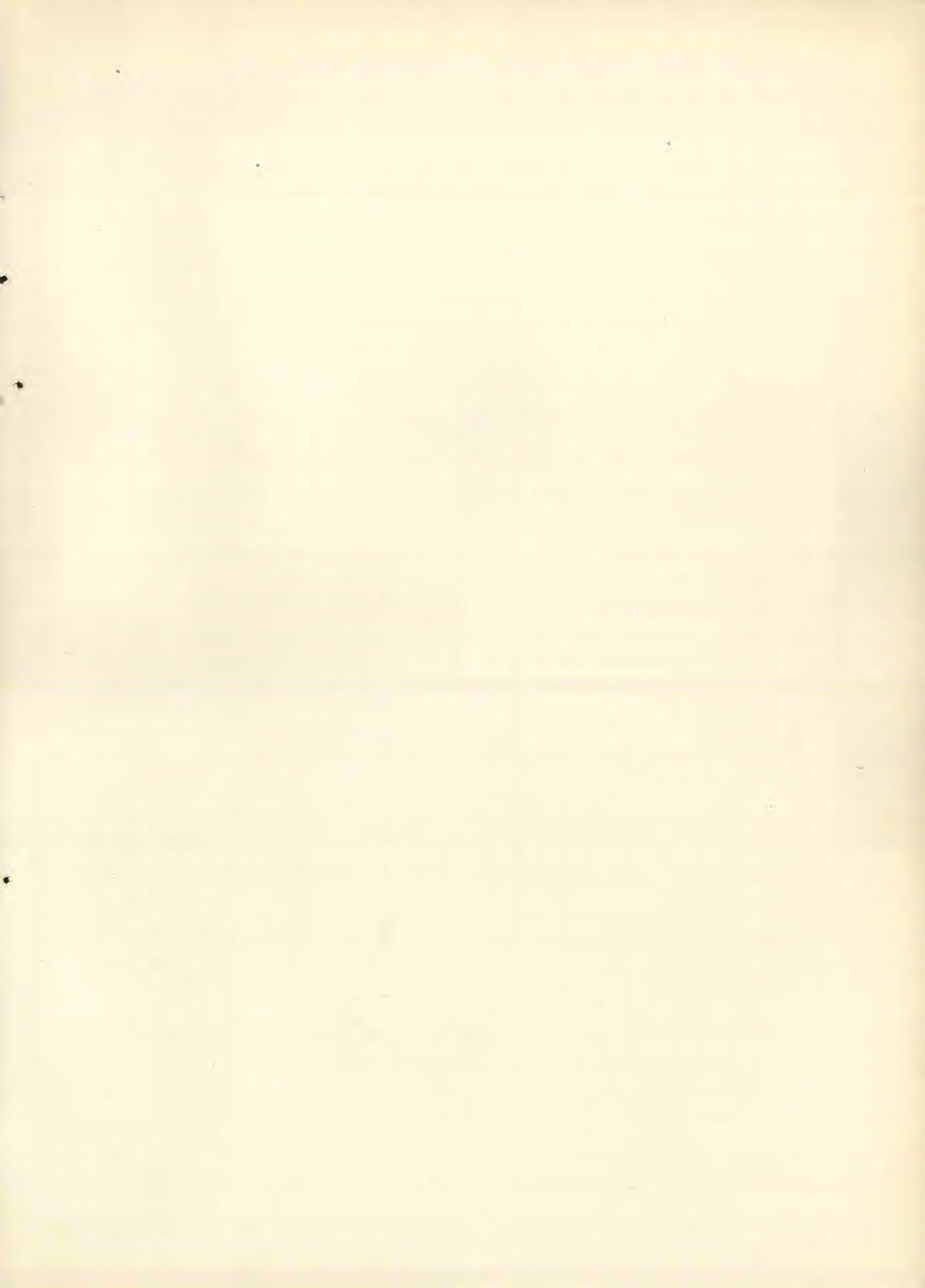
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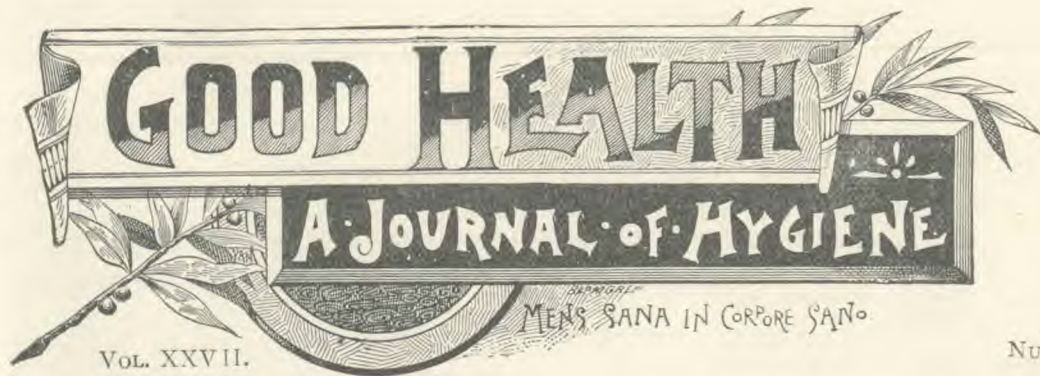
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ROUTE IN THE INTERIOR OF MADAGASCAR.



NUMBER 4.

BATTLE CREEK, MICHIGAN.

APRIL, 1892.

INTERNATIONAL HEALTH STUDIES.

BY FELIX L. OSWALD, M. D.

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

36.—The Isthmus Countries.

"SHALL our civilization be preserved?" is a question that has frequently occupied the speculative philosophers of modern times. The defensive resources of science can hardly be over-estimated; still it is more than probable that arts and industries alone constitute no adequate safeguard against the invasion of warlike barbarians. Egypt, Greece, Rome, and the empire of the Spanish Moors, all succumbed to the assault of less scientific, though more vigorous rivals. In the far East national decadence can often be traced to the gradual exhaustion of the arable soil, but our own continent has had to record the discovery of an exuberantly fertile forest-region, studded with the ruins of cities whose builders have vanished from the very memory of their neighbors. The existence of moldering temples in the virgin woods of Central America was known to the early Spanish explorers, but in 1841, the travelers, Steven and Casherwoodt, came across entire cities of ruined palaces, some of them vast, massive structures, and all covered with sculptures so elaborate that they seem to be the work of successive generations of architects. The sculptured coliseums of Copan and Palenque demonstrate the skill of their builders, not only in architecture, but in the manufacture of stone-cutting implements, in painting, and in the transportation of great weights, since some of the huge monoliths seem to have been brought from distances of fifty and sixty miles.

The disappearance of that certainly more than half-civilized race can be attributed only to one of two possible causes: their gradual extinction by

vice and disease, or their extirpation by the superior valor of hostile barbarians — invaders not being apt to owe their success to numerical superiority.

In either case their fate argues against the climate of their native land, and the coast regions of Central America have, indeed, proved graveyards to all sorts of nations, abstemious Spaniards, as well as gluttonous negroes and North Europeans. In Panama, M. Jules Arnauld, the Commissary General of the French Canal Company, consulted a number of *savants* to select the comestibles most likely to preserve the health of his laborers, and imported tons of lime juice, raspberry vinegar, prunes, and *farine grenelle* (a sort of Graham flour), raisins, and rice; but the climate defeated all precautions, and his men died, by dozens first, and soon by scores a week, till the contractors had to recruit their ranks from the desperadoes of Aspinwall and La Guayra. The ditchers furnished the largest quota of victims, but cooks, engineers, and hospital nurses were likewise more than decimated by the dread *vomito*, and for the study of yellow fever phenomena, the east shore of the isthmus would present almost unexampled facilities. The contagion, which elsewhere seems to depend upon special seasons and circumstances, appears to brood like a perennial miasma on the fens of the Chagres River. Nowhere else on earth could believers in the unavoidable results of climatic influences gather more numerous facts in support of their theory; and yet even here close observers may find evidences of the redeeming effects of personal habits. The Spaniards set a good example in dietetic mod-

eration; but the trouble is that the quality of their food is less commendable, and in point of cleanliness they rank far below the Chinese coolies, who frequently survive epidemics in spite of their shocking cuisine. With a frugal, non-stimulating diet and strict attention to domestic hygiene, a settler on the banks of the *Laguna Konda*—the “dismal swamp”—of the Chagres Valley, might enjoy good health for years, or at least during the eight dryest months of each year, since the frightful insect plagues of the rainy season make sleep too difficult for the comfort of a normal human being.



RUBBER TREES.

“Life insurance agents would decline a position in this country,” writes a French physician who had passed a year and a half in the isthmus camps; “still, experience obliges me to believe in the existence of that pathological phoenix—an absolutely fever-proof fellow. He is not apt to turn up in the shape of a South United States Hercules, nor yet of a gaunt Spanish-American pill-vender, but more likely in that of a thin, active little Italian provision dealer or Yankee engineer, with an irrepressible business energy, for I really believe that some men have no time to be sick. They pull through thick and thin by sheer dint of head strength (*entêtement*) and escape, as I have seen galloping horses run the gauntlet of a volley that would have shattered a whole cavalcade

of less rapid quadrupeds. There is, besides, a sustaining virtue in success of any kind, while hope deferred, and disappointment are as fatal as sultry heat. I have known the non-arrival of an expected paymaster to raise the weekly death-rate some fifteen per cent. Ruddy cheeks are considered a symptom of blooming health, but I have noticed that a florid complexion is far more apt to pass into the jaundiced hue of the *vomito* than a certain pallor peculiar to abstemious, active individuals past the middle of life. Now and then that palefacedness may betray the influence of a counter-poison, but more probably the

favorable omen of a florid countenance has been overrated, and is altogether too much akin to the hectic flush to be a matter of congratulation. Lean, bustling fellows have a superior chance of survival, but a peculiar flaccid indolence, as a result of exhausting vice, is almost an uglier omen than florid corpulence. A lazy, life-weary fellow, on the Rio Chagres, risks getting a longer chance of sleep than he bargained for. No one who has studied the habits of the imported North European laborers can flatter himself with the delusion that there is any prophylactic virtue in alcohol. That of quinine cannot be denied, but has been over-estimated, and I think that, as a febrifuge, the less repulsive red pepper of the natives is its peer. Talking of my own predilection, I would rather dispense with spices altogether than use *chile Colorado* as a substitute for salt; still, chewing red-hot pepper for five minutes would be less distressful than a five seconds' struggle with the palate's protest against

that quintessence of nauseous tastes—the intense bitterness of sulphate of quinine. There are said to be quinia fiends who swallow a dose of that tongue-torture as Chinamen swallow opium, but I have never yet come across a specimen of that *genus*, while thousands, nay, hundreds of thousands, of Spanish Americans contract a fondness for red pepper, and it is possible enough that their *penchant* is the result of a sanitary instinct, realizing the necessity of a counter-poison. Dram-drinkers, on the other hand, intuitively dread the penalty of nature, and after a protracted alcohol orgie often take to their heels in time to avoid the consequence.”

Those premonitions of instinct have, indeed, been observed in other epidemics. There are persons

who would visit a yellow-fever hospital as calmly as they would inspect a lazaretto of wounded soldiers, and who, nevertheless, have a deadly dread of smallpox or influenza. Others decline to expose themselves for even a short period to the miasma of extensive swamps, while individuals with perfectly sound lungs may go so far as to deny the contagiousness of the *grippe*, like an eccentric neighbor of mine who sincerely pitied the languid and sick, haggard appearance of his influenza-stricken friends, but ascribed it all to the "effects of imagination!" Hospital nurses might envy a delusion of that sort, since many of them feel as if they were taking their lives in their hands every time they open the door of the contagious-disease ward; but just as many manage to calm their misgivings by cultivating a confidence in the protective virtue of certain antiseptics—



TEHUANTEPEC INDIANS.

tics—vinegar, for example, or carbolic acid. That confidence, too, has its faith-cure value, and in that sense it would be wrong to condemn the solemn processions by which the natives of Panama hope to exorcise the demon of the *vomito*.

Panama is overrun with the agents of North American quack-nostrums, and thousands of gallons of fusel are yearly sold at a thousand per cent advance on the manufacturing expenses, in bottles which to the eyes of the purchaser acquire a miraculous value by being labeled with some combination of the word "Bitters." The popularity of similar swindles, often exposed by the GOOD HEALTH "Detective Bureau" department has, however, been modified by the lessons of experience, as in Illinois, where a committee of veterinary surgeons was appointed to report on the results of the so-called "Hog cholera Cures." They selected fifty porkers, of which twelve were treated to one, and twelve to the other variety of the vaunted nostrums, while twenty-six were not drugged at all. Seventeen of the twenty-four dosed quadrupeds died

in the course of the next month, and only six of their undosed relatives. The number of patients had been nearly alike, but the let-alone plan seemed to increase the chances of recovery nearly three hundred per cent.

Yankees, however, are not the only laborers in the fruitful vineyard of the nostrum superstition. A French pill doctor had such success on the isthmus that he established a branch factory at Aspinwall, where his posters crowd the advertisements of half a hundred "Bitters" and "Amargoso" venders. One good ice factory would be worth them all. The Santiago doctor's *camera polar* cure has been tried with the same surprising success in Santos and La Guayra, and will, before the end of this year, get a chance to beard the Bitter quacks in their Panama stronghold.

The isthmus of Tehuantepec, with its logwood forests and rich copper mines, will continue to attract Yankee speculators. But its chances as a route of transcontinental commerce are handicapped by three parallel mountain chains, one of them of Alpine dimensions, and far too steep even for a ship-carrying railway of the Eads pattern.

The latter scheme has a much better chance of success in Nicaragua. The distance from ocean to ocean exceeds that of the Panama route, but the country is comparatively healthful, and if the construction of the proposed waterway *via* Lake Managua, should prove too expensive, the Eads project may be realized without sacrificing thousands of human lives in fever-swamp ditches. Close to the mouth of the Rio San Juan the coast is rather malarious, but ships of deep draught can ascend that river to a point where the uplands rise in bold terraces, securing abundant drainage and making railway operations at certain seasons of the year almost as safe as in East Tennessee, or northern Alabama. A few miles east of the Vallejo navy yard, in California, a ferry-boat has been constructed in a manner to carry entire railway trains from shore to shore of a broad estuary, and there is no reason why railways should not be built massive enough to carry ships. The lifting of an ordinary-sized ocean steamer would present no difficulties to the resources of modern engineers, and the main objection urged against the ship-road plan was the unwieldiness of a mammoth locomotive, apt to crush through trestles and bridges and refuse to obey the brakes; but the Eads project, as modified by its originator, contemplated rather the construction of a low, broad truck, resting on six or eight rows of wheels (fitting as many parallel tracks of rail) and drawn by two or three ordinary locomotives.

Either that project or the almost equally feasible one of a sluice canal, will before long open up a region destined to become a favorite rendezvous for sightseers from all parts of the civilized world. Besides its wealth of American antiquities, Nicaragua can boast a fauna not surpassed by that of any region north of the Amazon Valley, and one or the other of its twenty-three active volcanoes can be relied upon

to treat visitors to a display of free pyrotechnics. The volcano of St. Vincent, too, is in a state of almost perpetual activity, but the two only accessible harbors of the island are as fever-ridden as Vera Cruz, while in Nicaragua the percentage of deaths from climatic fevers is three times lower than in south eastern Mexico, and nearly ten times lower than on the Isthmus of Panama.

(To be continued.)

A SNAKE STORY.

SOME days ago, while engaged in answering correspondence in our private office, a loud ring called us to the telephone, where we were told that a gentleman in a neighboring city wished to communicate with us, and the following dialogue occurred:—

“Are you Dr. —?”

“Yes.”

“Well, we have a man here who has a snake in his stomach. We want to bring him to you for an examination, and want to know if you can—”

“Yes, we can examine him, but we do not quite understand what you expect us to do further.”

“We want to know if you can perform an operation to remove—”

“I am not sure that I understand you correctly,— please repeat.”

“We have a man here who has a snake in his stomach; we want to know if we bring him down to you, if you can open him up and remove the snake?”

