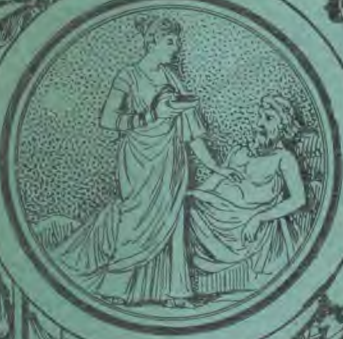
SEPTEMBER, 1894.

GOOD HEALTH



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SADI CARNOT.

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BIOGRAPHICAL HEALTH STUDIES.

BY F. L. OSWALD, M. D.,

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

8. Sadi Carnot.

It has been remarked as a curious fact, that Italy, in spite of her political tribulations, has given birth to a superlative genius in almost every branch of human science and art. If character, as distinct from talent, has any claim to recognition, France has been equally fortunate in having produced Bayard, the ideal cavalier of the Middle Ages, and Sadi Carnot, the representative gentleman of his century.

The worship of joy, that never ceased its protests against the gloomy insanities of the monastic era, and made Paris the metropolis of the civilized world, went too often hand in hand with libertinism and intemperance; but the refining process of modern culture has gradually eliminated that dross, and in many latter-day descendants of a rampant aristocracy the noblest traits of head and heart are combined with a native grace which education often emulates in vain.

The Carnots (originally Carnosts) trace their lineage to a family of country squires, that left Southern France during the persecutions of the Albigenses, and settled in the neighborhood of Dijon, where one Hilarion Carnot published, in 1695, a history of religious orders, and another drew up the plan of a municipal constitution, and was subsequently sent on a special embassy to Holland. Jean Carnot, a notary of Nolay, was intrusted with the task of re-organizing the corrupt system of internal revenue; and the same talent for organization made his son, the great War Minister of the French Republic, the marvel of an age almost overblessed with able and restlessly active men.

In the short space of fourteen months this precursor of Bonaparte, raised and equipped eight large armies, and after a voluntary exile of ten years, undertook the task of retrieving the declining fortunes of the empire, with an energy and felicity of resources which long baffled the tactics of the allied armies. During the busiest two years of his life, Lazare Carnot often worked sixteen hours a day, for weeks together, and the severity of his system of supervision made him the terror of idlers; but under the exterior of a stern bureaucrat slumbered a poetic soul, and the "organizer of victory" devoted his leisure hours to a translation of Sadi's "Eulistan," and made the Persian poet the godfather of his favorite grandson.

"I have to re-harmonize my mind somehow or other," he used to say, "like a slaughter-house manager of my native town, who contrived to alternate his sanguinary trade with the cultivation of flowering shrubs."

Sadi Carnot, the grandson of that poet-patriot, was born in 1837, at the ancient city of Limoges, romantically situated on a promontory of the Auvergne range, some sixty miles northeast of Bordeaux. His vacation rambles in the neighboring highlands were long recollected as the happiest hours of his life, and confirmed that love of outdoor work which at first tempted the future politician to devote himself to "economics," in the sense of scientific farm management. His father, Hippolyte Carnot, would have preferred to have him try his fortune in the service of the government, and Sadi at last compromised the

matter by entering the Polytechnic School, where one of his uncles held a professorship of mathematics.

Nepotism, however, had nothing to do with the rapid progress of the professor's young relative. He studied chemistry, and amused himself with private experiments when his fellow-students were guzzling absinthe, and won prize after prize with his architectural drawings which "resembled steel engravings," and helped to turn the attention of the clever draughtsman in the direction of fine arts. It was the period of athletic revivals, when the youth of Europe strove to emulate the disciples of Turnmaster Jahn ; and the two upper classes of the *École Polytechnique* clubbed their resources to establish a gymnasium of their own.

Young Carnot contributed his mite, but after two or three meetings discontinued his visits. He had no taste for indoor exercise, and detested its conjunction with boisterous politics and alcohol orgies on the trans-Rhenish pattern. The dueling mania, which now and then threatened to become epidemic, he held in such contempt that he voted to exclude the question from the program of a debating club, as a topic more fit for the controversial exercises of a lunatic asylum. Students of that class are rarely popular, but Sadi disarmed the wrath of dissenters by his good-humored wit that forced more than one young fire-eater to join in the laugh at his own expense. Years after, when he had already approached the goal of political supremacy, he used to invite his old fellow-students to celebrate the anniversary of his graduation ; and but few of the survivors could find it in their hearts to absent themselves from these reunions. Like Charles Lamb and Thomas Jeffrey, *le petit* Carnot was as popular with the rough but fun-loving swashbucklers of his class as with his fellow wits. He graduated fifth in a class of forty-six, and two years after was first in the competitive examination of the *École des Ponts et chaussées*, (the School of Road-and Bridge-building,) where he finished his studies as a civil engineer.

He speedily secured profitable employment, and would have been content to pass the rest of his life in the pursuit of his chosen vocation ; but, during the chaos of revolt following the disaster of Sedan, the provisional government remembered the prestige of his grandfather, and intrusted him with the task of organizing the resources of national defense in the three departments of Seine *Inferieure*, Eure, and Calvados.

In the winter of 1871, he was elected deputy of the department of Cote-d'Or, and from that day politics gave him no breathing spell. He was pushed, rather than admitted, to higher and higher rounds of the administrative ladder, till in 1886, he was chosen to replace an ousted Secretary of the Treasury, and a year after was intrusted with the highest office of a republican government. His countrymen could oblige him to renounce his hopes of rural tranquility, but could not make him depart from the simplicity of his private habits. Marcus Aurelius made it the rule of his life to "love truth and justice, yet live without anger in the midst of liars and egotists," but President Carnot solved the perhaps still more difficult problem of loving peace and temperance, yet living with grace in the midst of reckless and, in many senses of the word, intemperate men.

In 1864, when Carnot reaped the first-fruits of his polytechnic studies by being appointed city surveyor of Annecy, he married the eldest daughter of Prof. Duport-Withe, ex-secretary of the Minister of Justice, and author of several successful works on political economy. This lady, though an excellent housekeeper and a skillful nurse, had acquired quite a fund of classical knowledge in her own right before the completion of her twentieth year. She reads and writes five foreign languages, including Latin ; speaks English without a perceptible accent ; and assisted in the promotion of her father's hobby by translating the abstruse works of Stuart Mill. In March, 1865, the Carnots set up a household of their own, and regulated the routine of their daily life by rules which they afterward contrived to reconcile with the social exigencies of the French capital and the official etiquette of the Tuileries.

On four days of the week Carnot arose, at daybreak in winter, and about seven in summer, and never tasted a morsel of food till he had got through four hours' desk work. He had a supreme faith in *la tête lucide du jeune*, the advantage of a mind unclouded by repletion, and in emergencies sometimes protracted his fast till 2 P. M., when he joined his family at luncheon. He would then go to the reception hall. After conferring with his official agents, he called for his mail of petitions and newspapers, previously read and marked by his private secretary ; and on lucky days found time to attend to his personal correspondence before dinner.

The state dinners that came off in November and March the Carnots considered in the light of a sacrifice on the altar of diplomatic necessity, and the President often went merely through the form of presiding at these etiquette banquets, tasting a crumb of cake here and a drop of wine there, and longing for the end of the ordeal, when he could bow himself out to

take his real dinner, *en famille*. On ordinary days he rarely had more than one guest, and still oftener dined only with his wife and his eldest son, the younger children having got through with their supper before six o'clock. For the sake of the possible guest, a few bottles of claret appeared on the dinner table, but the President himself took water with his half glass, and ate meat so sparingly that he could be practically considered both an abstainer and a vegetarian. Of vegetables, sweetmeats, and fruit the four courses of the daily dinner included a considerable variety, and Carnot had no prejudice in the matter of protracting the dinner hour after the plan of Frederick the Great, who held that the activity of the digestive organs modified that of the brain just enough to prevent an animated controversy from becoming passionate and personal.

On Sunday, the Carnots now and then dined out, but Tuesdays and Saturdays were devoted to conferences with the heads of the various government departments. On those days the President arose very early in order to finish all the preparatory work in the forenoon, but had often to drudge away till 8 P. M., when he made the first and last meal of the day an exceptionally hearty one. Since his school days he had been subject to intermittent catarrhs, and experience had taught him that repletion, well-timed, had a tendency to prevent the atmosphere of a crowded reception office from affecting his lungs.

Weak eyes are a hereditary affliction of the Carnot family, and the great War Minister occasionally locked himself up in a heavily curtained room to give his optic nerves a much-needed chance of rest. His grandson, too, dreaded the alternative of spectacles; and when his eyes troubled him more than usual, would try all sorts of lotions, or apply an ice poultice to his temples before going to bed. These expedients temporarily answered their purpose, but at last gave the eyes of the patient a peculiar "veiled," or dimmed, expression, not quite unlike that sometimes resulting from the use of alcoholic drugs.

Carnot's temper and the continued triumphs of his public career enabled him to dispense with other stimulants. He never tasted distilled liquors in any form, and often quizzed his own weakness of nervous constitution, or quoted the precedent of Marshall Bernadotte, to excuse his horror of tobacco fumes.

His children, too, learned to love temperance for its own sake. In their early teens his two boys were already models of courteous conduct, in spite, or perhaps because of, their father's rule to make banter obviate the necessity for harsher modes of punishment. His keen sense of ridicule enabled him to laugh them out of all their bad habits, and a correspondent of *Figaro* describes his youngster Francois running up, half smiling, half crying, to silence his father's jokes in a long embrace,—implying a silent promise of reform.

In public debates, that same gift could manifest itself in a capacity for pretty severe sarcasm, redeemed, however, by its objective purport, as Carnot himself enjoyed an almost life-long immunity from personal insults. His quiet dignity and perfect self-control checked the insolence of fanatics who would not have hesitated to try their bullying tactics on a prince or prelate, and the invectives of his political opponents nearly always vented their spite on his proxies. That *mens acqua in arduis* that sustained Warren Hastings in all his tribulations is to some degree a hereditary blessing, primarily the result of long training in the school of adversity. Hard fortune at home and abroad had perfected the Carnots in the somewhat un-Gallic art of keeping their temper under all circumstances, and gave both the War Minister and his grandson a great advantage over their emotional opponents.

"The peculiar dignified expression on the face of the dead," says Heinrich Heine, "is mainly due to their aristocratic calmness and their cool freedom from passion; and in deference to that higher caste of the departed, sentries are instructed to present arms at the approach of a funeral, though it should happen to be the funeral of a poor cobbler."

Carnot's features, as he lay still and pale on the bier of the *chambre ardente*, affected visitors of all nations with the impression that France had lost her noblest citizen, and even the most rabid radicals exchanged their comments in a low whisper. The model President had, however, enjoyed a good deal of that international homage on this side of the grave, and Herbert Gladstone expressed the sentiment of all diplomatic Europe in calling the successor of M. Grevy "the most perfect gentleman of the present age."

Carnot's calmness, though, was by no means a symptom of apathy, and those who knew him best, hinted that his apparent equanimity under extreme provocation was the result of efforts of self-control that sometimes avenged themselves in severe fits of dyspepsia.

Such provocations were, however, exceptional vicissitudes of a career, on the whole, remarkably free from discords. Carnot counted his warm personal friends by hundreds and his admirers by millions.

The toil of his official duties was sweetened by domestic felicity, by intellectual enjoyments, by abundant opportunities for gratifying the noblest and most harmless of luxuries,— a passionate love of the fine arts.

His death was a national calamity, but the subjective value of a life like his cannot, after all, be estimated by the measure of its duration. The splendor of the Northern summer sun is not affected by the shortness of the season; and individuals, like nations, may depart content, when they have fulfilled their destiny by solving the problem of happiness.

(To be continued.)

NURSING IN HOMES, PRIVATE HOSPITALS, AND SANITARIUMS.[1]

BY MRS. S. M. BAKER,

Medical Matron of the Surgical Department of the Battle Creek Sanitarium.

(Concluded.)

In the care of surgical cases fresh from the operating room, there is, of course, much more to be done. The following example is an exact copy of the hourly notes made by the day and night nurses in charge of a patient during the first twenty-four hours after an operation for the removal of diseased tubes and ovaries: The case was a critical one. Tubes distended with pus and adhesions numerous and dense. Operation completed at 5 P. M., patient placed in bed, surrounded with hot bottles. Pulse to be taken every fifteen minutes, temperature every two hours. Drainage tube to be examined every three hours. 8 P. M., nausea, ice-bag to throat, fomentation to spine, temperature taken. 9 P. M., fomentation to stomach, position changed. 10 P. M., vaginal douche, ice-bag refilled for application to throat, temperature taken. 12 faradization to stomach and spine, temperature taken. 1 A. M., ice-bag over dressing, patient slept about fifteen minutes. 2 A. M., hot enema to remove gas from bowels, temperature taken. 3 A. M., drainage tube examined and fluid withdrawn. 4 A. M., patient slept a few minutes, temperature taken. 5 A. M., patient vomiting, application to stomach and throat renewed. 6 A. M., fluid withdrawn from drainage tube aseptically, fomentation to stomach, ice-bag to throat. 7 A. M., hot vaginal douche, patient slept an hour. 9 A. M., faradization to stomach. 10 A. M., hot bags to back and ice to throat, temperature taken. 11 A. M., fomentation to stomach. 12 M., hot vaginal douche, fluid withdrawn from tube, temperature taken. 1 P. M., ice-bag to throat, hot bag to stomach, patient slept an hour. 2 P. M., cool compress to head, temperature taken. 3 P. M., hot bag to spine. 4 P. M., faradization to spine, hot foot-bath, temperature taken. 5 P. M., fomentation to stomach, cool compress to head. Of course, in the care of such a case there are innumerable other attentions necessary, such as turning the patient, changing head, rubbing limbs, and a great variety of other duties which require the constant and faithful service of a nurse.