“Yes, bring him along; I think we can remove the snake by some means.”

So the next day the gentleman with whom we had communicated, appeared at our office with the man who had the snake in his stomach. He proved to be a young man about twenty-five years of age, who was also accompanied by his father. Taking first the gentleman into the office alone, we held the following conversation with him:—

“Do you really think that the young man has a snake in his stomach?”

“Yes, I think he must have. He thinks so, at any rate.”

“Do you really think it possible for a man to have a live snake in his stomach?”

“Yes, I suppose so; I have heard of people having snakes, lizards, and other things in their stomachs.”

“But how can an animal live in the stomach?”

“I do not know; I only know that I have heard that people have such things as snakes in their stomachs, and this young man thinks he has one.”

“Now let us consider the matter: Suppose a big fish should swallow you as the whale swallowed Jonah; would you expect to live long in his stomach?”

“Oh, no.”

“Well, then, suppose you should swallow a small fish; would you suppose the fish would get along in your stomach any better than you would in the fish’s stomach?”

“Well—perhaps not; I guess he would die. But then, snakes are harder to kill than fishes, you know.”

“Well now, suppose a big snake should swallow a small dog; would the dog live in the stomach of the snake?”

“No.”

“Then suppose a big dog should swallow a small snake; what would become of the snake?”

“Oh, I think the dog’s stomach would digest him.”

“Very well, then; suppose a man should happen to swallow a snake; would not the man’s stomach digest the snake, as well as the stomach of the dog would do it?”

“Well, I guess, doctor, you are right; but really, I have always supposed that people might have live snakes in their stomachs; and this man has felt so sure he had one that I thought perhaps he might have one, and we have brought him down here for you to find out. I am sure you can’t convince him that he has not a snake in his stomach.”

“Do you think, then, that the man’s mind is affected?”

“Oh, yes, I am sure of it.”

“Well, if the man has become insane upon the subject, the only way will be to use a little strategy: we shall have to make a little scratch over his stom-

ach, so that he will think we have made an opening into it, and then show him a snake,—I have one in a bottle which will answer the purpose, perhaps.”

“That is just the thing, doctor; I am sure it is the only thing that will ever get this snake idea out of his mind.”

“Very well, then, let us call in the patient’s father, and see what he thinks about it.”

The old gentleman entered, and precisely the same conversation occurred as that detailed above; but still the old gentleman insisted that the young man had a snake in his stomach. Said he, “I know he has a snake in his stomach, because sometimes it comes up in his throat and chokes him.”

“That was only a nervous sensation; a great many people have choking sensations, who certainly have no snakes in their stomachs.”

“Well but, doctor, he feels the snake squirming around in his stomach; he is very sure there is a snake there, and I think he is right about it.”

“You think it is possible, then, for a man to keep a live snake in his stomach for any length of time?”

“Oh, yes, I think it may be.”

“Suppose you should swallow a live oyster,—you eat oysters, sometimes, do n’t you?”

“Yes.”

“And sometimes you have swallowed an oyster so quickly after taking him out of the shell, that he was still alive when you swallowed him, have you not?”

“Oh, yes, I think I have.”

“Well, does that oyster remain alive in your stomach? Can you imagine such a thing as a man going about with a dozen live oysters in his stomach, simply because he has swallowed that number alive?”

“Oh, no; certainly not.”

“Well, if an oyster cannot live in the stomach, is there much more reason to suppose that a snake could live there?”

“I admit, doctor, that what you say sounds all right; nevertheless I believe that my son has got a snake in his stomach, and I want you to open him up and take it out.”

Being convinced that an operation would have to be performed for the old gentleman as well as for his son, in order to remove the snake, we concluded that the case was one for a lunatic asylum, rather than for a surgical hospital; but it afforded a fair illustration of the so-called cases of snakes or lizards in the stomach which are occasionally reported. It is safe to say that no case ever occurred in which there was really a snake or any other reptile in a living human stomach.

ROYAL RECOGNITION OF VEGETARIANISM.—The Vegetarian Society of England congratulate themselves upon the fact that a member of the Royal family was present at a recent meeting of the Vegetarian Society. Vegetarian principles are unquestionably gaining ground wherever they are understood, and the noble efforts of the English Vegetarian Society have done more than any other organization in promulgating the principles of this much-needed reform.

THE STRATEGIC CURE.—A celebrated German physician was once called upon to treat an aristocratic lady, the sole cause of whose complaint was high living and lack of exercise. But it would never do to tell her so; so his medical advice ran thus: “Arise at 5 o’clock, take a walk in the park for one hour, then drink a glass of tea, then walk another hour and take a cup of chocolate. Take breakfast at 8.” Her condition improved visibly until one fine morning the carriage of the baroness was seen to approach the physician’s residence at lightning speed. The patient dashed up to the doctor’s office, and on his appearing on the scene she blurted out: “O doctor, I took the chocolate first!” “Then

drive home as fast as you can,” ejaculated the astute disciple of Esculapius, “and inject the tea with a syringe, for the tea must be at the bottom.” The spell was not broken.—*Annals of Hygiene.*

“TAKE care of your health,” President Patton tells the Princeton boys. “You may not need binomial theorems, but you will need your digestion every day. I wish that, years ago, I had thought more about my own health. A frequently recurring headache, a bad appetite, and sleeplessness are solemn warnings that you must heed. Dyspepsia is not a thing to make fun of.”

MEDICAL GRAMMAR.—*Harper’s Bazaar* tells of a boy who was asked to compare the word “sick.” After pausing for a moment, he gave utterance to the following new and original idea in the line of grammatical comparison: “Sick, worse, dead.” This is precisely the pathological stairway down which disease leads the man who neglects to check the beginnings of disease by the employment of the proper means of prevention and cure.

MOOTHS (mouths) are nae measures.—*Scotch Proverb.*

MEXICAN HABITS AND CUSTOMS.

BY ELD. L. C. CHADWICK.

THINKING that a few comments on the varied scenes which I have found in my long missionary



GENERAL MARKET.

journey through Mexico, Central America, West Indies, South America, and Africa, with illustrations of some of the habits and customs of the people, may be of interest to the readers of GOOD HEALTH, I send this as the first of a series which I hope to be able to supply quite regularly, if I find mail facilities for sending communications back to the States. It would be impossible, in the brief space of a single article, to give anything like a de-



MEXICAN DWELLING.

tailed account of Mexican customs, so I can only cull a few of the many incidents which came to my notice.

The first Sunday that I spent in the Republic was on the border at Nuevo Laredo. In the Capital City, the same day, they had a charity celebration in the form of a bull fight. It was for the benefit of the flood sufferers in Spain. Although the laws of the Republic now nominally forbid this cruel sport, which was once so popular there, yet on this

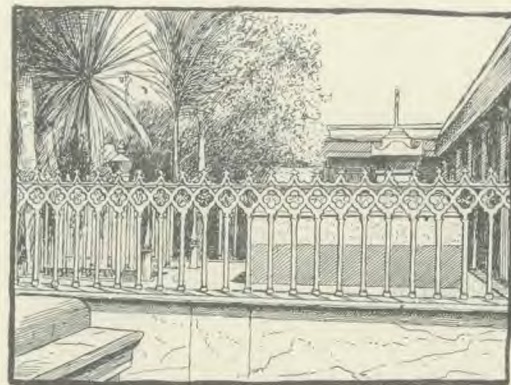
occasion law was set aside for charity's (?) sake, and of the occasion the *Two Republics*, a daily paper published in the city, says: "The attendance was estimated at 15,000 people, and the net proceeds for the Spanish sufferers were at least \$20,000. Among those present were President Diaz and Mrs. Diaz, whose entrance was greeted with a cheer. Nine bulls and thirteen horses were cruelly killed



A STREET BREAKFAST.

amid the cheers of the vast assemblage." There was a little more appropriateness in this than one which had been held before, the proceeds of which were for the assistance of the society for the prevention of cruelty to animals. This shows that the insatiable thirst for blood still exists in the Mexican Republic.

The first of the accompanying cuts shows a market scene in the city of Monterey, Mexico. The large market building, the entrance of which is seen at the right, is filled with venders of fruits, vegetables, and



NATIONAL CEMETERY.

meats, while the large space outside around the entire building is filled with persons who are not

fortunate enough to get space inside, and who erect booths or tents, or display their produce for sale on the pavement without shelter, as is seen in the cut. This market is an exceptionally fine one, and is much cleaner and more carefully kept than any other I saw in the Republic.

The poorer classes of people in Mexico live in a very unhealthful and oftentimes uncomfortable manner. The second cut shows a house in one of the leading cities of Mexico, within a stone's throw of one of the principal plazas, which is a fair sample of the homes of the better class of the common people. This house is made of adobe bricks, with a straw roof, and in it four families were living when I visited it and took the photograph of it. A single small room, without furniture, beds, floor, tables, etc., serves as the dwelling-place for a family of from four to ten, while a little dirt hovel outside serves as a cook room for a dozen or more families. Many of them do not even have a shelter at night, but wrap their blankets around them, and crawl into an alley or against the side of some wall, and sleep as soundly as though they were in a palace. I often took a stroll in the early morning, and saw them crawling up from the ground and pulling their blankets around them ready for another day of life. My friend Mr. Steelman and I were taking a walk one morning, and saw a family of two men and one woman who had just emerged from one of these outdoor sleeping places, and were seated in the street taking their breakfast on the ground. Here you see the picture which I took of them. A third man, a well-dressed stranger, had just come along on the walk as I caught the scene. The shadow at the left of the picture is from the mammoth cathedral of San Fernando, while

within a few feet is the entrance to the National Cemetery. Inside the cemetery are many fine tombs. The government does not allow the dust of the dead to be deposited here till after it has been



FLOWER AND BERRY MARKET.

buried five years in some other place; then by the payment of \$250 for each person, the dust can be interred in niches in the great walls which surround the cemetery. Here lies the dust of Juarez, and many other noted characters famous in Mexican history. I send one photo which I took, as a sample of many others.

Right beside the largest cathedral in all Mexico is a flower and berry market. Beautiful fresh strawberries are to be had here at any time, and as my friend Rev. Mr. Steelman, the Baptist minister in the city of Mexico, was purchasing a large basket for our dinner, I took a view of the scene as shown in the last cut. My visit to Mexico was a very pleasant and profitable one. I shall always remember it with pleasure.

JESUIT TEA.

JESUIT tea consists of the leaves of the *ilex Paraguayensis* or *máté* of South America. Nearly three hundred years ago, the Jesuit missionaries on entering Paraguay, found many of the natives of that country addicted to the use of a decoction made from the leaves of a small tree which grew wild in the forest. The missionaries soon taught their converts to cultivate these trees and make merchandise of their leaves, and thus was developed a prosperous business, which has gradually increased, until at the present time several million people in the southern half of this continent are most inveterate users of Jesuit tea. Chemists tell us that the Jesuit tea, although the product of an entirely different plant, is

practically identical in its properties with the herb of China. The stimulating properties of *máté* are said to be fully equal to those of China tea, and the fascination of the habit of its use is apparently much stronger than that of the tea produced in China and Japan. Travelers in South America tell us that the natives are so addicted to the use of Jesuit or Paraguayan tea, that they frequently rise in the middle of the night, kindle a fire, and drink from half a dozen to a dozen cups of the steaming beverage. The Paraguayan will give up wine, spirits, and even tobacco, of which he is passionately fond, but his *máté* he must have. The veteran *máté* toper could not be induced to undertake any task without first reinforce-

ing his energies by several copious drafts of this stimulant.

The preparation of the leaves for market is not very different from the preparation of Chinese tea, only somewhat more crude. The leaves are partly roasted over a fire, then packed in sacks made by sewing together the edges of raw bullock skins, and left to dry in the sun, — a method which doubtless imparts to the leaves a peculiar flavor not of vegetable origin.

Thomas Morong thus describes a preparation of the tea for drink: "An ounce or two of the dried leaves is crammed into a small gourd called 'the *mâte*;' boiling water is then poured into the gourd, and the infusion is sucked through a tin or silver tube called the *bombilla*, which has at one end a

bulb perforated with small holes. After the water has been poured in two or three times, the dregs are thrown away and a fresh supply of *yerba* taken. I was told, when in Paraguay, that the self-indulgent matrons of the country had been known to call for the drink forty-eight times in succession before their thirst was quenched."

Paraguay tea is claimed by the natives to give them increased strength and vigor, but evidently the supposed increase of strength is a delusion, there being really nothing more than an increased disposition to effort, which, as Dr. Smith of England clearly pointed out years ago in the case of Chinese tea, is certain to be followed by a greater reaction when the effort is ended, than if no stimulus had been taken.

A SANITARY LESSON.

THE story of the great plague which prevailed in London in 1665, and of the great fire which succeeded it, has often been told, but never in a more interesting way than by Walter Besant, in a recent number of *Harper's Magazine*. We quote from the article the following paragraphs, which illustrate the fact that the value of quarantine and disinfection were recognized some time before the creation of what might be termed our modern sanitary science: —

"The disease continued to spread. It was thought that dogs and cats carried about infection. All those in the city were slaughtered. The people even tried, for the same reason, to poison the rats and mice, but the sagacity of these creatures enabled them to discover the conspiracy and to defeat it. Many families isolated themselves. The journal of one such household remains. The family which lived in Wood Street, Cheapside, consisted of the master, a wholesale grocer, his wife, five children, two maid-servants, a porter, and a boy. He first sent away the boy to his friends in the country; he gave the elder apprentice the rest of his time; and he stationed his porter Abraham at his door as an outer guard. He then closed every window, and suffered nothing to enter the house except at one upper window, which, before he opened it, he fumigated with gunpowder.

"At first the plague, while it raged about Holborn, Fleet Street, and the Strand, came not within the city. This careful man, however, fully expected it, and when it appeared in July, he ordered his porter to take up his place outside the door, and locked himself up for good. Then he knew nothing of the

outside world except what the porter told him, and what he read in the bills of mortality. But all day long the knell never ceased to toll. Very soon all the houses in the street were infected and visited except his own. But when, every day, he heard worse news from his porter, and every night the dismal bell and the rumbling of the cart, and the voice of the bellman kept him awake, he began to give up all for lost. He did not lose courage, however; he made arrangements for the isolation of any one who should be seized, and gave directions in case it should be himself. Three times a day he held a service of prayer with his household; twice a week he observed a day of fasting; every morning he went round to each chamber door to ask how the inmates fared. When they replied, 'Well,' he answered, 'Give God thanks therefor.' Outside, Abraham sat all day long, exchanging the news with the passers-by; this grew daily more and more terrifying. One day Abraham came not. But his wife came. 'Abraham,' she said, 'died of the plague this morning, and as for me, I have it also, and am going home to die. But first I will send another man to take my husband's place.' So the poor, faithful woman crept home and died, and that night, with her husband, was thrown into a great pit, with no funeral service but the oaths of the men who drove the cart. The other man came, but after a day or two, he also sickened and died. Then they had no porter, and no way of communicating with the outer world. They were prisoners, the whole family, with the two maids, for five long months.

"Presently the plague began to decrease; its fury

was spent. But it was not until the first week of December that this citizen ventured forth. Then he took all his family to Tottenham for change of air. One would think they needed it, after this long confinement and the monotony of their prison fare.

“By this time the people were coming back fast — too fast, because their return caused a fresh outbreak. They burned an immense quantity of curtains, sheets, blankets, hangings, and whatever might harbor the accursed thing. And every house in which a case had occurred was scoured and white-washed, while the churchyards were all covered with fresh earth at least a foot thick.

“This was in January. The plague, however,

dragged on. In the month of July it was still present in London, and reported to be raging at Colchester. In August, Pepys finds the house of one of his friends in Fenchurch Street shut up with the plague, and it was said to be as bad as ever at Greenwich. This was the last entry about it, for in a week or two, there was to happen an event of even greater importance than the Great Plague.

“The last cross had not been removed from the last infected house, the last person dead of the plague had not been buried, before the Great Fire of London broke out, and purged the plague-stricken city from end to end.”

WHAT IS TEMPERAMENT ?