The results of such assiduous attention on the part of the well-trained nurse ought to be better than those ordinarily attained, especially in the treatment of acute and surgical cases; and that the results are superior is abundantly attested by the records of private hospitals and sanitariums where such care is given. In one hospital, with the work of which I am familiar, and in the wards of which many serious surgical cases, including an average of two abdominal cases weekly, stitch abscess rarely ever occurs, even after the most tedious operations; peritonitis is almost absolutely unknown; and erysipelatous inflammation of wounds is never seen. In my own wards I have seen 172 ovariotomies for removal of diseased ovaries or appendages, including many large ovarian and uterine tumors, with an equal number of successive recoveries and without a single case of peritonitis. The operations were, without doubt, skillfully performed, but the operator makes no claim to greater skill than some other operators whose records of recoveries are by no means so great, and does not hesitate to attribute the extraordinary success to the thorough preparation of the patient, including aseptic dietary and the careful nursing after the operation.

Not all the methods used at a sanitarium or private hospital are adapted to the home, but a very large share of the hydropathic, electric, and dietetic measures employed at a sanitarium, together with the resources of massage, physical culture, Swedish movements, and Swedish gymnastics, can

[1] Read before the Section of Hospitals, Dispensaries, and Nursing, of the International Congress of Charities, Corrections, and Philanthropy, Chicago, June 17, 1893.

be utilized in the cases requiring nursing at home.

Nursing in homes and private hospitals or sanitariums affords the intelligent nurse an admirable opportunity to do an educational work for her patient of the greatest importance as a means both of cure and of prevention of future suffering and disease. In taking charge of a case, a nurse may limit her work absolutely to the care of the sick, and on leaving, may feel that she has done her duty. She will carry with her the abundant gratitude of the patient and her family; but her province can extend farther. If her heart is sincerely in her work, and her training thorough, her influence will not stop with teaching the science of dietetics, or ventilation, or disinfection, or exercise, or the use of heat and water; but her quick penetration will often find in a home the members of the family living by false standards, either through ignorance or carelessness. One of the most painful and appalling errors to a wide-awake nurse who understands the principles underlying healthful dress, is the prevailing ignorance on that subject, and the discomfort and misery following in its train. The inequality of warmth over different parts of the body, the weight suspended from the hips, the tight bands and stays about the waist, the sweeping skirts, the high-heeled shoes, are destructive to the comfort and health, and consequently to the happiness, of thousands of families.

At the Battle Creek Sanitarium Training School we are taught that this error must be corrected by example as well as precept, and we dress with equal warmth from neck to ankles, constricting bands and stays are entirely discarded, and lungs and limbs are alike free in their action.

Dress reform strikes unpleasantly those who do not understand just what is to be gained by it, and it is the nurse's privilege to teach why the old way will bring discomfort and disability, even if worse evils are escaped. We heard at the Woman's Congress that ninety-five diseases and disorders come from bad dressing. The nurse will find it an argument in overcoming the prejudice against this most stubbornly opposed of reforms, that the stigma is being lifted, first by its agitation by the leading ladies of the land until it is being better understood; and second, because the masses have discovered to their surprise that beauty in dress and dress reform can walk hand in hand, and that the Bloomer costume is by no means a requirement of rational dress reform.

When the nurse has converted her patient to the principles of healthful dressing, and has shown her how to adapt her style of dress to it, she has put her in a position, quoting again from an address at the Woman's Congress, where her life may "be greatly richer when not handicapped by dress."

Is this all a nurse can do? Perhaps the life of the patient has been heretofore only for selfish pleasures and ambitions. It may be she has never before felt that "it is not all of life to live." As the nurse ministers to her from day to day, she looks to her for words of counsel and light on a subject which to the sufferer is dark and misty. This is the most golden opportunity of all the nurse's work, and in the dark moments when the friends of the sufferer turn to her for courage and comfort, what consolation can she give if she cannot bring them to the feet of the Great Physician?

Often it is the unrest and the disappointments of life, or its hurry and rush, that have brought the physical suffering which we are called to alleviate; and the nurse who can show the sufferer how to find the higher strength with which to meet life, will have given to her patient a help as much more potent than physical ministrations alone as the spiritual life is higher than the physical. Indeed, as the two are so closely and indissolubly linked, the ministering to the mind diseased is often an important factor in the recovery of the patient. It is much to alleviate physical suffering; it is a satisfying work to minister to the comfort of others, to save life, as is often our privilege; but as the life beyond is infinitely greater than this life, so is our satisfaction and our reward infinitely greater if we can help those to whom we minister to appreciate that life and the relations of this one to it. The grateful thanks of the patient whom we have nursed back to health are very pleasant, but sweeter still is the assurance that the life thus restored has taken on a new meaning, and has been consecrated to a higher service than before.

Not always can we see that done in the homes of our patients which we would be glad to see done; but if we work "as unto Him," seeking to leave, as results of our effort, healthier bodies, purer homes, sweeter lives, and nobler aspirations, as we go from home to home, we may safely leave the results with the Great Physician under whom we serve.

A JURIST'S VIEWS OF THE MEDICAL PROFESSION.

UNDER the above heading, our genial friend, Hon. Byron K. Elliott, of Indianapolis, says some very excellent things. Only lack of space prevents the insertion of the entire article, and we cannot refrain from making a few quotations from the Indiana *Medical Journal*, as follows: —

"The influence of the physician is powerful and widespread. There is not in all this land a household or a home in which the physician is not the most important visitor that crosses its threshold. He stands 'upon the confines of existence, welcoming the newcomer and bidding farewell to the goer away.' Under God, the issues of life and death are in his hands; disease and misery, or health and strength often depend upon his knowledge, skill, and judgment. An error on his part may cost life; or, if not productive of such serious consequences, may wreck the health of the patient or send him out into the world, infirm, lame, or deformed.

"It needs no argument to prove that there is an imperious necessity for medical education. Strong measures are required to protect the community from pretenders and charlatans. Humanity has suffered too much from ignorant pretenders, and it is high time to end their existence. . . .

"The basis of power in medicine is scientific knowledge of principles, and skill is the application of that knowledge with judgment and sagacity. The knowledge that avails is scientific knowledge, and that kind of knowledge is deep rooted, and yields a golden fruitage. It is the kind of knowledge, and the only kind, that makes a man strong when strength is needed and gives him power to successfully grapple with disease. . . .

"The sagacity and judgment of the physician must apply the knowledge that he acquires; but if knowledge be absent, there is nothing to apply; and absent such knowledge always is, if there is not a philosophical mastery of the principles. In the absence of scientific knowledge there can be nothing but crude guesses and wild conjectures; and if judgment and sagacity be absent, the power to make practical application of acquired knowledge cannot exist. A medical education is neither complete nor valuable, unless it gives the power to know what to do and how to do it.

"Medicine is a science as well as an art; and before there can be proficiency in the art, there must be a mastery of the science. If medicine is a science, its principles are laws of universal sway in all its domain. Throughout all the universe, law reigns, and over all the sciences it holds dominion. Every science has its fundamental laws which, in the field of that particular science, are universal. Medicine is no exception to this all-pervading rule. The laws of health are universal; and where laws are universal, there can be no distinct systems or schools, although there may be diversity of views as to the efficacy of remedies and modes of treatment. Fundamentally, however, there can be only one school; since every science is, in its primary elements, a united and indivisible system of philosophical laws. In these laws and principles the man who deserves a place in the great profession of medicine must be deeply learned. More than mental training and discipline is required to fit a man for the great work of a physician. . . .