THIS question is one which is so often asked, and so seldom scientifically answered, that we are glad to place before our readers the following lucid explanation of the subject, which we translate from a work by Fernand Lagrange, an eminent French physician:—

“By temperament is meant that special mode of being, acting, and re-acting which is peculiar to each man. All men of the same age, same race, and the same family have not the same external appearance, the same structure, the same resistance, and the same impressibility. In some the muscles are predominant, in others the adipose tissue, and in others the nervous system. Some seem to be affected by no external influence; they expose themselves with impunity to the influence of cold, heat, and moisture. Others, on the contrary, suffer from catarrhs, pains, and congestions when exposed to the slightest variations of temperature.

“Finally, under the influence of some disturbing cause, all men do not experience the same morbid effects. A chill which gives to one a bronchitis gives to another a neuralgia, to another a disturbance of the bowels, etc.

“An exaggeration of the variations of temperament produces a disposition to certain diseases. Persons endowed with extreme temperaments are not in that state of functional equilibrium which constitutes perfect health, or at least this equilibrium is unstable and easily influenced under external causes.

“The very nervous man is likely to fall into a nervous state as the result of physical and mental shock which would not have affected the health of a person with a more calm temperament. We see, for example, following a fright, a blow, or a fall, the

sudden appearance of hysteria in a woman who had not previously given any indications of the disease, but was of a very nervous temperament. In the same way between the lymphatic temperament and scrofula there is only a step which the system may easily pass under the influence of many bad hygienic conditions.

“If the physiological peculiarities which characterize temperament are exaggerated to an extreme degree, the equilibrium of health is no longer simply menaced but is definitely destroyed. That which was only a predisposition has become a morbid state. Symptoms which had previously required a cause to produce them, now appear spontaneously. Temperament has now become transformed into a diathesis.

“Diathesis, following the happy expression of Prof. Bouchard, is nothing less than a morbid temperament. It is not a disease, properly speaking, but a perversion of nutrition which must certainly, and without the intervention of any external cause, through its own spontaneous evolution, end in symptoms of disease more or less grave in character.

“Savage animals seem to have uniform temperaments. They differ among themselves according to climate, and according to the soil from which they derive their nourishment; but in the same region all animals of the same race present among themselves so great a resemblance that it is difficult to point, for example, among a hundred pigeons, other differences than those by which the young are distinguished from the old. It is impossible, on the other hand, when one attends a military review, not to be struck by the conspicuous differences which

are presented among the conscripts, notwithstanding that they are all of the same age, born in the same canton, and have been raised in the same conditions of climate.

This is because animals undergo only the collective influences of environment and nourishment, while the circumstances capable of modifying a man are individual in character. If the races of animals differ among themselves according to locality, the climate, the composition of the waters which they drink and the food which they derive from the soil, men of the same country differ especially according to their manner of life.

"If one seeks to ascertain among individual habits those which have the greatest influence in producing variations in human temperament and producing diathesis, we must place in the first rank those which have relation to food and exercise, two hygienic factors the action of which is so connected that it is difficult to isolate the study of one from that of the other.

"It is an inevitable result of civilization to modify the types of individuals through modifying the habits of peoples. It belongs to philosophy to determine whether the civilized state brings more or less happiness to man. The physician cannot fail to recognize that the more civilization is refined, the more accentuated become the individual variations of temperament; the more numerous become the subjects affected with diathesis.

"An expressive word has been applied to those persons, who, in consequence of morbid hereditary modifications of constitution, have come to present a physiological type inferior in health and in resistance to the normal primitive type. They are called the 'degenerates.'

"Certain violations of the laws of hygiene, such as drunkenness, abuse of pleasure, and the excess of intellectual work, may produce changes in temperament characterized by the tendency to diseases of the nervous system, a tendency which may be transmitted by heredity. The children or grandchildren of drunkards, of debauchees, and of overwork are generally endowed with an irritable, nervous system and possessed of little energy. They are characterized by feebleness of will and an unbalanced moral

state. They are subject to neurosis, to hysteria, to epilepsy, and even to affections of the brain and spinal cord. It is to this class especially that the term *degenerates* is applied. They are not the only class who merit this epithet. The disturbances of vital equilibrium resulting from violations of the laws of hygiene may make themselves felt in the functions of nutrition as well as in the nervous functions. Subjects affected with diathesis characterized by disturbances of the nutritive functions, are, in reality, suffering from organic degeneration. The gouty, the diabetic, and persons affected with constitutional obesity, as well as neurotics, are also degenerates.

"Certain degenerations may affect an entire population without the individual subjects being personally culpable of any violation of the laws of health, as is the case with the degeneration due to inveterate malaria in countries in which intermittent fevers prevail. The cretinism which prevails in certain valleys is another form of this degeneration. But in the majority of cases degeneration is due to vicious hygiene, which is due to the habits and sometimes the exigencies of the social class to which each individual belongs. Among these deteriorating habits there is none which plays so important a role in our time as the neglect of exercise.

"Many disturbances of nutrition may result from neglect of exercise. These morbid temperaments and diatheses are naturally best treated by exercise, but this powerful means of modifying nutrition cannot be employed in such cases without special precautions which are not required in persons in good health or of a well-balanced temperament.

"Besides these disturbances of nutrition there is a crowd of other morbid conditions of diverse origin and character which place a person in a state of diminished resistance and render him vulnerable to fatigue. The class so affected may be generally designated under the name of valetudinarians, — persons in whom the constitution has undergone a permanent change, it may be as the result of a slowly progressive disease, or following a disease which was incompletely cured. Such persons are in an intermediate state between health and disease. Exercise must be applied in such cases with the greatest care and tact."

KILLED BY THEIR MOTHERS.—The London *Vegetarian* says the overlaying of infants by their mothers in that city furnishes material of the utmost value to those engaged in opposing the sale of alcoholic

stimulants. Out of 1,000 deaths so attributed, 280 occurred on Saturday night, 170 on Monday, and then a gradual decreasing number until Saturday is again reached.

A PIPE AND A DICTIONARY.

THIS is the weed nicotian.
 This is the pipe with stem of reed
 Which held the stuff that's called the "weed."
 This is the match with phosphor end
 Which lighted the tube with graceful bend,
 Packed with the shrub Virginian,
 This is the man bereft of hair,
 Whose sulphurous fumes defiled the air,
 As he started this meerschaum brown, flavescent,
 Filled with Raleigh's gift herbescent.
 This is the smoke that rose from the clay
 In the lips of the fiend who puffed away,
 While the flame on the end of the wooden splint
 Ignited the powder which gave the tint
 To the bowl of the instrument fuliginous,
 Stuffed with America's plant indigenous.

This is the salivary stain,
 Produced by the glands of the beast inane,
 Whose work pulmonic made fumes carbonic
 Which rose with those of the fusee bright,
 Whose fiery tip had served to light
 The capsule charged with poisonous drug,
 Known by the name of "navy plug."

This is the stone which tells the fate
 Of him whose death expectorate
 Was caused by the herb of powers asthenic,
 Consumed in a process oxygenic,
 Begun by the spark of stick pyrogenous,
 Applied to a briar-wood pipe exogenous,
 Of which the smoke is poison slow,
 Whose name it takes from Jean Nicot.

—James F. Babcock, in *Boston Transcript*

DIET AND LONGEVITY.—The following enthusiastic tribute to vegetarianism and to the power of hygienic habits in laying the foundation of a long, active, and useful life, is from the pen of Rev. J. B. Saxe, Fort Scott, Kan., and is copied from a *N. Y. Tribune* of late date:—

"I adopted a vegetable diet in 1841, when twenty-two years old, and for more than half a century I have eaten no flesh or butter, have drunk no tea or coffee, and have lived mostly on Graham or corn bread and fruit. In 1850 I wrote a book on the subject, 'The Organic Laws,' published by Fowler & Wells, and noticed at that time in the *Tribune*, which said that if the doctrines of the work were not accepted, the zeal with which it was written ought to lead to a study of the question. During all these years I have had hardly a day's sickness, have consulted no doctor, taken no drugs, and have always been able to do vigorous work, either mental or physical. What makes this more striking is the fact that I began life with a feeble constitution, and was mostly an invalid, always doctoring, up to the time of my adoption of this system. I have seen most of my early acquaintances, healthy and vigorous young men and women, pass away, while I am conscious of scarcely any bodily or mental decay; and in my seventy-third year can do anything I could at twenty, and do it better and easier. I can see no reason why I may not live twenty years more, as well as I have for the past twenty.

"After forty years' experience I reaffirm all that I said in my book. Though a clergyman by profession, I have been engaged in farming most of the time for thirty years, and have labored with my hands nearly every day; and I assure my brother farmers that there is no need of being sick, or having anything to do with drugs or doctors, or being laid up with age and infirmity at seventy. Nearly

every American could and ought to live to the age of 100, and most of them to the age of 200; and would if they lived right from childhood. Captain Reiley says that when captive among the Arabs, he saw men 300 years old, and still able to follow the tribe in its wanderings. Health and endurance are as necessary capital as land to a farmer, and should be cultivated as carefully and as scientifically if he would have success in his vocation."

You will find yourself refreshed by the presence of cheerful people; why not make earnest effort to confer that pleasure on others?—*Lydia Maria Childs*.

Too Fussy.—*Mrs. Oldtymes*—"These new notions about sterilizing milk and boiling water to drink are all nonsense. They make a heap of work all for nothing. I had eleven babies, and I ought to know something about it."

Young Mother—"And did your children all grow up to maturity?"

Mrs. Oldtymes—"Two of them did."—*Brooklyn Life*.

"MISS JOHNSON, the sculptress of Washington, who has just completed a bust of the late Gen. Logan, with which Mrs. Logan is much pleased, is described as a good looking young woman of about thirty, with deep, dark eyes, a lily-fair skin, and a total disregard for aught save her art. She is a vegetarian of the vegetarians, and will not even wear kid or any skin gloves or leather shoes, substituting for the latter, boots and slippers of *papier maché*."

WINE-DRINKING produces at first an apparent increase of muscular power, followed by a proportionate loss of strength. So with flesh-eating.—*Dr. Wm. A. Alcott*.



POSTERIOR SPINAL CURVATURE.

As pointed out in an article in this department in our last number, round or stoop shoulders, and flat or hollow chest are conditions primarily due to posterior curvature of the spine. It is very remarkable that this form of spinal curvature has heretofore received so little attention. Quite a large proportion of civilized adults, in this country at least, exhibit a certain amount of lateral curvature of the spine, shown by unevenness of the shoulders, a depressed right or left shoulder invariably indicating a curvature toward the opposite side of the body. If the reader will sometime take the trouble, when in a large city, to stand and note the figures of the persons passing along a crowded street, he will soon be convinced that at least from one third to one half of all the persons he meets have more or less lateral curvature of the spine. It is certainly not a thought calculated to encourage complacency, that so large a proportion of our fellow men and women are deformed.

If one takes note of the number of persons who are round-shouldered or flat-chested, he finds the proportion very much greater still. It is probably not too much to say that at least half the adult population of this country are more or less round-shouldered and flat-chested; probably the proportion is even larger than this.

As before stated, this species of deformity is always due to posterior curvature of the spine. This form of spinal curvature has remained unrecognized for a long time, probably on account of the fact that the curvature is not often so great as to completely obliterate the natural forward curve. Even in the worst cases of posterior curvature, there still remains some degree of concavity in some portion of

the back. The middle and lower portion of the back is, when in a state of health, strongly curved forward, while the upper portion usually has a slight backward curve. Posterior curvature consists in the increase of the natural curvature of the upper portion of the spine, and the consequent lessening of the concavity of the middle and lower portions.

There are at least three forms of posterior curvature of the spine. In the first, the person stands with the hips far advanced, the shoulders carried well back, and the lower abdomen very prominent. In this form, the posterior deviation of the spine seems to be about equally distributed on either side of the natural posterior curvature of the upper dorsal region.

In the second form of posterior curvature, the most noticeable change is in the straightening of the anterior lumbar curve. This form of curvature is well shown in Fig. 2, page 76, of the March number.

In the third form, the curvature is specially prominent in the upper portion of the dorsal and the cervical regions. It is this form of posterior curvature which is so frequently seen in elderly men who have become very much stooped. It is not necessarily the result of age, but is most commonly observed in aged persons.

The evil results of posterior curvature are numerous. As will be readily seen by reference to Fig. 3, in the last number of *GOOD HEALTH*, one effect of posterior curvature is to lessen the antero-posterior diameter of the chest; that is, the chest loses somewhat in its depth, the breast bone is sunken, the heart and lungs are compressed, and their action thus more or less impaired.

It must be remembered, however, that that portion of the trunk inclosed by the ribs contains other or-

gans besides the heart and lungs; the liver, stomach, pancreas, and spleen all lie entirely above the lower border of the ribs, and must, accordingly, suffer from the pressure due to the depression of the breast-bone and flattening of the chest. The result of this abnormal pressure is invariably downward displacement of the stomach, pancreas, liver, spleen, and, in most cases, the right kidney; possibly the left kidney is also sometimes affected in a similar manner. The downward displacement of these organs

necessarily results in a similar displacement of the large and small intestines and other organs which occupy the abdomen and pelvis. In Figs. 1 and 2 are shown, in the first, the usual, and in the second, the corrected standing poise of a person who took great pride in the fact of having received many compliments for an erect carriage. The sad deformities of figure were hidden by the various artifices of dress invented for this purpose, and it would be quite impossible for a person to be more astonished than was this same individual when shown the tracings from which the figures above referred to were reproduced.

Any person who has given thought to this sub-

ject will recognize at a glance the fact that in a person giving the outline shown in Fig. 1, there must be a serious displacement of the internal organs, and to such a person would also doubtless occur the absurdity of undertaking to cure the evils resulting from this deformity of the spine without first removing the deformity itself

But pressure alone is not the only means by which displacement of the internal viscera, with the resulting evils — dyspepsia, inactivity of the bowels, gastric neurasthenia, insomnia, nervous headaches, nervous exhaustion, etc. — is produced. Posterior curvature of the spine cannot occur without a relaxation of the muscles by which the trunk is held erect and balanced upon the pelvis. There are, practically,

two sets of these muscles; those which act upon the spinal column directly and maintain by their contraction its natural anterior curve, and those which are attached to the lower borders of the ribs and the bones of the pelvis, and constitute the lateral and anterior walls of the abdomen. Relaxation of the muscles of the back is accompanied by a corresponding relaxation of the abdominal muscles. When the relaxation of the spinal muscles becomes habitual through a lack of development of this portion of the muscular system, the same condition of relaxation and weakness will be found in the abdominal muscles.

When it is remembered that a tense, well-contracted condition of the abdominal muscles is necessary to maintain the floating viscera of the abdomen in position, the significance of this condition of relaxation and weakness will be appreciated. The abdominal tension or pressure maintained by well-contracted muscles is not only the means of holding in position the stomach, liver, bowels, kidneys, and other organs of the abdomen and pelvis, but also regulates the size of the hollow, gas-containing organs of the abdomen. When abdominal tension is re-

moved, as in cases of dropsy, through withdrawal of fluid, or as the result of the removal of a large tumor, the abdomen is not infrequently filled out to its previous abnormal proportions with most astonishing rapidity by the accumulation of gas in the stomach and bowels. The constant pressure of the abdominal walls naturally restrains this gaseous accumulation within normal limits. When the abdominal muscles are relaxed or weakened by disuse, the liver, stomach, and other organs drop down from their normal position, and the stomach and intestines become abnormally distended with gas, as the result of which the patient not only suffers from the inconvenience of an unsightly protrusion of the lower abdomen, but a serious and often permanent



FIG. 1.



FIG. 2.

injury is inflicted on the stomach and bowels through the abnormal distension of their walls.

The changes produced by posterior curvature of the spine are very much more serious than those which result from simple lateral curvature, except when the last-named condition exists in a very extreme degree. An amount of posterior spinal curvature which causes depression of the chest and roundness of the shoulders, is found to be more serious in its effects as regards the health, than a lateral curvature of the spine which causes unevenness of the shoulders amounting to one or two inches.

The injuries resulting from posterior spinal curvature, although in childhood and youth comparatively slight and transient, in adults, persons of middle age, and in elderly persons, become more or less permanent. The flexibility of the spinal column, which is really a series of joints, is dependent upon its constant and free movement, as well as in the

the night measurement being made after the individual had been all day upon his feet, engaged in vigorous exercise.