"The ethical principles woven into the mental and moral organization of men are like threads of gold woven into gross fabrics; they remain bright and untarnished throughout all the years, while the baser parts grow dark and moldy in decay. Men whose thoughts and actions are influenced by sound ethical principles are men whose virtues every one may see. . . . The physician who for long years has come to you and to me through storm and sunshine; who has stood at the bedside when the cry of the newborn broke the silence of the darkened chamber; who has cheered us by his presence in the dark hour of sickness and gloom; who has been with those we love when human skill availed not, and death came,— he is the man of all men to whom our hearts go out in friendship closely akin to love."

EARLY RISING.— The following calculation is interesting: Suppose one boy, aged ten years, determines to rise at five o'clock all the year round. Another at the same age, indolent and fond of ease, rises at eight, or an average of eight, every morning. If they both live to be seventy years old, the one will have gained over the other, during the intervening period of sixty years, 65,745 hours, which is equal to 2739⅓ days, or just seven and a half years. If a similar calculation were applied to the whole country, how many millions of years of individual usefulness would it prove to be lost to society?

THE CIGARETTE IN SOCIETY.— Dr. R. Beverly Cole, a distinguished teacher of San Francisco, Cal., in a recent article to the New York *Medical Examiner*, says that cigarettes stunt men, arrest nutrition, and hinder development. An exchange comments on that thought as follows: "The French government determined as much as that in its observations at the military schools of that country. As a consequence, it absolutely forbade the smoking of cigarettes. It has been said that the gradual lessening in stature of Frenchmen is to be attributed to the almost universal habit of inhaling cigarette smoke. It impairs all the functions, — the eyesight, the moral perceptions, the mental grasp, and the physical power, — and in return does no good. It is only the much injured that come to the physician's attention. Those only slightly or moderately harmed suffer without complaint, and very often, perhaps, because they do not know why they are sleepless, without appetite, or feel generally worthless. The cigarette explains the early failure of so many promising boys. It dulls their minds, destroys ambition, robs them of energy, and inclines them to listlessness and a dreamy surrender to the narcosis which grows with every cigarette."

The New York *World*, in a late issue, gives a somewhat startling account of the increase in the use of the cigarette, especially among the women of fashionable circles. It is stated that their use has become so common that no one of their "set" hesitates now to offer cigarettes to callers, and some of the society women consume enormous quantities of the imported brands. It has come to be a recognized fad in society, and the terrible habit seems to be growing.

DURING the last hours of Daniel Webster, Mr. Adams called on him, and seeing his desperate condition, and wishing to cheer him as much as possible, he remarked to the dying statesman, "Good morning, Mr. Webster; I hope you are doing well." Mr. Webster's eloquent though sad reply was: "Mr. Adams, I am sorry to say that I am not. I feel that I am the tenant of a house sadly racked and shaken by the storms of time. The roof leaks, the windows rattle, the doors creak on their hinges, until my mansion seems almost uninhabitable. But the saddest part of the situation, sir, is that I have received word that the landlord positively refuses to make any further repairs."

VALUE OF FRESH AIR AND SUNSHINE.— An interesting experiment that proves the value of fresh air, even for very young and delicate children, was tried in a well-known babies' hospital. All the sick babies that were suffering from chronic indigestion and lack of nutrition, and who would not improve in spite of good food, perfectly ventilated rooms, and careful bathing, were taken to the top ward of the hospital, where all the windows were open wide, wrapped as for the street and put in their perambulators. They were kept in this room from two to four hours daily, and soon showed a marked improvement. Their cheeks became rosy, they gained in weight and appetite, and would often fall asleep and remain so during the whole time they were in the air. Very deli cate children had bags of hot water placed at their feet during cold weather. It is recorded in the account of this experiment that not one child took cold as a result of it.— *Farm and Fireside.*

WHY A CEMETERY IS SO CALLED. — Webster says a cemetery is "a place where the dead bodies of human beings are buried." But that is all he says, and there is not a five-year-old child in the land who could not tell as much without referring to his "Unabridged."

In tracing the derivation of the word, it is found that the root is an old Hebrew word, "*caemeteria*," meaning dormitories, or sleeping-places. Later on, the form of the expression was changed to "*requietorium*." In that section of "Camden's Remains" which has the heading of "Concerning British Epitaphs," the following occurs: "The place of burial was called by St. Paul '*semenatoria*,' in the respect of a sure hope of a resurrection." The Greeks call it "*caemeterion*," which means a "sleeping-place until the resurrection." The old Hebrew word for a place of burial means "the house of the living," the idea being that death is only a protracted sleep that will terminate on the day when Gabriel blows his trumpet.— *St. Louis Republic.*

CHOLERA FROM FEAR.— The Washington *Star* gives a striking example of the effects of fear in times of cholera in the following authentic case, recorded in the newspapers of that time: —

"In 1853 or 1854, I now forget which, we had the cholera in Wien (Vienna). The professors at the great general hospital in the Alserstrasse had their hands full. A man by the name of Franz Holriegl was then awaiting the sentence of death for murder, and the director of the hospital presented a petition to Emperor Franz Josef to grant a full pardon to this man, providing the culprit, in return, would consent to sleep in a bed from which the corpse of a cholera victim had just been removed.

The emperor granted a full pardon under the aforesaid condition, and the condemned man was only too glad to comply. He was taken into the hospital and ordered to lie down at once in the same bed from which in his presence the corpse was removed. The man undressed and went to bed. In less than half an hour he began to vomit, and in six hours he died from cholera.

"The man died from cholera, which he took from fright. The corpse removed from the bed was not that of a cholera victim, but of a man who met his death from a gunshot wound. The experiment did not take place in a cholera wing, but in the ward for skin diseases."

BREAD IN HISTORY.

It would seem natural to suppose that bread must always have been something like the article by that name with which we are so familiar. This is, however, far from being the case; men were not always familiar with the preparation of wheaten flour which we call bread; indeed, in our own day there are entire populations wholly ignorant of its use. The black races of Africa and the red men of America have no notion of it. In the vast empire of China, containing a quarter of the whole human race, bread is almost unknown. Only in the province of Kan-Son is bread, such as we use, made. The people of Hindoostan use only unleavened bread. Archæology furnishes evidence of the use of unleavened bread toward the close of the prehistoric period. Charred bread has been found in the lake-dwellings of Switzerland and in the subterranean vaults of Egypt. These specimens afford precise evidence of the state of bread-making among the Helvetians of the Stone Age, and the Egyptians thousands of years before our era. The bread of that age shows that the grain had been crushed by beating it between two stones. It contained much sand, and to its presence is attributable the ground-down state of the teeth so frequently observed in mummies and in the skeletons of the lake dwellers.

In the days of the patriarchs the Hebrews used unleavened bread, and it does not appear that they knew of any other bread before their sojourn in Egypt. The use of unleavened bread is no less ancient among the peoples of the Aryan stock. The Greeks ascribed its origin to the remote mythological ages of Ceres and Pan. In the heroic days depicted by Homer, the Greeks had nothing but unleavened bread, and even that the poet mentions only in connection with some particular feasts.