The fibro-cartilages are subjected to uniform pressure, and hence are of uniform thickness only when the natural curves of the spine are preserved. When the spine is abnormally curved, either posteriorly or laterally, the fibro-cartilages are compressed on the concave side of the curve. This change in the form of the cartilages is shown in Figs. 3 and 4. If the compression is only temporary, such as naturally results from the varied movements of the trunk, the fibro-cartilage easily preserves its normal form; but when, through pernicious habits in sitting, standing, etc., the cartilage is constantly compressed upon one side more than the other, it after a time becomes permanently changed in form, and if the abnormal position is quite constantly maintained, the cartilages not only become deformed, but lose their elasticity, so

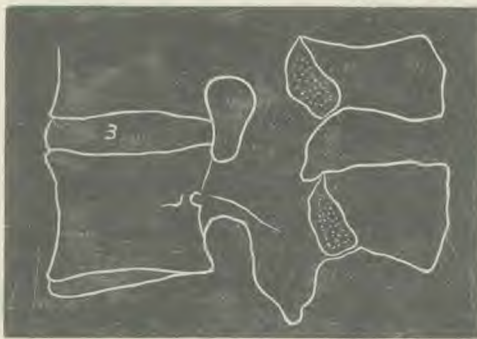


FIG. 3.

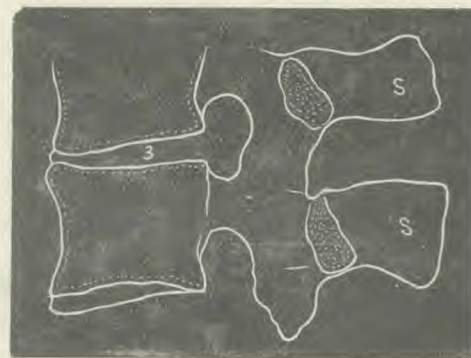


FIG. 4.

case of the elbow, knee, or any other joint. If an arm is held in a flexed position for only a few weeks, the ability to move the elbow joint by a voluntary effort is not infrequently lost, so that forcible extension must be employed in order to restore the natural mobility of the joint. An unused joint is rendered stiff and inflexible by the shortening of the muscles and ligaments, and by the accumulation of lime salts in the ligaments and other structures about the joints.

This is true of the many joints which compose the spinal column; and in the case of this complicated assemblage of joints, another factor must be considered: The bones composing the spinal column are separated by fibro-cartilaginous discs, which lessen in thickness by compression, but quickly recover when the pressure is removed. To this compressibility of the fibro-cartilages is due the curious fact that a young adult is usually shorter at night than in the morning. The height between night and morning has been known to vary as much as three inches,

that correction of the deformity is by no means easy. This hardening, or partial ossification of the cartilages, is one of the most frequent causes of the loss of flexibility in the spine.

The traveler in Holland or Belgium in certain seasons of the year, sees constantly in the fields, men, women, and children at work with their bodies bent nearly double, gathering flax or doing other work which requires the hands to be in contact with, or near to, the ground, but without flexion of the knees. The average adult American man or woman would find it impossible to even touch the ground with the hand by bending forward at the hips, without bending the knees. This is due to the partial consolidation of the joints of the middle and lower portion of the spine. The rigidity of this portion of the spine in most adult men and women, is so great that in bending forward to reach the floor, the degree of flexion attained would fall short at least a foot of that required, in the majority of cases.

This consolidation of the lower portion of the spine is invariably accompanied by a relaxed condition of the abdominal muscles. These muscles, like those of other portions of the body, require constant activity to maintain their integrity. When the spine becomes rigid, the movements necessary for exercise of the muscles of the trunk are no longer

executed, and, in consequence, these muscles rapidly deteriorate in strength, resulting in a loss of the natural abdominal tension and the consequent displacement of the organs contained within the abdominal cavity.

In our next we shall point out the rational mode of treating this deformity.

EXERCISE ESPECIALLY NECESSARY FOR ADULTS.

It is a singular fact that many parents who fully recognize the importance of exercise as an element in the education and training of children, give no thought to the importance of exercise as a means of maintaining their own health, or that of their children who have attained maturity. The father may exercise the greatest care to see that his son, while in school, has the proper amount of physical training, but when he leaves school and enters the counting-room, or any other position necessitating a sedentary life, the father, curiously, loses all anxiety upon the subject of exercise. The young man now more than ever needs abundance of exercise, especially in the open air; and still more does the father himself, as do all adults, require daily an adequate amount of muscular work.

With the child, a spontaneous disposition for activity leads the little one to secure a considerable amount of exercise. The youngest infant, not yet able to hold its head erect, kicks vigorously with its legs as it lies in its cradle, and, as soon as able to run alone, the muscular exercise which the average infant takes is amply sufficient to satisfy the demands of nature. It is only when the child becomes old enough so that it begins to be restricted by such artificial requirements as confine him to the school-room, and to sitting long at his desk, etc., that methodical and systematic exercise comes to be specially required.

The neglect of exercise is not so likely to be followed immediately by bad results to the child as in the case of adults. The child is growing, and in the increase in bodily size there is an outlet for the surplus nutrient material which is used in making good daily losses resulting from muscular exercise or other forms of vital work. In the adult whose body has ceased to grow, this is not the case, and any excess of nutrient material taken into the system beyond what is actually needed for repair, is likely to result at once in some injury to the body, the least serious of which is the deposit of a surplus amount of adipose tissue. It is very rare indeed to find a person

suffering from excessive accumulation of fat who has not at some time been guilty of either one or the other of the two indiscretions, over-eating or lack of physical exercise. Whatever portions of food are not used for the repair of tissue which has been destroyed by work must be either deposited, or eliminated through the liver, kidneys, and other excretory organs. A certain portion is deposited as adipose tissue, but other elements are deposited in the tissues in the form of organic poisons which hinder other vital activities of the body and hence weaken its energies. Regular and methodical exercise is, on this account, more important for adults than for children.

Neglect of regular exercise is one of the chief causes of gout, rheumatism, dyspepsia, and a whole train of maladies, the best preventive as well as one of the best remedies for which, is systematic, carefully regulated daily exercise. Many adults recognize this, but have a very inadequate idea of the amount of exercise required for health. For example, a man who spends from eight to twelve hours a day behind a desk in an office or a bank will call attention to the fact that he conscientiously walks, four times a day, the half mile which separates his home or lodging place from his place of business, imagining that this amount of exercise is adequate to meet the physical demands of his body. Thousands of men have grown old prematurely, and broken down in business, by living under this delusion.

Walking is not a vigorous exercise, and it is difficult for the active business man to find time enough to obtain by this means alone, sufficient exercise to maintain a good physical condition. Some men have done this, as John Ericsson, the great inventor, for example, who maintained a marvelous degree of activity up to an advanced age by spending two hours in vigorous walking, every evening, after having spent from twelve to fifteen hours in severe mental effort. Mr. Ericsson usually took exercise between 10 o'clock and midnight, but there are few business men who would persevere in such a plan of exercise.

DRESS

A MUD-DEFYING COSTUME.

BY E. L. SHAW.

THE very excellent dress invented by Mrs. Margaret Shaw Ingersoll, of Boston, is no longer an idea, but an established fact whose value has now been fully proved. Several months ago, before its first trial for street wear, a description of this suit was given in *GOOD HEALTH*, but as it is a subject of such wide-spread interest, we copy in full a more

elaborate description of the several garments composing the costume, taken recently from the lips of Mrs. Ingersoll herself, by the reporter of a New York paper:—

“The suit consists of a hat, a shoulder cape, a storm proof cloak, a dress in one piece, a pair of trousers, riding boots, and leggings.

“The dress, trousers, and shoulder-cape are made of dark green repellant cloth, trimmed with a tan braiding. The hat is a combination of green and tan, in the same goods as the gown, trimmed with gimp. The cloak and leggings are made of



FRONT VIEW.

very heavy repellant cloth. The dress is made quite short-waisted, with a kilt-plaited skirt that reaches a little less than half way to the ankle, below the knee. The trousers (worn in my case over tights) are full, and gathered at the knee by an elastic; the boots are regular riding boots, except that the leather is treated with a waterproof dressing, and the stitch line between the sole and the upper is filled with rubber cement. They are practically waterproof, however.

As they are the same size as the street boot, the storm slipper or rubber can be worn with them.

“The cloak is made on the model of a child’s Greenaway, only not so full in the skirt. Being made in this way, with very full sleeves and short-waisted yoke, it does not in the least impede any movement or gesture. Any outside garment may be worn that does not confine the arms nor insist upon a waist line. The hat may be made of anything serviceable and sensible, but it makes the suit more complete to have the hat match the rest of the costume.”

Referring to it, the before-mentioned paper, the *Recorder*, remarks: “Clothed in this sensible and comfortable dress, a woman may safely defy the most inclement weather. It will especially prove a boon to business women.”

• We have had special drawings made of this suit, which we reproduce here, that our readers may see how modest, tidy, sensible, and healthful a garb it really is, and how free from all objectionable features such as would be likely to offend the eye or trespass upon the delicacy of a timid, refined woman. Such a one is, we know, more apt than otherwise to think with shivering repugnance of a dress worn in public, ankle short, but we wonder how many of those who feel thus have ever seen a well-dressed woman



BACK VIEW.

upon the street in skirts reaching only to the tops of ordinary walking boots? The sight is so rare that we venture to say not many of this country and time have ever beheld it. Whoever sees it for the first time will, we feel sure, be struck, as was the writer, a few weeks since, by its general air of wholesomeness and desirability. All our preconceived ideas that a dress of this length must necessarily be an ungraceful dress vanished, as we noted the free, firm step, and the easy, natural, and self-respecting way in which its wearer, a middle-aged woman, moved along—a woman, we thought, as swathed in long skirts we laboriously toiled on behind her, who might well carry herself proudly since she had, alone and unaided, solved the long-mooted dress problem, and risen superior to even February's mud and slush!

Some form of shortened skirt is undoubtedly the coming dress, as it is the only convenient one for business women, but it will not probably be a uniform costume, but rather one modified by the personal style and individual taste of the wearer.

Mrs. Ingersoll has dubbed her costume "The Mudless;" not euphonistic, certainly, but highly valuable in suggestion.

DRESS reform has invaded that stronghold of fashion, Paris. At a meeting of the "Federated Females of France," it was resolved by fifty women delegates from the different branches of the association to organize a campaign against modern costume. They are pledged to wear short skirts, to discard stays, broad hats, boots with high heels, and gowns with low necks.

A REFORM-DRESS EXPERIMENT.—A lady member of the Kaweah Co-operative Colony, Cal., writes as follows to the *Woman's Tribune*:—

"As we, as a community, believe in reform, and are trying to practice it, last April we called a meeting of the ladies of the colony to talk over the advisability of adopting a more sensible and healthful mode of dress; as a result of the discussion, fifteen of our number decided to adopt the short skirt, about three inches below the knee, leggings to match the skirt, and blouse waist—the corset was to be laid aside by those who wore it—and on a concerted evening, at one of our social gatherings, we said, 'Four, to go!' and all appeared in our reform dress. We have worn it ever since with great comfort and convenience, and could hardly be induced to go back to the long, trailing skirts and the corsets."

Business women throughout the country would do well to organize themselves into Rainy Day or Wet Weather clubs, in every section. By appearing on the streets in considerable numbers at a concerted time, the inevitable staring of beholders would be divided up among so many that no one poor little timid soul would mind her share of it, particularly, while the "ice" of old established fashions and customs would be greatly imperiled, to say the least, if not absolutely broken. Individual women wearing shortened skirts would occasion little remark after the first demonstration, being known merely as members of the Rainy Day Club.

Some tasteful distinctive costume might be decided upon by each club, or the requirements of the dress may be varied to suit the personal preferences of the wearer. Club entertainments and club excursions might also be planned, which would add greatly to the interest in the dress question, as well as be the means of gaining frequent accessions to the number of members. If women of influence and good sense will interest themselves in this subject, Rainy Day clubs may be made exceedingly popular. This would mean the carrying of the gospel of health and physical freedom to thousands.

KILLED BY CORSETS.—Within the last few weeks there have been reported three deaths of young ladies, as the result of corset-wearing. In one case the young lady dropped dead while dancing, and in the other, death occurred during a game of euchre, while still another recently expired on the street, under peculiar circumstances. Coughing and choking were occasioned by a hemorrhage from the stomach. When medical assistance arrived, artificial respiration was attempted, but proved inefficient, and the girl expired in a few moments. A coroner's inquest was held. The verdict rendered by the jury recognized the real cause of death as being the fact that the girl was laced so tightly that when attacked by the choking, respiration could not be restored in time to save her life. It seems quite reasonable that the findings of the jury were in accordance with sound common sense, as it must be patent to any one who will give the matter a moment's reflection, that if the lungs are crippled to the extent of one half or two thirds their capacity, by the constrictions of a tight band or corset, any unusual embarrassment of respiration might quickly lead to fatal results under circumstances which would have led to nothing more than temporary embarrassment in case the lungs had been free to act.

SOCIAL PURITY

STRIVE FOR PURITY OF THOUGHT.

MRS. E. G. WHITE.

A LONG, preparatory process, unknown to the world, goes on in the heart before the Christian commits open sin. The mind does not come down at once from purity and holiness to depravity, corruption, and crime. It takes time to degrade those formed in the image of God to the brutal and satanic. By beholding we become changed. By the indulgence of impure thoughts, man can so educate his mind that sin which he once loathed will become pleasant to him.

Satan is using every means to make crime and debasing vice popular. We cannot walk the streets of our cities without encountering glaring notices of crime presented in some novel, or to be acted at some theater. The mind is educated to familiarity with sin.

The course pursued by the base and vile is kept before the mind in the periodicals of the day, and everything that can excite passion is brought before them in exciting stories. They hear and read so much of debasing crime, that the once tender conscience, which would have recoiled with horror from such scenes, becomes hardened, and they grow to dwell upon those things with greedy interest.

Many of the amusements popular in the world to-day, even with those who claim to be Christians, tend to the same end as did those of the heathen. There are indeed few among them that Satan does not turn to account in destroying souls. Through the drama he has worked for ages to excite passion and glorify vice. The opera, with its fascinating display and bewildering music, the masquerade, the dance, the card-table, Satan employs to break down the barriers of principle, and open the door to sensual indulgence. In every gathering for pleasure where pride is fostered or appetite indulged, where one is led to forget God and lose sight of eternal interests, there Satan is binding his chains about the soul. . . .

The heart must be renewed by divine grace, or it will be in vain to seek for purity of life. He who attempts to build up a noble, virtuous character independent of the grace of Christ, is building his house upon the shifting sand. In the fierce storms of

temptation it will surely be overthrown. David's prayer should be the earnest petition of every soul: "Create in me a clean heart, O God; and renew a right spirit within me." And having become partakers of the heavenly gift, we are to go on unto perfection, being "kept by the power of God, through faith."

Yet we have a work to do to resist temptation. Those who would not fall a prey to Satan's devices must guard well the avenues of the soul; they must avoid reading, seeing, or hearing that which will suggest impure thoughts. The mind should not be left to wander at random upon every subject that the adversary of souls may suggest. "Girding up the loins of your mind," says the apostle Peter, "be sober, . . . not fashioning yourselves according to your former lusts in your ignorance; but like as He which called you is holy, be ye yourselves also holy in like manner of living." This will require earnest prayer and unceasing watchfulness. We must be aided by the abiding influence of the Holy Spirit, which will attract the mind upward, and habituate it to dwell on pure and holy things. And we must give diligent study to the word of God. "Wherewithal shall a young man cleanse his way? By taking heed thereto according to thy word." Says the psalmist, "Thy word have I hid in mine heart, that I might not sin against thee."