The loaves of antiquity were flat, and they were so prepared that there was no necessity to cut them; they were broken; hence the expression "to break bread," so common among the old writers. Athenaeus, describing the festivals of the Gauls, remarks that they served the bread "all broken." According to Fortunati, the saintly Queen Radegonde lived on coarse bread, in a spirit of mortification, to habituate herself to poverty; and this was the only nourishment of very many unfortunates in the sixth century. Even in this nineteenth century, the use of unleavened bread is habitual in certain cantons of Spain and Italy. The griddlecakes of Ireland, the *pogatcha* of Bosnia, the *pumpernickel* of Westphalia, the *flad-brød* of the Norwegian peasants, are all varieties of unleavened bread. The ancients attributed the discovery of leaven to the Egyptians, and it was from them that the Hebrews learned it.

We learn from the dream of Pharaoh's chief baker, interpreted by Joseph, that baking had at that time become a distinct pursuit; and that it had reached a high state of development may be safely inferred from the chief baker's dream of the "three baskets which contained all manner of baked meats." This was nineteen centuries before Christ; and about four centuries later, when the Israelites left Egypt, leavened bread was their chief article of diet, and it was also in general use throughout the East. Herodotus tells us that Crœsus erected a statue of gold to his baker in memory of his skill, and the same author tells us that the number of women engaging in making bread for Xerxes's army of 1,700,000 men was beyond count.

The first bakers who followed their craft in Rome were slaves captured during the expedition against Philip, 171 B. C. The substitution of beer yeast for leaven appears to have been adopted by the ancient Gauls, but the custom fell into disuse, and was completely forgotten until toward the middle of the seventeenth century, when it was rediscovered in London. This innovation was very energetically opposed by the medical profession. The Faculty of Paris, on being consulted by the lieutenant of police, decided on March 4, 1668, by a vote of forty-five to thirty, that the leaven of beer "was opposed to health, and prejudicial to the human frame on account of its acridity, due to the decomposition of wheat and barley." Guy-Patin and the more ardent

them. While Greek physical development was the finest the world has known, the dress that poetized it required the least outlay of expense or effort. It was the perfection of ease, freedom, convenience, and adaptability. This matchless robing was probably the cheapes tever worn. When our countrywomen are instructed in art, they will readily see that one essential quality of beauty is proportion. Proportion in expenditure demands that incomes should be disbursed with due regard to the relative importance of different claims upon them. Elegant costumes are not beautiful for women of narrow means, because they are not harmonious with necessary retrenchment in other departments of daily living. A cordial acceptance of this truth effectually prevents blameworthy outlay. Women are to be persuaded to the observance of that harmony which is not accidental, but which flows from obedience to the laws of proportion in expense, in use, in fitness, and in color. Extravagance has no share in beauty, because it is *necessarily*, by name and essence, out of proportion. Let a woman clearly comprehend that a gown, to be beautiful for *her*, must be exactly suited to her purse, her duties, her sphere in life. If the income is small, good dressing will be in accord. If a woman appreciates that a beautiful gown must enhance the value of her complexion by its color, she may remember that she can secure that element of beauty in textures possible to scantily filled purses.

Becomingness does not necessarily inhere in costly fabrics. Even if they are in harmony with the income, they must be in harmony with the complexion. Given a becoming color, a texture suited to the occasion, a design appropriate to personality, and the main requisites of beauty in dress are secured. The price of the fabric is immaterial. Cotton goods are very cheap when laundry work is not a great factor in the estimate. They are now offered in the impure colors that are so manageable. Charming daintiness may be had for a few cents a yard in printed challies,— delicacy or glow of color in woolen crapes, henriettas, and nun's veiling at a moderate rate, and there are always low-priced woolens — sometimes they are popular to the exclusion of other materials. Japanese wash silks make economical dresses or parts of dresses. Muslins are always in order for summer wear. Still more durable are the softer varieties of red or blue denims to be chosen by those to whom heavy materials and simple forms are most becoming. If made on the wrong side, a more delicate color is secured. Thin cottons, available for some occasions, are printed for comforters. Silk and cotton, and silk and woolen fabrics, of great width and therefore relatively cheap, may be found at the upholsterer's. These are especially good for gowns of simple shape. In choosing one's material it only adds to perplexity to consider how others would use this or that. Anything that suits one's purpose may be made available. The object is to appear at one's best, and not to appear as others do. The gown must be becoming, itself being subordinate, unobtrusive. We can think of combinations of chambrey, gingham, and harmonious printed muslin, of nun's veiling, and cotton crape that would be just as picturesque, if becoming and appropriate, as the same design realized in velvet and brocade. If suitable to one's complexion and in accord with one's manner of life, there is no cheaper fabric than the very best brands of black silk, if one chooses to incur the first outlay. We mean for constant morning and evening wear, winter and summer. Those women who look well in a rich warm blue may find a desirable fabric in the indigo prints that are so cheap, so durable, so washable. Women with brown hair, brown eyes, and brown skin ; women with brown-black hair, gray eyes, and rosy cheeks, and women with black hair, pale skin, and blue eyes are the ones likely to find this color becoming. The cost of such a dress is, at most, fifty cents. Half a dozen, a year's supply for home wear, for three dollars ! Think of it. Who would want so many alike ?—No one but a woman of good taste and independence of character.

If linings, stiffenings, ruffles and heavy ornaments are avoided, the dressmaker's bill is greatly shortened. If one will give the requisite thought, and will employ any tractable seamstress, she may lessen expense. Clothing is still cheaper if one is skilled in sewing, and has sufficient leisure for the home manufacture of gowns. Simple forms do not tax ingenuity, and simplicity is one charming aspect of beauty.

Dress ordered upon the principles of art need not be changed in shape as the seasons progress. If it was becoming once and is still becoming, it should not be changed, except as it wears out. The gown that is thoroughly charming may be repeated over and over again. One need not fear monotony, for the dyes of different years vary, as every one knows who tries to match an old dress. This absence of alteration alone proves the economy of artistic dress. A woman who desires that others should notice her new dress has forgotten the fundamental principles of beautiful costume, since she is thinking of something else besides making an attractive environment for the beneficent uses of a supple body and its spiritual occupant.

In short, if one can make a moderate, or even a pitiful, outlay of money, one need not despair of gratifying a laudable desire for beautiful gowns. In any case, there must be intelligent thought and a careful exercise of discriminating taste. If a poor woman can give that, she is at an advantage, even over the one who, without taste, has an unstinted supply of coin.

BE THOU MY GUIDE.

Be Thou my guide, and I will walk in darkness
As one who treads the beamy heights of day,
Feeling a gladness amid desert sadness,
And breathing a vernal fragrance all the way.

Be Thou my wealth, and, reft of all besides thee,
I will forget the strife for meaner things;
Blest in the sweetness of thy rare completeness,
And opulent beyond the dream of kings!

Be Thou my strength, O lowly One and saintly!
And though unvisioned ills about me throng,
Though danger woo me and deceit pursue me,
Yet, in the thought of thee, I will be strong.