Israel's sin at Beth-Peor brought the judgment of God upon the nation, and though the same sins may not now be punished as speedily, they will as surely meet retribution. "If any man defile the temple of God, him shall God destroy." Nature has affixed terrible penalties to these crimes,—penalties which, sooner or later, will be inflicted upon every transgressor. It is these sins more than any other that have caused the fearful degeneracy of our race, and the weight of disease and misery with which the world is cursed. Men may succeed in concealing their transgression from their fellow-men, but they will no less surely reap the result, in suffering, disease, imbecility, or death. And beyond this life stands the tribunal of the Judgment, with its award of eternal penalties.—"*Patriarchs and Prophets.*"

of chicanery, in which the concealed magnet and the compass needle play the principal part. I claim, therefore, that in any event it is wrong and misleading to attempt to confound magnetism with the curative properties of electricity.

"I have yet to learn the first case where magnetism, either strong or weak, has ever produced any effect either beneficial or detrimental upon the human system. Night after night for months I have been in the presence of the most powerful dynamos (as have thousands of men in the many electric-light stations all over the world) where

magnetism of the strongest kind permeates every bone and fibre and tissue of the body, and yet, so far as any effect either good or bad on the system goes, one would never know he had been in the magnetic field, and he would not notice it unless he found his watch had stopped. To the best of my knowledge and belief there is absolutely nothing in the human anatomy that can be acted upon by a magnet. Of course, if a child swallows a mouthful of tacks, or a paper of needles, there is something upon the inside of the child upon which magnetism will act, but not otherwise.

(To be continued.)

DR. KEELEY is evidently making a good thing out of his "bi-chloride of gold" humbug. It is reported that he has recently sold to a Connecticut physician the exclusive right to use his remedy in that State for \$80,000. Dr. Keeley ought not longer to pose as a philanthropist.

THE NEW YORK MEDICAL RECORD ON THE KEELEY CURE.—The New York *Medical Record*, one of the leading medical journals in the United States, in commenting on the recent death of Mr. John F. Mines, who was undoubtedly the most prominent of the converts to the Keeley method, and whose cure had been effected only a few days previous to his death on a drunken spree, justly remarks upon this now exploded method as follows:—

"The story carries its own lesson. It is the beginning of the end of the Keeley method; it shows what has all along been asserted, that the man possesses no specific, and that his treatment is mainly a moral and hypnotic one.

"Of course his adherents take refuge in the statement that he does not pretend to cure all cases, and that about five per cent relapse. There is not the slightest proof, however, that *only* five per cent do relapse. As for the further assertion, that some patients while cured may get the disease again, it is a silly quibble not worth discussing.

"We believe most thoroughly in mental and moral therapeutics for the inebriate; but we protest against giving credit of cures by such means as any inert drug or to any other 'something' which is kept as a quackish secret. The charlatan produces wonderful cures for a time, but in the end his work tends to injury and disaster."

INSANE FROM THE KEELEY CURE.—The papers are publishing the fact that C. M. Vaughan, of Denver,

Colo., recently went insane from the effects of the Keeley treatment for drunkenness. He was attacked suddenly in the night while stopping in a hotel, and was so furious that he drove people from the hotel in their night clothes. If the above is true, it would seem that the drunkards reformed by the Keeley method are a more dangerous element in society after reformation than before.

ANOTHER CASE.—The newspapers recently report the death of Walter B. Earle, a patient at the Keeley Institute of White Plains, New York. The patient had recently undergone a course of treatment at the Institute and had been discharged cured, but shortly afterward died insane. His friends claim that his death was the result of the bi-chloride treatment. The New York Senate has ordered the Committee on Public Health to make an investigation of the matter and report March 17.

STILL ANOTHER.—A Troy (N. Y.) newspaper states that James Gavin, a "gold-cure" patient of that city, has disappeared. When last seen he was in a state of "paralyzed intoxication." His family believe him to be insane.

FOOD ADULTERATION.—Adulteration of food as an industry seems, according to a recent report of the Massachusetts State Board of Health, to be carried on in that State to an alarming extent. The Board finds that in a list of twenty of the most common articles of food used in every household, the adulteration amounts to 32 per cent. It examined 434 specimens gathered at random, and of these, 139 were more or less adulterated. Canned goods were the especial prey of dishonest and unscrupulous persons, only about one seventh of the specimens being found worthy of approval by the Board.

GOOD HEALTH

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

SANITARY HOUSE CLEANING.

IN all presumably well-regulated households there is an attempt to put in order the house and premises from a sanitary standpoint, at least once a year. We do not much believe in annual house cleanings, as hygiene requires that the house as well as its inmates should be clean all the time, and if proper attention is given to the daily removal of dust, debris, and dirt in every form, the annual house cleaning will be unnecessary. Nevertheless, time and custom relegates to the springtime the general overhauling, renovating, and expurgation of germs, which is certainly better done once a year than not at all. It is not the purpose of these paragraphs to undertake to give explicit directions for house cleaning, but we cannot forbear to call attention to a few points which ought to receive special attention.

In the first place it should be remembered that the real purpose of house cleaning is to get rid of germs. The mighty microbes which, through the neglects of a year, are certain to be found perching on every window-sill, picture frame, and stationary article of furniture, nestled among the folds of lace curtains, lambrequins, and upholstery, hidden slyly among bits of bric-a-brac and curiosities, stored in vast quantities underneath rugs and carpets, under and behind chests, dressers, drawers, the family organ, and perhaps the time-honored family clock, growing luxuriantly in dark corners, unventilated closets, and especially within the pantry, and about the kitchen sink, swarming in millions from the musty cellar, the laundry, and the dark space underneath the house, and even haunting with a stale and pestilential breath the sacred precincts of the parlor, the guest chamber, and the spare bed,—the all-prevailing, unseen, but mighty mischief-working germ is the thing to be gotten rid of by the spring house cleaning.

The purpose of the renovating process is not simply to make the house and premises look bright

and fresh, or, in other words, to give to them a sort of polish, inviting to the eye, except so far as improved appearance is an evidence of increased cleanliness.

A year's accumulation of germs is by no means easy to be gotten rid of. Bacteria are exceedingly tenacious of life, and cling with marvelous obstinacy to everything with which they come in contact, and after a year of almost undisturbed possession of the premises, it cannot be expected that they will be easily ousted.

House cleaning is seldom thoroughly done, and the consequence is, a few weeks after the annual scrubbing and overhauling has been completed, the premises from a sanitary standpoint are in a condition almost equally as bad as before. The ancient Jewish housewife understood better than does the modern housekeeper, the importance of thoroughness in domestic sanitation. If she found a brown or yellow spot of mold growing upon the plaster, she did not simply wipe it off with a moist cloth and then give the matter no further attention, as the average modern housewife would do, neither was she satisfied with what our modern housekeepers would consider going to the full length of sanitary scrupulousness,—the application of a coat of whitewash or calcimine. No, indeed; instructed by the priest respecting the danger of living in a house inhabited by mold, and the myriad kindred germs which accompany such unsanitary conditions, the Jewish wife and mother, on the discovery of a plague spot, in other words a patch of mold, in her dwelling, immediately moved her family out of it, with all her store of mats, rugs, robes, blankets, furs, quaint wooden bowls, brass pots, gourd drinking cups, and strange looking goatskin water bottles. The whole family moved out of doors, camping out in a tent or under a palm-tree, and then the priest came down and looked the premises over, and ordered a house clean-

ing such as would frighten a modern Bridget quite out of her wits.

Instead of going into that germ-infected house with a handful of chloride of lime to sprinkle about the floors, and a pail of whitewash to spread on the walls, or a few rolls of paper just come up from Damascus, decorated with the newest designs, to paste upon those germ-covered walls and ceilings, the priest, with his servants, comes with shovels, trowels, baskets, and probably a train of donkeys with their drivers, and he attacks that house in a fashion to make one think that he intends to tear it down, and he is not satisfied until he has scraped off every particle of mortar and laid bare the smooth surface of the great stones composing its walls.

One can picture in his mind what a commotion must have been set up by such a house cleaning. A great ado about nothing, doubtless some of our modern housekeepers would say; but Moses, although he had never seen a microscope, and hence had never beheld a germ, knew well the mischief-working and death-dealing potency of these parasitic organisms, and put into the Jewish law directions for house cleaning, which, if carefully carried out, left little chance for even a solitary microbe to remain behind; for the germ-infected mortar which was so carefully scraped off the walls, was not carried out and spread over the garden, or dumped into a neighbor's back yard, but was placed upon the back of a donkey, and carried off to the Gehenna outside of the city walls.

The Jewish house cleaning process did not stop even here. After new plaster had been put upon the walls, and the whole house had been renovated, it was shut up for a sufficient length of time to give a new crop of germs an opportunity to grow to such proportions as to be visible to the eye, and then if it was found that the plague spot, or leprosy, or, as we moderns would say, the *mold* had reappeared, there was no more trifling with that house. Even the walls, the mortar between the stones, possibly the stones themselves, had become infected by these all-penetrating microbes, and down came the priest with his servants again, this time with axes and more shovels, and pick-axes, and more donkeys and a bullock cart, and they attacked those germs with a vehemence which left not one stone upon another. The whole house—every brick, every rafter, every lintel, every window casing, every door-sill, every tile on its roof, every stone slab in its floor, every plank, every spike, even to the last foundation stone—was torn away, pulled down, broken up, and carted off and dumped so far away from any human habi-

tation that those deadly microbes would never again have any chance to do anybody any harm.

Our modern house cleanings are not after that fashion. Indeed it is not necessary that they should be quite so radical, as modern science has given us a knowledge of disinfectants, which are nature's antidotes for germs, and which, when properly applied in conjunction with thorough means for cleansing and the bodily removal of germs, enable us to disinfect in a most thorough manner the most infected premises. We need not tear off the plaster from our walls, for example, since we have learned that the fumes of burning sulphur will penetrate wherever germs can go, and follow these invaders to their most secret hiding places.

The average housewife is quite content with mere scrubbing and whitewashing. These means, though most essential and of undoubted efficiency, need to be supplemented by the cleansing of such places as cellars, pantries, wash-rooms, as well as sick rooms, and every place where must or mold have made their appearance, by means of sulphur fumigation. The method is easy of application. It is only necessary to get a quantity of sulphur (not brimstone) sufficient to provide three or four pounds of sulphur for every 1,000 cubic feet of space to be disinfected. It is needless to add that the amount of cubic space is obtained by multiplying together the length, breadth, and height of the room or rooms to be disinfected.

To burn the sulphur, mix with it an equal quantity of powdered charcoal, which is easily prepared by quenching some coals from the fire, putting them into a paper flour sack and beating them with a mallet or the end of a stick of wood until finely broken. Put the mixture of sulphur and charcoal into an old iron kettle, set this on some bricks in a tub containing water to the depth of about one inch. Pour a little alcohol upon the mixture of sulphur and charcoal, then drop into the kettle a little roll of paper which has been lighted at one end. The tub should have been previously placed in the middle of the room, and all windows and doors except the one means of egress should have been tightly closed, the cracks having been stopped by pasting paper over them. Get out of the room as fast as possible, close the opening, making it as tight as possible, by pasting paper over the cracks on the outside. Allow the room to remain closed for twenty-four hours, then open the doors and windows and air for twenty-four hours more. Then it is safe to move into it; it is thoroughly clean; there is not a live germ in it.

A room cleaned in this manner after having been thoroughly scrubbed and dusted, is in as good sanitary condition as a house in old Palestine that had had its walls scraped and newly covered with mortar.

One more thing we must mention, the absurdly unclean habit which some slack housekeepers have in papering walls,—putting new paper on without pulling off the old. By this method the myriads of germs which have accumulated upon the old paper along with the dirt which has defaced it, are covered up under the new paper; but instead of being destroyed, they are encouraged to greater development and activity by the food furnished them in the paste with which the paper is attached. Papering walls is certainly objectionable from a sanitary standpoint. Papered walls are not easily cleaned. The

old-fashioned calcimine is also objectionable. It readily absorbs moisture in consequence of the glue which it contains; the development of germs is encouraged, as glue furnishes the best kind of food for some of the most deadly germs, and with all the rest, it has little durability in consequence of the readiness with which it peels off when exposed to moisture. The invention of alabastine has furnished an article which is wholly unobjectionable from a sanitary standpoint, and as this preparation is now furnished in a great variety of colors, any desired effect as to coloring and decoration can be produced without resorting to the use of either the very objectionable wall paper or the scarcely less desirable calcimine. We are glad to commend this article for general use.

BRANDY AND LA GRIPPE.—Probably no drug has been so widely recommended and so frequently used in the treatment of *la grippe* as brandy, or its congener, whiskey. A number of persons who had suffered from the disease before consulting us, confessed to keeping themselves half drunk during the attack, by copious draughts of whiskey, which was recommended to them as a cure-all, and yet notwithstanding, these same individuals were suffering from very severe *sequela* resulting from the disease. As an evidence of the faith in alcohol as a panacea for this malady, we may mention the fact that the first thing done by a generously inclined lady, who devoted a considerable sum to the "relief of distress" from influenza, was to distribute two thousand bottles of brandy. We are glad to note that the *British Medical Journal*, perhaps the highest medical authority in the world, takes strong ground against the use of alcohol in this disease, and suggests that if this free use of brandy for influenza is to continue, "the remedy is likely to be worse than the disease." Dr. James Edmonds, an eminent London physician, writes to the *British Medical Journal*, "The use of alcohol seems to me to do nothing but mischief to the patients." This opinion quite agrees with our own observations. A large number of cases of this sort, numbering probably several hundred in all, have been treated at the Sanitarium, and not a drop of alcohol has been used in any case, yet with rare exceptions recovery has been very prompt and complete.

TAPEWORM AND BOLOGNA SAUSAGE.—A correspondent writes us that a physician of her city, noticing the very great increase of cases of tapeworm, has been investigating the matter and finds that in every

instance the family has been in the habit of eating Bologna sausage. This is not to be wondered at, as probably no other form in which flesh food appears on the tables of civilized human beings is more objectionable and unwholesome than is Bologna sausage. Many people readily accept Bologna sausage who would not think of eating pork sausage on account of the filthy habits of the scavenger, a dietetic inconsistency which is evidently based upon ignorance. From our standpoint pork sausage is much preferable to the average Bologna, since in consuming the former, one knows exactly the extent of his infraction of hygienic rules—in other words he knows that he is eating pork—but when one eats Bologna, he is consuming the odds and ends of everything. The United States Consul at Bologna reported some time ago the results of an investigation, in which he learned that genuine Bolognas were largely composed of mule flesh, and a San Francisco Bologna manufacturer, who received the highest prize for his products at a public exhibition, was detected by his competitors, who undertook to pry into his secret, in the act of converting truant cats into the delectable mixture of all manner of beasts which he sold as Bologna. There is no reason why the tapeworm should not be represented in Bologna along with the other animals, and doubtless this dietetic menagerie seldom lacks a few specimens of the parasite.

ETHER DRINKING.—It is asserted by a correspondent of the *Medical Age*, that ether drinking is common among the Finns, Swedes, and Poles who have settled in the northern counties of Michigan. The ether is usually mixed with alcohol or whiskey. Heretofore we have supposed this prac-

tice to be confined to certain localities in Ireland, in which country the practice seems to be extending, children, even, in some localities, being addicted to the habit, obtaining the drug from women who tramp about the country disguised as beggars. One of the reasons for the use of ether seems to be the fact that a person can get drunk at a less expense on this drug than on whiskey, the effects are produced more quickly and are more quickly recovered from. It is reported of a certain Irish judge that he closed court at 12 o'clock, got his dinner, went on a spree, and became sober again in time to take his seat upon the bench at 1 : 30 !

FAITH-CURE AND MIND-CURE.—One of our most highly appreciated contemporaries, the *Free Methodist* of Chicago, a journal which we are glad to find thoroughly in sympathy with good reforms, in a recent very kindly notice of GOOD HEALTH, remarks : "We are sorry, however, that the editor confounds 'Mind-cure' and 'Christian Science' (falsely so-called) with Faith-cure." Our contemporary labors under a misunderstanding of our meaning, which ought perhaps to have been made clearer. The reference made to faith-cure in a recent number of this journal must not be construed as having any relation to the exercise of faith in healing the sick in accordance with the teachings of the Bible. We had reference only to that sort of faith-cure which is peddled about at a dollar a prayer, as was remarked to us by a patient who had for some time been humbugged by this form of religio-medical quackery. We have no faith whatever in a faith-cure which must be paid for, to be enjoyed, and to obtain instruction in which a one-hundred-dollar fee must be paid. We regard the so-called "faith-healers" who go about the country, as simply another species of mind-curists who have "borrowed the livery of Heaven to serve the devil in." Let not the "faith" of such pretenders be confounded with that which offers its blessings without money and without price.

THE DYSPEPSIA-PRODUCING BAKING-POWDER.—The war which is being waged at present among the manufacturers of baking powders is likely to result in much good to the public, through the thorough ventilation of the deleterious composition of these powders almost without exception. We believe the more intelligent of those who have become conversant with the merits of the controversy, will certainly be led to consider whether or not all baking-powders are not more or less harmful in character, even

if composed of the purest ingredients, that is, simply carbonate of soda and tartaric acid. Ammonia and alum, the two chemicals which are so very unsparingly and properly denounced by Dr. Enderman, are condemned, because they are harmful chemicals. Dr. Barker, Professor of Chemistry in the University of Pennsylvania, and President of the Chemical Society, in a discussion which recently occurred before the society, remarked, in reply to a plea by the agent of a baking-powder firm, that the quantity of ammonia used in baking-powders was not very large, "No matter how small the quantity, I must decline to be dosed medically without my consent, when taking my meals."

This is all very excellent, and exactly what we believe and have been teaching for many years, only we have carried the matter a little further. Tartaric acid and carbonate of soda are chemicals as well as ammonia and alum, not quite so drastic in character, it is true nevertheless, chemicals which have no use and no proper place in the human stomach. When taken in connection with meals, the compound resulting from the action of tartaric acid upon carbonate of soda, such as occurs when these substances are used in the raising of bread, is what is commonly known as Rochelle salts. Salts are good and necessary in medicine under some circumstances, but, in the words of Prof. Barker, "No matter how small the quantity, I must decline to be dosed medically without my consent, when taking my meals." Who would think of deliberately putting into his soup or any other article of daily fare, regularly, every day of his life, a small quantity of Rochelle salts, or any other medicine, at least if such a drug had not been prescribed for him by some physician as necessary for the relief of some ailment from which he might be suffering? It is high time this wholesale medication of the public was stopped; hence we trust that the baking-powder war will continue until the manufacturers, like the Kilkenny cats, have destroyed one another.

DEATH FROM TRICHINÆ.—Deaths from trichinæ are becoming so frequent that they have almost ceased to be the subject of remark. The last victim is a young woman seventeen years of age, residing in Paoli, Ill. The flesh of the patient was found to be filled with trichinæ.

CONVULSIONS FROM CIGARETTES.—The *Philadelphia Record* records a case of a young man picked up in the streets suffering from convulsions, which were attributed to the use of cigarettes.



THE CAUSE OF NERVOUS HEADACHE.

THE cause of nervous headache and its proper treatment are subjects which, without doubt, will be of practical interest to many readers of this journal. We quote the following article by "J. H. K." from the *Bacteriological World and Modern Medicine*, as an expression of the latest scientific views on this question:—

"There are few practitioners who have not frequently found themselves baffled in their efforts to relieve a chronic sufferer from nervous headache. The inefficiency of all the remedies which have been proposed for this malady, is evidenced by their number, and the eagerness with which every new remedy proposed is grasped and submitted to trial. Antifebrin and antipyrin, and the various other analogous drugs which have recently been recommended for this distressing affection, although at first vaunted as panaceas, soon prove to be as inefficacious to effect a permanent cure as older remedies. The real cause of failure is not due to the stubbornness of the disease, but to a failure to recognize its cause. In a great majority of cases a careful investigation will show that the patient is suffering from the retention of decomposing fecal matter in the large intestine. Most patients suffering from nervous headache, suffer habitually from constipation, or, if questioned, will state that the single daily stool is ragged and very foul smelling.

"The administration of a large enema, or better still, a coloclyster, in these cases, will almost invariably bring away a large amount of fecal matter which has been retained, notwithstanding the daily evacuation. Doubtless there are a large number of persons suffering from fecal accumulations, who have regular daily stools, and suppose their bowels to be in a perfectly healthy condition. These retained fecal matters contain a great number of microbes, which, under favorable conditions for growth, develop

poisonous ptomaines, which, as has been clearly shown by the recent researches of Trastour, Bouchard, Brouardel, and other pathologists of the French school, play a most important role, in the production of a great variety of symptoms hitherto little understood.

"Leven has shown that attacks of nervous headache are usually accompanied with tenderness of the solar plexus, or the abdominal sympathetic—especially the lumbar ganglia of the sympathetic. It will be found that the two conditions, hyperæsthesia of the lumbar sympathetic, and poisoning by the absorption of ptomaines developed in retained fecal matter in the large intestine, usually co-exist, and we have seen extreme tenderness of the lumbar sympathetic ganglia disappear within an hour after the administration of a coloclyster, and the thorough evacuation of the contents of the large intestine. It is my experience that nothing is so valuable as a means of cutting short an attack of nervous headache, or preventing an occurrence of the disease, as a complete clearing out of the large intestine, which may be readily accomplished by the administration of a large enema, the patient being placed in the knee-chest position. An enema taken in this way is called by Dujardin-Beaumez an *enterclyster*. We prefer the term *coloclyster*. Two quarts of warm water are generally found to be amply sufficient for the purpose. Sometimes two or three repetitions of the treatment are necessary thoroughly to remove from the colon old accumulations. After injection, the water should be retained a little time and the bowels should be manipulated with the hand, either by the patient or by an attendant, so as to cause the water to pass as far up in the colon as possible. If the patient is very feeble, the coloclyster may be administered with the patient lying in a half-prone position. The patient should lie the same as in the Sims position, only

turned toward the right instead of toward the left side.

“The benefit derived from this treatment is not only through the removal of fecal matter, but, through the absorption of a portion of the water introduced, the kidneys are aided in the elimination of the poison from the system. If the water employed is quite warm, it will also produce profuse perspiration, by which the elimination of the poison is likewise assisted.

“The colocolyster, even when thoroughly em-

ployed, will not always give immediate relief to a person suffering from an attack of nervous headache, but it will almost invariably shorten it, and, if employed once or twice a week, or whenever there is evidence of fecal accumulation, will go further toward the prevention of subsequent attacks than any other remedy. The use of a small quantity of water in these cases is worse than none at all, as it encourages the development of microbes, and facilitates the absorption of ptomaines by bringing them into solution.”

DIET FOR ACID DYSPEPSIA.

THERE are two forms of this disease, which are radically different, and require very different treatment. In the most common form, the food undergoes fermentation in the stomach, resulting in the formation of acids, particularly lactic acid. In a form of the disease which is less frequently met with, but which is by no means rare, the acidity is due to an excessive development of hydrochloric acid in the stomach. In the first-mentioned form of the disease, in which the acidity is due to fermentation, the patient should avoid sugar and all food containing sugar, coarse vegetables, and articles difficult of digestion. Fermented bread, hot biscuit, griddle-cakes, and similar articles, are exceedingly objectionable. Zwieback, water-crackers, and breads made without yeast or baking-powder, with a moderate use of cooked, sub-acid fruits, such as steam-baked apples, and, in some cases, eggs when properly cooked, constitute the best diet for this class of patients. Peas and beans with the hulls excluded, and cooked without the addition of fats, are well tolerated in most cases. Ripe grapes and mellow peaches in their season may also be taken. Gluten biscuits and gluten meal are required in severe cases.

The production of a greater quantity of gastric juice, or of gastric juice containing a larger amount of hydrochloric acid, is essential to improvement in these cases. The two most efficient means for accomplishing this, are, the long mastication of food, by which a larger amount of saliva is mingled with it, and the introduction of a larger proportion of albuminous elements with the food. The saliva is a natural stimulus for the peptic glands. Its presence in the stomach arouses these glands to activity, and to a large degree determines the amount of gastric juice which they will produce. The amount of gastric juice is also, as a rule, in pretty exact proportion to the amount of albuminoid sub-

stances, that is, albumen, gluten, and similar substances contained in the food. Acid dyspeptics usually find that preparations of wheat are much less apt to produce acidity than oatmeal, probably for the reason that the albuminous principle of wheat is gluten, which is digested in the stomach, and hence acts as a stimulus to the peptic glands, whereas the albuminous element of oatmeal is caseine, a substance which is digested only in the small intestine, by the action of the pancreatic juice, and not in the stomach. Peas and beans are less likely to agree with this class of dyspeptics than are preparations of wheat, for the same reason, their albuminous principle being vegetable caseine, a substance closely allied to the caseine of milk. For the same reason, also, milk is likely to sour when taken into the stomach.

A diet of bread and meat will give temporary relief to this class of patients, for reasons given above, but it is a poor remedy, as the excess of nitrogenous matter likely to be received into the system, together with the poisonous extractives which all flesh food contains, which are likely to be received in harmful quantities when the diet consists largely of flesh food, are likely to ultimately produce a condition worse even than that which it is desired to cure.

In the second class of cases — those in which there is an excessive production of hydrochloric acid — it is important to excite the activity of the stomach as much as possible, hence a diet consisting largely of foods chiefly digestible in the small intestine is usually preferable. The food should be thoroughly disintegrated by thorough cooking and careful mastication, that it may enter the stomach in a soft, pultaceous condition, requiring little muscular activity on the part of the stomach. Meats and eggs should be particularly avoided, as they are digested in the stomach, and hence will increase the activity of the peptic glands.

Milk and grain preparations, as bread and milk, mashed peas and beans from which the hulls have been excluded, and similar foods are specially to be commended for this class of patients. In severe cases, it is best for the patient to take from ten to fifteen grains of soda just before eating, and to renew the dose three or four hours after eating, if necessary. Soda is exceedingly detrimental in cases of acidity due to fermentation, but almost indispensable in cases in which the acidity is due to excessive secretion of hydrochloric acid.

The distinction between these two classes of cases may be usually made by the fact that when acidity is due to fermentation, it rarely occurs until three or four hours after a meal; whereas, acidity due to excessive secretion occurs usually within an hour after eating. The latter condition is usually accompanied by redness or soreness of the tongue, and the occurrence of small ulcers or aphthous patches in the mouth. A positive diagnosis can be made only by a chemical examination of the matters removed from the stomach by vomiting or the stomach tube.

ARSENIC IN SKIN DISEASE.—We quote the following from the *Bacteriological World and Modern Medicine* :—

“The routine employment of arsenic in skin diseases has been a source of much evil. The writer has met a number of instances in which acute inflammation of the kidneys has been induced by this routine practice, and great mischief has been done. A young lady, the daughter of a physician, consulted us some years ago, being sent by her father, for chronic eczema. On inquiring if arsenic had been tried, the patient replied in the negative, saying her father, an eminent and experienced physician, had told her that she would better suffer from the skin disease than chronic arsenical disease. We are not condemning the use of arsenic altogether, but only oppose its indiscriminate use. We are glad to note that so eminent a medical authority as Jonathan Hutchinson, of London, has recently called attention to this evil, particularly in the treatment of elderly persons. There are few cases of eczema or other chronic skin diseases, which cannot be cured by careful regulation of the regimen of the patient, and local applications, and without resorting to the prolonged use of arsenic, or any other constitutional remedy.”

SHOULD OLD AND YOUNG SLEEP TOGETHER?—The question is often asked us: “Do you think it objectionable for old and young persons to sleep together?” We answer most emphatically, Yes. It is certainly very damaging for young persons to sleep with old persons, but it is also damaging for a young person to sleep with one of equal age. It is indeed questionable whether persons of any age can habitually sleep together without damage. The injury does not arise from the absorption of vitality from the young by the old, or from a person of one temperament by a person of a different temperament, but it grows out of the fact that beneath the bed clothing there is constantly thrown off by the skin quantities

of poisonous matters, which accumulate, creating underneath the more or less impermeable bed covers, a poisoned atmosphere. In case two persons occupy the same bed, the amount of this poison is naturally doubled, and as the body reabsorbs more or less of the poisonous matter, the density of the poison in the under-the-bed-covers atmosphere is necessarily increased. The extent of the injury inflicted would naturally be palpably greater in the case of a young child, on account of the greater susceptibility of the very young. But the same mischievous tendency must exist in the case of persons of any age to a greater or less extent. A bed for each member of the family is certainly one of the arrangements which can be commended from a hygienic standpoint.

REMEDY FOR IVY POISONING.—The following powder sprinkled upon the inflamed parts, often gives very prompt relief, the remedy being specially useful in acute stages of the disease, and when there is much irritation: Boracic acid, finely powdered, 3 oz.; carbolic acid $\frac{1}{2}$ dram. Sprinkle on the part freely, as a protective.

BLACKADER asserts that milk contains a starch-liquefying ferment which is destroyed by a temperature above 160° F. This fact is used as an argument against the prolonged heating of milk in sterilization at a high temperature.

Milk sugar is destroyed by prolonged heating. The caseine is changed so as to be rendered less coagulable by rennet, while a portion of the albumen is coagulated.

GOUT AND THE USE OF SUGAR.—Dr. Jonathan Hutchinson, the great London physician, forbids his patients who are suffering from gout, the use of cooked fruits, if eaten with sugar. The employment of cane sugar he finds particularly injurious. Ripe fruit, eaten raw, without the sugar, is harmless.

ANSWERS TO CORRESPONDENTS.

TREATMENT FOR CATARRH, INDIGESTION, ETC.— J. L., Canada, has catarrh of back passages with much dropping of mucus, and asks, “1. What do you think of warm vaseline or petroleum oil spray in this case?” He also asks, “2. Would Horsford’s Acid Phosphates help my indigestion? 3. Would buttermilk be good for me? and when should I drink it?” In relation to losing flesh and tone generally, he inquires, “4. Can you recommend Maltine with peptones? 5. Would Buffalo Lithia Water be good for me? 6. Could I make it myself, of salicylate or carbonate of lithia?” In relation to the urine, which he states is generally quite dark, and sometimes of a salmon color and quite thick, with a reddish sediment, he asks, “7. What is the trouble, and what ought I to do?” He inquires lastly, “8. Which is less injurious, yeast or pure baking-powder?”

Ans.—1. Fluid vaseline is of the greatest value in the treatment of nasal affections in cases in which there is diminished secretion with dryness and the formation of scabs. 2. Acid phosphate, like other drugs, rarely affords a permanent relief, even in cases in which it is temporarily helpful, hence it is only a palliative remedy. The cause of the disorder should be removed, when the disease will disappear. 3. Buttermilk made from sweet cream is a wholesome food. It should not be taken as a drink, but should be eaten as a part of the meal. 4. Maltine is sometimes useful as an aid to digestion, especially in cases in which there is inability to digest starchy foods. Peptones are, in our opinion, rarely if ever called for, except in cases in which food must be administered per rectum. 5. We are not acquainted with any mineral water which we can commend. 6. Artificial mineral waters possess all the properties of the natural waters, if made of the same constituents. Pure, soft water, if taken in the proper quantity, will doubtless afford relief from some of the symptoms mentioned. 7. You ought to consult an intelligent physician, and have a careful investigation of your case, which would require a physical examination, and a chemical microscopical examination of the urine. 8. Neither yeast nor baking-powder are necessary, but of the two, yeast is usually to be preferred, although a case is supposable in which baking-powder might be preferable to yeast. Bread raised by yeast is objectionable, because the yeast germs are not killed by ordinary baking, and set up fermentations in the stomach; but this objection may be removed by baking the bread a second time.

TREATMENT OF GASTRIC AFFECTIONS.—K. F. B., Maryland, inquires as to the merits of the stomach pump in the treatment of gastric affections.

Ans.—A stomach-pump, or rather, its modern substitute the stomach-siphon, is of great value in the treatment of certain forms of disease of the stomach.