— *Florence Earle Coates.*

COMPLETE THE WORK IN HAND. — Half the failures in life are brought about by leaving unfinished, tasks that are begun. It never is profitable to dissipate one's energy by dropping one task, well begun, to commence a new one. Such a habit has a bad effect upon the intellect and the general morals of the individual. An excellent habit to form is that which will enable one to complete the work in hand before anything else is undertaken. This habit of regularity will cultivate a strength of character which will stand in every trial of life. The mother should never lose sight of this great principle in the training of her children. — *Sel.*

HE DID AS HE WAS TOLD. — A teacher who last week received, as an addition to her primary school flock, a small graduate from the kindergarten, was impressing upon the new pupil the necessity of quiet movement about the room. "Now, Harry," she said, "go back to your seat, and see how still you can come to the desk. Come up like a mouse," she finished, by way of illustration.

Whereupon the small Harry returned to his place and, dropping upon all fours, came nimbly and silently, in true mouse fashion, through the aisle. The outburst of merriment which neither scholars nor teacher could suppress at this performance, surprised and grieved the heart of the little kindergartner, who saw nothing unusual in it. — *New York Times.*

WHAT YOU CAN DO. — You cannot set the world right, or the times, but you can do something for the truth; and all you can do will certainly tell if the work you do is for the Master, who gives you your share; and so the burden of responsibility is lifted off. This assurance makes peace, satisfaction, and repose possible even in the partial work done upon earth. Go to the man who is carving a stone for a building; ask him where that stone is going, to what part of the temple, and how he is going to get it into place; and what does he do? He points you to the builder's plans. This is only one stone of many. So when men shall ask where and how your little achievement is going into God's plan, point them to your Master, who keeps the plans, and then go on doing your little service as faithfully as if the whole temple were yours to build. — *Phillips Brooks.*

HERE is a beautiful and true story, full of pathos and of suggestion: A family man discovered, once upon a time, that he was being robbed of small sums of money. At length, one night, a slight noise in the room awakened him. He opened his eyes quickly to see a small figure creep past the bed to his pocketbook, abstract a bill, and steal silently away. He recognized his own son, a little boy. The next day the father called the child to him. "I have been thinking," he said pleasantly, "that I shall want your help in my money affairs. I am going to make you my treasurer, if you will do that for me. Here is my purse. It has $50 in it. Now when I want to pay for anything at the house, I shall come to you." After that speech and that transfer, the pilferings ceased. The boy became an honorable and honest man. — *Home and Farm.*

THE RESPONSIBILITY OF TEACHERS. — Teaching, especially the teaching of young children, is too commonly regarded as an occupation fit only for young girls or unpromising young men. We entirely agree with Channing, who says: —

"There is no office higher than that of a teacher of youth, for there is nothing on earth so precious as the mind, soul, and character of a child. No office should be regarded with greater respect. The first minds in the community should be encouraged to assume it."

EGYPTIAN MILLSTONES.— Wherever the people live on unbolted wheat or rye flour or meal, they have good teeth, bones, and muscles. I well remember when in Egypt, in 1884, the little Arab girl at Thebes, who, with a vessel of water upon her head, ran over sand, stones, rocks, and hills as we rode upon our donkeys to visit the tombs of the kings ; for she had splendid teeth, sparkling eyes, and a beautiful and well-developed waist, symmetrical in form and graceful in every movement. On a visit to the house of our Arab dragoman, or guide, to look at some curiosities which had been obtained from the tombs of the ancient Egyptians, we saw two women grinding at a mill and making the kind of flour which that young girl ate. There were two millstones, perhaps eighteen or twenty inches in diameter, standing in a tray, with an opening through the center of the upper one for pouring in grain, and at opposite sides erect handles. The women took hold of these handles and turned the upper stone around and around, and back and forth, and the flour or meal came out between the outer edges of the stones. I said to our guide, "We have not had a bit of good bread in Egypt, for at the hotels at which we have been stopping they think that they must furnish superfine flour bread for foreigners to eat. Now, I want you to make us a loaf of bread from that flour and bring it to our hotel to-morrow, and I will pay you for your trouble." He did so, and it was the best bread we had while in Egypt. —*N. Y. Tribune.*

THE COMFORT OF SHORT SKIRTS FOR WOMEN.— Mrs. E. B. Grannis, editor and publisher of the *Church Union*, New York City, ever broad and philanthropic in her views regarding the welfare of her own sex, remarks as follows concerning the short skirt : —

"No woman who walks about, or who is employed in any active service, can possibly realize the freedom and ease of motion that is in store for her in short skirts, unless she has adopted them. Women are retarded in a great variety of ways from attaining a large degree of success in any profession or business by the weariness from contending with long skirts. If the skirt comes down to the ankles, the knees are necessarily severely hampered, and the whole body is subjected to a weariness from a day's active service, which will be greatly relieved when short skirts are worn.

"A woman, after being employed for a few hours in active service in short skirts, when she dons her long skirts and returns to the same active effort, experiences a constant reminder that her knees are bound about, that she is dragging unpleasant burdens with her lower limbs, and that full half the effort of mind and physical strength which her work demands is spent in contending with the burdensome clothing."

THE Japanese have many curious customs. They begin a book at what we call the last page, and the end is where we have the title-page. Horses, when in their stalls, face the door of the stable ; men, and not women, do the sewing, and they push the needles in and out from them instead of toward them.— *Truth.*

SAVED BY SUNSHINE.— I think the superb health of my family is to a great extent due to the habit we have of almost living in sunshine. Every bright day all the shutters are open, and the entire house gets the benefit of sunlight. It drives away dampness, mold, microbes, and bluedevils, and puts us all in good humor and health. I cannot imagine good sanitary conditions and darkness. Even my cellar is as light as I can possibly make it ; and whatever fruit and delicacies need to be shut away from light, I put in close cupboards or covered boxes. I have sheets of canvas that can be thrown over them before they are put away, and always take pains so to arrange my stores that nothing will be injured by an abundance of light. People who live in badly lighted apartments have little color and less health. I, for one, do not intend to spend my days in an atmosphere of gloom.—*A Correspondent in New York Ledger.*

EDITORS of newspapers throughout England have been appealed to, through a circular signed by one hundred and five members of the House of Commons, asking them to cease demoralizing the people by reporting sensational cases of immorality or brutality, and in other ways appealing to the sensual nature of man.

DUTY.

OUR blue-eyed daughter with locks of gold,
Rosy and dimpled and eight years old,
Went to Sabbath-school one fine day,
When grass was springing in balmy May ;
The questions swiftly went round the class,
And soon came the turn of our little lass.
"Your duty to neighbors?" the teacher said.
Promptly replied our Golden-head,
"I don't know that kind of duty, you see,
But I know plain duty as well as can be."
His hand on her curls the teacher laid ;
"Well, what is 'plain duty,' my little maid?"
"Why, duty is the thing"—with a moment's thought—
"That you don't want to do, but you know you ought!"

—*Amelia Barr, in St. Nicholas.*

DORA'S GIFT.

"You do n't mean me to believe, Emily, that all these tall girls are yours? One, two, three, four, — my ! what a lot ! "

And Uncle Phil leaned back in his chair, and surveyed the party with admiring eyes. Without being particularly handsome, they were fine looking girls. Erect, vigorous, graceful, blooming, and full of fun, they gave proof of being a well-raised, healthy, charming quartette of daughters.

"Well, sister Emily," he said presently, "lump them now, and say what you will take for them. I'll give a fair price for the lot."