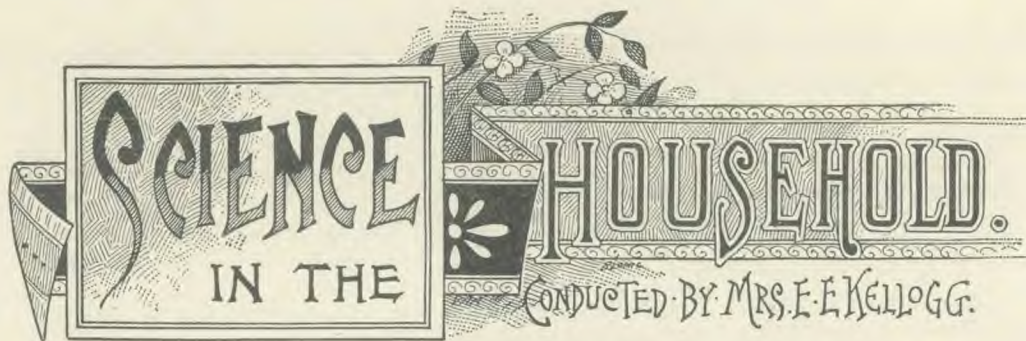
It is particularly useful in cases of dilatation of the stomach, gastric catarrh, cancer, and in some cases of ulceration of the stomach. In ordinary cases of dyspepsia, its use is not required.

SORE HEELS.—Mrs. C. B., Michigan, asks what she shall do for sore heels. Is troubled with them, generally all through cold weather, so that at times she is unable to wear shoes. This affection begins with a small hole or depression in the heel, when the surrounding flesh will rapidly swell and grow black and blue, and dreadfully sore to the touch.

Ans.—The patient is probably suffering from the results of frost-bite. We recommend bathing the affected parts alternately with hot and cold water. The feet should be placed first in hot, then in cold water, alternating every ten or fifteen seconds, the process being continued for fifteen or twenty minutes once or twice daily. Afterward bathe the affected parts with alcohol.

CURE FOR THE TOBACCO HABIT.—This correspondent is a man of 30 years of age, good constitution and temperate habits, but has chewed tobacco moderately for eighteen years. Realizes that it is a filthy, injurious habit, and would be glad to break it off, but says that he is a locomotive fireman, and when he tries to go without tobacco, he gets too sleepy to attend to his duties. At such times he is so hungry that he can scarcely eat enough. He also lacks energy and is easily irritated during this period. He asks if there is any treatment or tonic which would control these symptoms, thus assisting him to break off the habit. Would be grateful for any advice.

Ans.—A man who is thoroughly addicted to the tobacco habit, should not undertake a cure while pursuing his usual avocation, but should devote a week or two, or, if necessary, even more, to getting rid of the filthy habit. We have never found any difficulty in relieving the worst tobacco users of the habit, and without any serious disturbance, within one or two weeks, when there was a genuine desire to reform. The readiness with which the weed is renounced under judicious treatment is often surprising.



PERNICIOUS USES OF SODA.

BY HELEN L. MANNING.

To one who has the interests of the health of the public at heart, it is alarming to note how frequently in the cookery recipes given in domestic and rural papers, soda is recommended. I do not now refer to the use of soda in the making of breads and pastry, which indeed is so general, but rather to its recommendation and use to hasten the cooking of certain articles of food and to neutralize the acidity of certain others. For example, in a late contemporary magazine, the experience of a correspondent is commended, because in the first place she discovered one day when her sugar box was low, that cranberries were made palatable with much less sugar than usual by the addition of a small quantity of soda.

As the result of her experience, she recommends the addition of soda in cooking gooseberries, prunelles, dried plums, cherries, etc., on the score of economy in the use of sugar, saying that the addition of about a half teaspoonful to a quart of fruit will lessen the required amount of sugar one third. She also recommends soda in cooking both fresh and dried beans as a saving of fuel, and for the same reason, a pinch of soda is added in cooking tough meat or an old head of cabbage. But the crowning economy (?) of this same writer is her success in using it on a spare-rib, which had been kept until nearly spoiled. The meat was cut up,

washed in cold water, and then dropped into boiling soda water, and after ten minutes of dosing, was removed and cooked ordinarily, when no traces of taint were discoverable!

Soda, too, is often recommended and frequently used as a domestic remedy for sour stomach, heart-burn, etc., and usually the doses taken are not small. While soda will give temporary relief in such cases, its use is harmful because it neutralizes the acid of the gastric juice, as well as other acids which may be present, and so retards digestion. The pepsin of the gastric juice is only active when in an acid medium.

When it is well understood that dyspepsia and attendant ills are the offset for these so-called economies, the good sense of our American housekeepers will doubtless assert itself, and the "pinch of soda" will be looked upon with just abhorrence rather than as a friendly aid to cookery. The saving of a few dimes can in no wise compensate for an incalculable injury to the digestive organs. Soda and its concomitants have no rightful place in hygienic cookery. A "pinch of soda" may be legitimately employed to soften hard water for washing dishes, and for bathing purposes, or to dress burns and insect bites, but, friends, as you value good digestion and good health, let it be forever kept out of your stomachs.

VEGETABLES of pronounced or delicate flavors should never be cooked in an iron pot or stewpan. Indeed, it is only a question of time when all iron cooking vessels will be entirely discarded, now that granite and porcelain-lined ware has become so common. It is truest economy to purchase these, even though the first cost may be more than that of tin or iron. Both are exceedingly durable.

THE best lamp wicks are woven soft and loose. If lamps or burners become sticky or clogged with dust, boil them in soda water.

BROOMS which are hung up keep their first shape better and sweep more evenly than those left standing; and it is said that if they are dipped in warm water every day, they will last longer than if left dry.

SOME SEASONABLE RECIPES.

BROWN SAUCE FOR POTATO.—Heat a pint of thin cream or rich milk, and when boiling add half a teaspoonful of salt and a tablespoonful of flour (which has been browned in the oven until of a nut-brown color) rubbed to a smooth paste with a little cold milk. Cook rapidly until thickened, then more slowly for five or ten minutes. Serve hot.

BEAN AND TOMATO SOUP.—Take one pint of boiled or a little less of mashed beans, one pint of stewed tomatoes, and rub together through a colander. Add salt, a cup of thin cream, and half a cup of nicely steamed rice, and sufficient boiling water to make a soup of the proper consistency. Reheat and serve.

CARAMEL COFFEE.—To three and one half quarts of bran and one and one half quarts of corn meal, take one pint of New Orleans molasses and one half pint of boiling water. Put the water and molasses together and pour over the bran and meal which have been previously mixed. Rub all well together,

and brown slowly in the oven, stirring often until a rich dark brown. Use one heaping tablespoonful of the coffee thus prepared to each small cup of boiling water, let it just boil up, then steep on the back of the range for five or ten minutes before serving.

BLACK BEAN SOUP.—Soak a pint of black beans over night in cold water. When ready to cook, put into two and one half quarts of fresh water, which should be boiling, and simmer until completely dissolved, adding more boiling water from time to time if needed. There should be about two quarts of all when done. Rub through a colander, add salt, a half cup of cream, and reheat. When hot, turn through a soup strainer, add two or more teaspoonfuls of lemon juice, and serve.

STEWED RAISINS AND CHERRIES.—A very nice sauce for early spring when fresh fruits are scarce, may be made by cooking together three parts raisins and one part dried cherries. Cook slowly, not permitting to boil hard. No sugar will be needed.

A **SPONGE**, large enough to expand and fill the chimney after having been squeezed in, is the best thing with which to clean a lamp chimney. Tie the sponge to a slender stick, and after once being put in, it need not be taken out until the chimney is thoroughly washed with soapsuds and rinsed, as fresh water can be constantly poured through the chimney.

NEXT to a good stove or range a good clock is of paramount importance in the kitchen.

THE knives for kitchen use, for cutting bread and for peeling vegetables, etc., should be kept sharp.

FOLDING towel racks set on the wall near the sink are a great convenience in drying dish-towels and dish-cloths.

IN relation to ovens, a contemporary suggests, "When an oven burns on the bottom, cover it half an inch with clean sand; if it burns on top, put a layer of sand or ashes over it." However, a stove that has reached this point should be replaced by a new one as speedily as possible.

GILDING on silver should be rubbed as little as possible; wiping it with a soft linen cloth moistened with ammonia is all that is necessary.

SOMETIMES the fire will not burn readily at first, because the air in the chimney is cold; in that case, we have found that to burn a quantity of paper or shavings before trying to light the other fuel, will soon clear out the draft.

COOKING holders of ticking may be made nearly as long as a towel, so that both hands can be used with them. A number should be kept on hand, and they should be washed frequently, along with the towels.

THE little red ants, so troublesome in the house, may be caught in sponges into which sugar has been sprinkled; then the sponge should be dropped into hot water.

THE most satisfactory cloths for cleaning purposes are old flannel or merino underwear or old canton flannel. These never show lint, and can be wrung out nearly dry from hot water without losing their moisture and warmth.

LITERARY NOTICES.

"HEALTH AND STRENGTH IN PHYSICAL CULTURE," by John E. Dowd, Chicago. This little work is intended to illustrate the methods of using Dowd's Imperial Five-Pulley Health and Strength Exerciser, and the benefits to be derived therefrom. The book contains, in addition, a number of extracts from various authors upon the subject of health, and an account of the author's own personal experience. No one ought to read the work without getting good ideas from it.

"DELSARTIAN PHYSICAL CULTURE," by Carrica Le Favre; New York, Fowler & Wells Co. This is a pamphlet of 100 pages which contains a great deal of practical information on the subject considered, and allied topics. The advice given is sensible. The exercises recommended are practical, and likely to accomplish the purpose designed. A brief glossary explains the few medical terms which the lay reader may not understand, and a few pages devoted to review questions fits the work to be used, if desired, as a text-book or manual for class instruction. We like the sensible manner in which the author treats her subject, and do not hesitate to attribute the fine mental poise which has enabled the author to make so good a book, in part at least, to the fact that she practices what she teaches, and that, also, with her numerous graces and accomplishments, she is a vegetarian. Mrs. Le Favre has organized a number of vegetarian clubs, in various large cities, and has done much to spread a knowledge of the principles of hygiene and vegetarianism. We are always glad to hear of her success.

EX-POSTMASTER-GENERAL JAMES writes an article on "The Ocean Postal Service" for the April *Century*. Mr. James advocates a letter-rate of two cents an ounce for ocean postage, and a reduction in the rate on international money-orders. He thinks this reform more needed than that of a lower rate of postage on domestic letters.

THE March number of *Good Housekeeping* is filled with matter of uniform excellence. It is a journal for the home and the home interests; sensible, modest, and entirely free from all sensational methods. This is a good magazine, and one which can be uniformly read with profit. Clark W. Bryan & Co., Springfield, Mass.

THE *Pansy* for April is an excellent number. There are stories, articles, and verse suggestive of the Easter season it heralds. Its leading stories, by Pansy and Margaret Sydney, are of interest enough in themselves to make an excellent issue. The "Baby's Corner" contains a charming little story, and the American History article, and English Literature paper, not to mention the Old World anecdote, and Missionary news, furnish a range of topics which meets the needs of the young.

Price \$1 a year; 10 cents a number. D. Lothrop Company, Publishers, Boston.

THE Cassell Publishing Company, New York, have in press a work by Prof. Robert Grimshaw, the title of which is as follows: "Record of Scientific Progress for the Year 1891, exhibiting the most important discoveries and improvements in all the branches of engineering, architecture and building, mining and metallurgy; the mechanic arts, industrial technology, and the useful arts; photography, chemistry, medicine and surgery; printing; the generation, measurement, transmission, and application of electricity; the telegraph and telephone, meteorology and aeronauty, astronomy, etc."

A SERIES of articles on "Athletics" were begun in the January number of *Lippincott's Magazine*, and will be continued throughout the year 1892. These articles will be prepared by experts in such sports and exercises as rowing, fencing, baseball, cricket, walking, swimming, archery, tennis, football, riding, sailing, etc., as well as articles on physical training and indoor exercises. \$3 per year. Address *Lippincott's Magazine*, Philadelphia.

THE *Cumberland Presbyterian Review* is a quarterly magazine, devoted to theology and the discussion of current religious, literary, and scientific topics, and questions connected with church work and moral reforms. Subscription price, \$2 per annum. Cumberland Presbyterian Publishing House, Nashville, Tenn.

MRS. GLADSTONE'S first article in the series of "Hints from a Mother's Life," which she has written for the *Ladies' Home Journal*, is printed in the April issue of that periodical.

PUBLISHERS' DEPARTMENT.

LABORATORY OF HYGIENE (VACCINE DEPARTMENT), BATTLE CREEK, MICH.—Price, \$1 for ten points. Special discounts for large quantities. Address, Laboratory of Hygiene, Battle Creek, Mich. Heat and moisture are death to vaccine. Keep it in a dry, cool place. Do n't carry it in an inside pocket. Cleanse skin thoroughly before vaccinating.

This department of the Sanitarium Laboratory of Hygiene has been established for the purpose of producing vaccine of a standard of purity superior to anything which has heretofore been offered to the profession. The prejudice which has existed against vaccination, especially among the ignorant classes, although not by any means wholly confined to this class, has its foundation in the disastrous results occasionally following vaccination, which afford unmistakable evidence of blood poisoning, and of the presence in the vaccine of *something*, the introduction of which into the human system could not be regarded otherwise than as most undesirable.

The bacteriological studies of vaccine undertaken by Prof. Paul Paquin while in charge of the Bacteriological Laboratory of the State University of Missouri, and State Sanitary Veterinarian of that State, as well as those which Dr. Paquin has conducted since becoming Director of the Sanitarium Laboratory of Hygiene, have shown most conclusively that the "something" which works "not wisely but too well," not infrequently as the result of vaccination, is not the vaccine virus proper, but is a morbid and foreign element consisting of various pathological germs, some of which are capable of producing, under favorable circumstances, fatal effects, which accounts for the occasional deaths resulting from vaccination.

Prof. Paquin has demonstrated that by the exercise of vigilant care, and the employment of suitable methods, vaccine may be produced which is free from these dangerous elements; and the purpose of adding to the Sanitarium Laboratory of Hygiene, a department for the development of vaccine, has been to place in the hands of the profession, vaccine which can be relied upon for securing the protective influence for which it is employed, without the production of grave or seriously unpleasant symptoms from the action of foreign germs.

* *

WE are astonished that of the thousands of letters received at this office each month, we so rarely receive a letter or postal card bearing the brief but sad message, "Stop my paper." We say this is a matter of astonishment to us because GOOD HEALTH has always been an exponent of the most radical views respecting sanitary and temperance reform, and doubtless it frequently happens that many of the readers of the journal find in its columns views which are to them novel, and which they are not prepared at once to accept. The kindly manner in which the journal has been treated by the public since its birth, more than a quarter of a century ago, leads us to believe that however widely its teachings may have differed from the trend of current opinion, the candor and fairness with which its writers have ever sought to deal with the subjects to which the journal is devoted, have been such as to command the respect and confidence even of those whose views have widely differed from our own. It is also a matter of much satisfaction to the publishers, editors, and all connected with it, to know that the greater portion of the views expressed by the journal at the outset of its career, which were at that time considered extreme and even fanatical, have within the last twenty-five years come to be so recognized at the present time as to form an integral part of what is recognized as sanitary science. GOOD HEALTH still continues

its work as a pioneer in all matters pertaining to physical health and improvement, and if an opinion may be formed by its large and rapidly growing circulation, the publishers have reason to believe that the journal at the present time enjoys a larger share of public patronage and confidence than at any time in its previous history.

* *

DR. AND MRS. LYMAN JEWETT, who for thirty-seven years were among the pioneer missionaries to the Telugus of India, are now sojourning at the Sanitarium, as honored guests. Dr. Jewett celebrated his seventy-ninth birthday here, March 9th; his wife is a few years younger. It is six years since they were obliged, by failing health, to retire from active service in the field, since which they have spent much of their time with their children in Massachusetts. The work among the Telugus has been phenomenal in the history of missions, for when the crust of heathenism was once broken, thousands and thousands came flocking to the standard of Christ. Dr. Jewett was for sixteen years member of a committee formed under the direction of the Madras Bible Society, for the revision of the Telugu Scriptures. After that, he and his clever Moonshi, P. Rayhaviah Naidu, brought out a version of the Telugu New Testament, said to excel in accuracy, idiom, and collocation of words. This occupied four years and four months more. During their stay at the Sanitarium, Dr. and Mrs. Jewett have addressed the band of missionary volunteer nurses once or twice, besides speaking in the Sanitarium parlors Sunday evenings.