"Kohi-noors as thick as hailstones could n't buy one of them," said the proud mother.

"But you have n't told me what this small woman is good for," said Uncle Phil, pinching the pink tip of Dora's ear.

"Dora? What is Dora's forte? Why, I do n't know; but we could n't do anything without Dora ! "

"There ! " said merry Dora, "I knew I did n't have any gifts. I can't sing, paint, nor embroider, nor even entertain company."

"But she can always be the dearest dear of a Dora that ever was," said the sister on the other side of Dora, giving her a squeeze. And Dora seemed highly satisfied with this explanation.

But the weather in this family was not all summer weather. Uncle Phil found, after he had been living with them for a while, that these young nieces had their ups and downs like most other people. They disagreed with one another, and felt cross about it. They tried to do things, and failed sometimes. Jellies would n't always jell, dresses would n't always fit. In short, the briars besetting every path pricked the feet of these sweet lasses in their turn, from day to day, as they do the feet of all earth's travelers.

And then Uncle Phil found out what was Dora's gift. It had been dawning on him for some time; but one rainy day he startled the family by saying, "Sister Emily, Dora is the most gifted child you 've got."

It was, as I have said, a rainy day. "Of course it had to rain," Julia said grimly, as they gathered in the breakfast room. "As I wanted to go to ride on horseback with uncle, I might have known it would rain."

"It is well you have an escort who will wait till a clear day," said Dora, who was busy pulling up the blinds to the top pane, that they might get all the light there was to be had.

"Ah, what a nice little blaze ! " said Uncle Phil, limping round to the grate; "which of you knew that I had rheumatism this morning? "

"Dora always keeps a little pile of wood and shavings hid away for a morning like this," Julia said, leaving the window and coming to warm her cold fingers by the cheerful glow.

The mother entered with a cloud on her usually placid brow.

"Bridget is sick, girls — not able to get out of bed."

"How lucky that it rains ! " cried Dora. "No visitors, no going out; we can be busy-bees to-day without molestation. Sit down, and keep Uncle Phil from getting cross, mother, while we go and scratch up a little breakfast."

In a very short time a comfortable breakfast was on the table, everybody chatting pleasantly, and not a frown to be seen. It was at this moment that Uncle Phil announced his discovery that Dora was the most gifted child in the family.

"Yes," said Uncle Phil, gravely, in answer to the questioning eyes fixed upon him all around the table; "Dora has that rare treasure, the gift of pleasantness, — of being pleasant herself, and making other people feel so, no matter what is going on. I am sure that was the kind of woman the apostle was thinking of when he said it did n't matter about plaiting the hair and putting on gold ornaments, if a woman had that sweet, bright, quiet, unselfish spirit that God so approves."

And then all the eyes fixed upon the speaker filled suddenly with loving tears, and everybody seemed trying to kiss blushing Dora first.

"Yes," said the mother, softly, "pleasantness, — that is just my Dora's gift ! " — *The Angelus.*

To clean japanned goods, wet a sponge in warm suds and wash the tray, etc., and polish it with a cloth. If it looks smeared, dust on a little flour and rub it with a cloth, when, if any marks are left, they may often be removed with a little sweet oil rubbed on with a piece of flannel.

It is said that an ounce of alum or sal ammoniac in the last rinsing water or in the starch in which dresses are to be stiffened, will render them almost uninflammable; at least they will burn with difficulty, and will not blaze. This is worth remembering by mothers who have young children.

SOME WAYS IN WHICH TO USE GREEN CORN.

CORN in its fresh, green state is such a universal favorite that one scarcely wonders that the Indians believed it a special gift from the Great Spirit, in answer to Hiawatha's pleading for some good thing for his people. There are few articles used as a vegetable, that admit of a greater variety of desirable ways of preparation for the table than green corn. Alone or in combination with other vegetables or fruits, it may be appropriately served as a breakfast dish, and on the dinner menu may form a part of any course from the first to the last.

In selecting corn for the table, choose young, tender, well-filled ears, from which the milk will spurt when the grain is broken with the finger nail. The following are some of the many ways in which it may be acceptably served : —

Green Corn Soup.— Take six well-filled ears of green corn. Run a sharp knife down the rows and split each grain ; then with the back of a knife, scraping from the large to the small end of the ear, press out the pulp, leaving the hulls in the cob. Break the cobs if long, put them in cold water sufficient to cover, and boil half an hour. Strain off the water, of which there should be at least one pint. Put the corn water on again, and when boiling, add the corn pulp, and cook fifteen minutes, or until the raw taste is destroyed. Rub through a rather coarse colander, add salt and a pint of hot, unskimmed milk. If too thin, thicken with a little cornstarch or flour, boil up and serve. If preferred, a teaspoonful of sugar may be added to the soup. A small quantity of cooked macaroni, cut in rings, makes a very pretty and palatable addition to the soup. This soup is also excellent flavored with celery.

Corn and Pea Soup.— Use one cup of cooked, dried Scotch peas that have been rubbed through a colander to free them from skins, and one cup of corn pulp. Add milk to make of the right consistency. Re-heat the whole, and while re-heating, add a few bits of celery to flavor. When the soup is heated, remove the celery, season with salt and serve.

Macaroni with Corn Pulp.— Break macaroni into inch lengths and cook in boiling water. Prepare the corn pulp as directed for soup. If not rich with corn milk, some cream or milk may be added and the whole thickened slightly with flour. The pulp mixture should be of about the consistency of white sauce. When the macaroni is done, drain and add the corn in the proportion of a pint of corn to one and one half cups of macaroni. Mix well, turn into an earthen dish, and brown in a moderate oven. This makes an excellent breakfast dish.

Lentil and Corn Soup.— Prepare a bran stock by boiling for every quart of soup required, one cup of good wheat bran in three pints of water for two or three hours, or until reduced one third. To this stock as a base, add equal parts of cooked lentils (after being rubbed through a colander to remove the skins) and well-cooked corn pulp to make the soup of the desired consistency. Season with salt and serve. E. E. K.

A THIN silk cloth or a piece of cheese-cloth makes a good duster. So does a soft, firm woolen cloth ; but linen and cotton flannel leave lint behind them.

COOL rain water and soda will remove machine grease from washable fabrics.

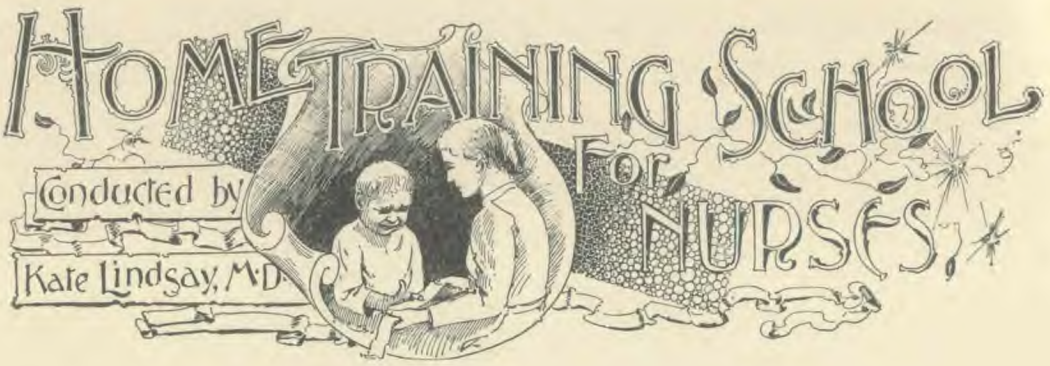
A SHOE that is uncomfortable from pinching may be made easy by laying a cloth, wet in hot water, across the place where it pinches, changing it as it grows cooler, for a number of times. This will cause the leather to shape itself to the foot.