* *

COL. GEORGE R. CLARKE, the founder of the famous Pacific Gardens Mission, located on Van Buren St., Chicago, has been recently recruiting his health at the Sanitarium. One Sunday evening during the time, by special request, he told the story of his work, which for fifteen years has been so wonderfully blessed in rescuing fallen men and women by gospel means. The Mission is a union evangelical one in which all denominations work together in harmony. It has now between sixty and seventy workers, all but five of whom are volunteers. Nineteen meetings are held each week besides the jail work, which is under the immediate supervision of Mrs. Clarke, who is his inspiration and most efficient helper in the Mission itself. Col. Clarke gave a graphic account of the starting of the Mission, its increase in numbers and influence, the marvelous conversions which in the majority of instances have been followed with godly lives; in point of fact, some of his most valuable and consecrated assistants have been won from the depths of drunkenness and crime.

* *

OUGHT TO BE IN EVERY HOUSEHOLD.—Peroxide of hydrogen is the paragon of disinfectants. The fact that most efficient disinfectants are dangerous to life has been a great obstacle in the way of the introduction of efficient means of destroying germs. Corrosive sublimate, an excellent disinfectant, is as fatal to human life as to germ life, and so deadly are its solutions, and so difficult to antidote when once they have been used to the system, that it is scarcely safe for them to be used in the ordinary household. Such old-fashioned disinfecting agents as copperas, lime, etc., are no longer regarded as of great practical value. Mr. Chas. Marchand has certainly conferred a great boon upon the people of this country by placing upon the market a disinfectant which is at once harmless to human life and fatal to all kinds of germs. Peroxide of hydrogen looks exactly like ordinary water. It is, indeed, made from water, by combining with it an extra proportion of oxygen, so that each mole-

PUBLISHERS' DEPARTMENT.

cule contains two atoms of oxygen instead of one. When brought in contact with germs, or with any germ-breeding substance, such as decaying animal or vegetable matter, the peroxide at once gives up its extra atom of oxygen, which instantly consumes the germs and other offensive substances, leaving behind simply pure water, which, of course, is harmless. If a child should happen to get hold of the bottle of peroxide of hydrogen and swallow as much as it liked, it would probably make a wry face at the disagreeable taste of the solution, which slightly reminds one of chlorine, but no other harm would come of it. It is one of the best agents known for the treatment of diphtheria, scarlet fever, and sore throat. It is an excellent remedy in chronic catarrh, is invaluable in the treatment of old sores, abscesses, and wherever there is a matter discharge. When applied to a suppurating surface, it destroys absolutely every particle of pus and matter and leaves the surface covered with a white foam, which leaves, when washed away, a clean, healthy surface.

Peroxide of hydrogen is certainly one of the most remarkable disinfecting agents, and its harmlessness coupled with its marvelous efficiency, places it far ahead of any other disinfectant agent known to be recommended for household use. We should not speak thus enthusiastically respecting this comparatively new preparation had we not given it ample trial. We are only stating truth when we say that we have such confidence in, and have become so dependent upon, peroxide of hydrogen, that we should hardly know how to practice medicine or to keep house without it.

* *

ERRATUM.—In our last number an error occurred through a transposition of words on page 77, in the paragraph describing Fig. 3. The second sentence of the paragraph reads: "The dotted lines indicate the correct poise, and the solid lines the incorrect poise," etc. The sentence should have read: "The solid lines indicate the correct poise, and the dotted lines the incorrect poise." The intelligent reader has doubtless made the correction for himself, but we call attention to the error, so that no one may be misled.

* *

SHEEP-RAISING IN DAKOTA is a financial success, as is evidenced by the statements made by prominent Dakotians in a pamphlet just issued by the Chicago, Milwaukee & St. Paul Railway, a copy of which will be sent free upon application to J. H. Hiland, Gen'l Freight Agent, Chicago, Ill., or to Harry Mercer, Michigan Pass. Agent, 82 Griswold Street, Detroit, Mich.

* *

THE Superintendent's report of the Hospital Department of the Sanitarium shows nearly 800 important surgical operations performed within a period of a little more than two years, with only seventeen deaths. The following paragraphs which we quote from the report add still greater significance to the remarkably favorable showing as regards mortality following operation:—

"It is of interest to note that in three, and perhaps four, of the cases of death, the patient died, not from the operation, but from the disease for the relief of which the operation was undertaken, so that justly, but thirteen instead of seventeen cases should be put down as attributable to operation, making the record thirteen deaths instead of seventeen, in nearly 800 cases, or about one and one half per cent.

"It is also a consolation to the surgeon to know that in each of the fatal cases, with the possible exception of three cases, there was no chance for life without an operation, and in two of those cases the chance for life was a very poor one, and the patient's condition very miserable indeed."

THE Governor of Michigan recently issued the following proclamation, to which we are glad to call the attention of our readers:—

Whereas, The United States Minister to Russia has represented to the Department of State that a general famine exists in thirteen provinces of Russia, which have a population of twenty-five million, and it appearing that multitudes must perish unless relief is speedily afforded; and,—

Whereas, The people of Michigan have always been generously disposed to contribute to the relief of suffering humanity in all parts of the world; and,—

Whereas, I have been requested by the Russian Famine Relief Committee of the United States to designate persons to receive and forward contributions from the people of Michigan;—

Now Therefore, I, Edwin B. Winans, Governor of the State of Michigan, do hereby recommend a prompt response by the people of our State to this appeal, and the following named gentlemen of the city of Detroit, who have consented to receive and forward contributions, are hereby designated for that purpose:—

R. W. Gillett, Vice-President Chamber of Commerce; J. H. Donovan, President Board of Trade; J. S. Gray, President Merchants' and Manufacturers' Exchange; R. G. Butler, Agent Wabash Railway; David Stott; James W. Flynn.

Supplies of flour, corn meal, cured meats, canned or dried fruits, and other provisions, as well as money contributions are asked for, and should be forwarded to one of the gentlemen named above, and marked, "For Russian Famine Relief."

* *

THE REASONS WHY.—We call it alabastine, as it is manufactured from alabaster rock.

The people use it because it is durable and beautiful.

The sanitarians indorse it because it is of a sanitary nature, and contains no poisonous material.

We advertise it as we want all to have an opportunity to be benefited by its advantages.

Wall-paper firms fight it, as it displaces their poisonous products.

Some dealers talk against it, as they can buy cheap calcimines, and where the people are not posted, sell at alabastine prices, thus making more profit.

Calcimines must go, as they are only temporary and spoil the walls.

Alabastine has come to stay, as it possesses merit, and has the unqualified indorsement of those who have used it for years.

Alabastine has stood the test of time, and now stands higher in public favor than ever before.

Prof. Kedzie, the eminent sanitarian of Michigan, says, "Have carefully tested for arsenic or copper, none could be found. Find no traces of poisonous or injurious material."

Dr. De Wolfe, the health officer of Chicago, says, "The perfect wall for domestic habitation is the material which resists decomposition in every form. It seems to me that alabastine is admirably adapted for the purpose."

Mrs. L. M. Hall, Matron of the Sanitarium, Battle Creek, writes as follows under date of March 10: "We are using tons of alabastine here at the Sanitarium, and could not be induced to use any other material as a substitute. We have tried them, and find nothing that gives entire satisfaction but the alabastine. We put it on new walls in main building, and we are taking the paper off cottage rooms, and patching up and decorating the old walls."

We are located at Grand Rapids, Mich., and will cheerfully answer any communications in relation to our goods.



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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. E. CHAREST, of St. Cloud, Minn. "Peroxide of Hydrogen for Gonorrhœa." *Medical World* of Philadelphia, Pa.

DR. PHILLIP RICORD, of Newark, N. J. "Peroxide of Hydrogen for the Relief of Bites from Venomous Insects." *N. Y. Medical Record*.

DR. JOHN AULDE, of Philadelphia, Pa. "Hydrogen Peroxide—a Resumé." *N. Y. Medical Journal*.

DR. EGBERT H. GRANDIN, Obstetric Surgeon New York Maternity Hospital, Infant Asylum, etc. "Peroxide of Hydrogen in Gynecology and Obstetrics." *The Times and Register* of Philadelphia, Pa.


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at Union Stock Yards is now about sixty (60), besides two (2) "Champion" Stationary Chemical Tanks, of 250 gallons capacity, and two (2) Chemical Engines. We also have a large number of Extinguishers at our elevators and ice houses, and Extinguishers and Engines at our Glue Works. When we have had occasion to use them, they have worked satisfactorily, and if we had not confidence in them, we certainly would not continue to buy them.

(Signed.) ARMOUR & Co.,
per J. D. SIMPSON.

THESE are Carbonic Acid Gas Machines, which patent is owned by this company, and the same machines used mostly in the fire departments of the country.

We have made a contract with, and are furnishing same, for the protection of the buildings and property of the WORLD'S COLUMBIAN EXPOSITION, and January 1st, 1892, already shows delivery of 320 Extinguishers, and 3 large Chemical Engines.

SEND FOR CIRCULARS AND INFORMATION.



Chicago & Grand Trunk R. R.

Time Table, in Effect Dec. 6, 1891.

GOING WEST.				STATIONS.		GOING EAST.				
Day	B. C. Pass	Lmt. Exp.	Pacific Exp.	Dep.	Arr.	Mail	Lead Exp.	Atte. Exp.	Day Exp.	Pr. H. Pass.
am	pm	pm	pm	pm	am	am	am	pm	am	am
3.00	9.00	7.00		Boston		6.15	9.50	9.25	7.30	
5.00	6.30	8.00		New York		8.40	5.30	4.20	9.00	
6.25	6.30	1.00		Buffalo		7.30	4.10	3.10	7.10	
7.45	8.00	2.45		Niagara Falls		8.15	9.50		7.53	
				Boston		7.30	4.10	3.10	7.10	
				Montreal		8.20	7.40		7.40	
				Toronto		7.35	5.25		7.35	
				Detroit		9.25	7.45	9.25	11.50	

Where no time is given, train does not stop.
 Trains run by Central Standard Time.
 Valparaiso Accommodation, Battle Creek Passenger, Port Huron Passenger, and Mail trains, daily except Sunday.
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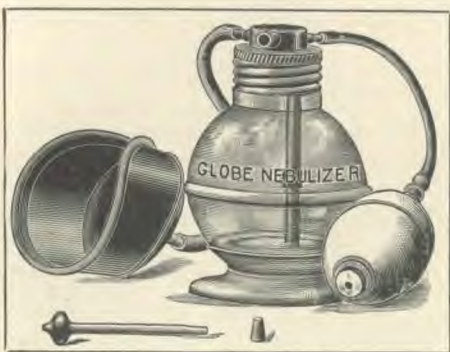
Corrected Jan. 31, 1892.

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 12.43	2.52	5.50	1.45	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	2.59	4.25	7.37	4.29	2.45	am 7.53	
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	10.45	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				5.50	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.	† Mail.	† Day Express.	* N. Shore Limited.	* Chicago Express.	* Pacific Express.	† Kal. Accom'n	† Eve'g Express.
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	am 7.20		
Rochester		9.35	am 1.25	4.20	9.55		
Buffalo	pm 11.00		2.20	5.30	11.50	am 8.45	
Suspension Bridge			3.15	6.35	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	9.18
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 1.30	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	2.48	7.29	5.35	8.55
Chicago		7.55	3.55	4.30	9.00	7.35	11.15

*Daily. †Daily except Sunday. †Daily except Saturday.
 Accommodation train for Jackson and all intermediate points leaves Battle Creek at 6.15 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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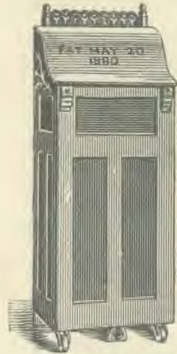
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"There were three crows sat on a tree,
As black as any crows could be."
"Alas!" said one, "would I were white
Instead of being black as night."
"Such foolish wishing," said his friends,
"In disappointment often ends;"
But now, forsooth, to make you white,
Will be an easy matter, quite.
We'll wash you well with some GOLD DUST,
And, when you're white, we fondly trust
That while you wonder at the feat,
Your happiness will be complete."

* * * * *
Behold him now as white as snow!
Wonder of wonders! saith the crow,
"If GOLD DUST POWDER makes black white,
'Twill surely all the world delight;
And mistress, mother, nurse and maid
Will find themselves henceforth well paid
In using this great help for all,
The household's needs—both great and small;
For dishes, kettles, pots and pans,
For paint, and floors, and milkmen's cans—
It surely will great comfort bring,
And clean each dirty place or thing;
For what will make a black crow white,
Will make what e'er is dingy bright."

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WASHING POWDER.**
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"THE COMING HEDGE PLANT" for all sections of the country, and superior in both usefulness and beauty, for this purpose, to anything yet introduced. Every stem and twig being bright, glossy green, it is highly ornamental in winter as well as summer. One of our customers writes: "Messrs. PIKE & ELLSWORTH:—The Trifoliate Orange which I bought from you stood out all winter and started off brisk this spring (1891). It did not even shed its leaves." F. M. WILLIAMS, Smithton, PA. When used for hedge, the plants should be set from 18 to 20 inches apart in a single row. At least one tree of this beautiful Orange should find a place in every yard in the land; and this is possible at the following remarkably low prices for which we send the little trees post paid to any address, and safe arrival guaranteed: Price, 2kc. each; 3 for 50c.; 6 for 75c.; 12 for \$1.25; 25 for \$2.50; 50 for \$4.35; 100 for \$8.00. Address **PIKE & ELLSWORTH, JESSAMINE, Pasco Co., FLA.**



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Cts. per lb.		Cts. per lb.		Cts. per lb.	
Oatmeal Biscuit.....	.72	White Crackers.....	.70	Wheat Granola (bulk 10).....	.72
Medium Oatmeal Crackers.....	.70	Whole-Wheat Wafers.....	.70	Avenola (bulk 10).....	.72
Plain Oatmeal Crackers.....	.70	Gluten Wafers.....	.30	Granola (bulk 10).....	.72
No. 1 Graham Crackers.....	.70	Rye Wafers.....	.72	Gluten Food No. 1.....	.50
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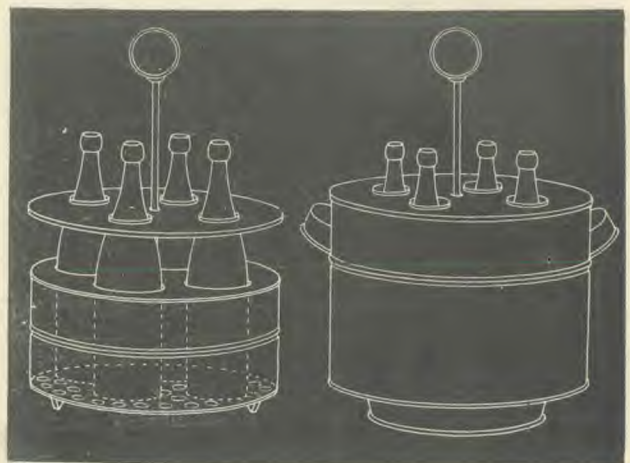
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In nutrient value, as determined by chemical analysis, besides affording a better quality of nutriment. Thoroughly cooked, and ready for use in one minute.
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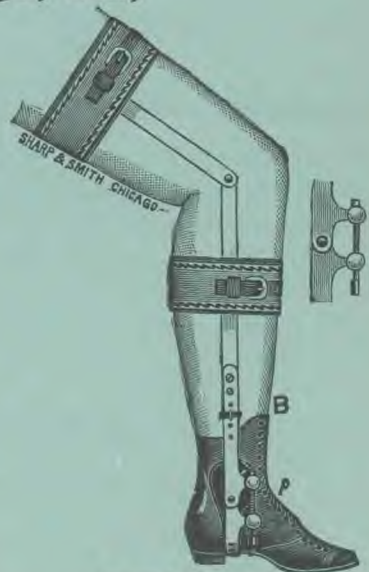
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