THE thorough rinsing of all china that has been used should be an invariable preliminary to the washing of it in hot suds. From this it should be drawn, a piece at a time, and wiped quickly with a dry cup towel. The towel, by the way, will keep dry much longer when used on dishes that have just emerged from water so hot that evaporation aids the work of the cloth.— *Sel.*

IT is said that if sassafras bark is sprinkled among dried fruit, it will keep out worms.

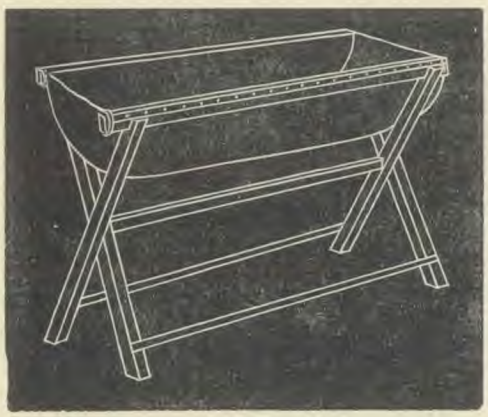
PUT a little spermaceti, lard, or kerosene in the boiled starch, and borax in the cold, and your linen will be both stiff and glossy.

IF a shirt bosom or any other article has been scorched in ironing, lay it where the bright sunshine will fall directly on it.



THE FULL BATH.

By a full bath is meant a bath in a tub containing sufficient water to completely immerse the whole body, except the head. The tub for an adult should be about six feet long, and eighteen inches deep, and two feet wide. It may be of wood, tin, zinc, galvanized iron, or other metal, or of porcelain or marble when stationary. Portable tubs are made of strong waterproof rubber or oilcloth. These are easily moved from room to room. Many substitutes for the full-bath tub may be devised. Anna Fullerton,



BABY'S CRIB AND BATH TUB.

in "Obstetrical Nursing," describes the following very convenient and practical arrangement: —

"A homemade bath tub and crib for an infant may be constructed by getting any ordinary carpenter to make a frame after the form of a common canvas cot. Four straight pieces of pine, thirty inches long and one and one half inches square, are used for the legs, and these are crossed and pinned in the center by a cross bar. Two side bars, one by two inches and thirty-six inches long, are attached to the upper part of the legs. Then take a piece of strong rubber or oilcloth, a yard wide by a yard and a half long, hem the ends, and draw up to eighteen inches. Then tack the sides securely to the top bar."

(See Illustration copied from "Obstetrical Nursing," previously quoted.)

This will make a convenient crib for the baby to sleep in and also a bath tub for his daily bath. It can be folded and set in the closet or any other convenient place, when not in use. A canvas cot with a cover that sags deeply in the middle may be used as a full bath for an adult, by covering with a strong rubber blanket or oilcoth, the surplus water being allowed to run into a tub at the foot which should be at least two inches lower than the head. When it is desired to retain the water for a time, the oilcloth may be rolled up at the bottom. A lady writing from a Western State to the *Household*, about how to keep in good health while doing all the work for a farm household, speaks of using a large hard wood barrel, which can be purchased for a dollar, anywhere. This is set in a convenient corner of the kitchen where it may be curtained off, or in warm weather in a part of the wood shed. In the morning it is filled half or two thirds full of water. If the day is very warm, the water becomes of a moderate temperature for a cool bath before dinner, or it may be warmed by the addition of a kettle of hot water. A small stool is set in the barrel; and when hot and tired from being over the cook stove, or by other house-hold duties, the lady takes a rest by removing her clothing, mounting a chair, and stepping into the barrel for five or ten minutes. When sitting in the water, it comes up around her neck and shoulders. A brisk rub with a crash towel completes the bath, and she is ready for work, cooled, rested, and invigorated; her mind clear, nerves calm, and muscles free from the dragged-out, sore feeling which makes physical work a drudgery.

The full bath may be used as a cleansing agent, as

a sedative bath to induce sleep, or as an eliminative bath to promote perspiration and increase the activity of the skin; and it is coming more and more into favor as a means of reducing temperature in all forms of continued fever. In Germany it is the cooling measure used in all cases of typhoid fever. The bath for cleanliness should be tepid or warm, 88° to 98°. A thorough soap and water shampoo, given with a brush or a washcloth of material rough enough to get up a good circulation, should be taken before entering the bath. This will soften the dead skin, and dissolve the oily matters, which, with all kinds of other dirt, is constantly accumulating on the surface of the body; and thus, by keeping the skin active, do much to prevent disease. A short warm or tepid full bath taken at night or any time during the day when one is heated, nervous, or sleepless, will increase the surface circulation, relieve sore muscles, calm irritated nerves, and induce a restful condition of mind and body, as illustrated by the busy housewife and her barrel bath. The cold full bath taken in the morning is a valuable tonic measure, and is useful as a means for preventing colds, stimulating circulation, increasing the activity of all the nutritive functions of the body as well as the action of the lungs and kidneys, and favoring the elimination of waste matter, thus promoting physical health and increasing the vigor of the mind. The cold full bath is the favorable antipyretic of the German physician; he fearlessly plunges his typhoid fever patient into water 65° or 70° and keeps him there, even though he may vigorously protest, with chattering teeth. Meanwhile the nurses are instructed to engage in vigorous rubbing, and thus keep the surface circulation active; and under these vigorous measures the temperature falls, the nervous tossing ceases, the delirium is relieved, the heart beats more slowly and vigorously, and all the eliminative organs of the body do better work, so that the patient is often able to digest and assimilate food, and fall into a natural sleep instead of the stupor due to the blood poison resulting from absorption from the diseased intestinal tract. Under this treatment the mortality of typhoid fever has decreased very decidedly among the Germans.

The graduated bath is oftener used in these cases in this country, and is a milder measure and equally useful in the treatment of high temperature. The patient is put into a tepid bath 90° or 95°, and the temperature of the water gradually lowered to 70° or 75°. The cold bath is usually continued for fifteen minutes; the graduated bath, for half an hour. During the bath, in either case, the surface should be vigorously rubbed, and also afterward. Heat should be used at the feet, and a warm drink may be given. The patient, after resting, may take food. In giving such vigorous treatment, the pulse, temperature, and respiration should be carefully watched, also the color of the skin. A rapid fall of temperature and labored breathing are indications for removing the patient at once from the water and bringing about a reaction, as a collapse is threatening.

The chief objection to the use of the full bath in treating fever at home is the lack of the necessary apparatus. The rubber bath tub is so expensive as to be out of the reach of many, but the cot and oilcloth are not expensive, and are easily prepared and used. The efficacy of cold bathing for reducing temperature is greatly promoted by friction while in the bath. This should never be neglected, as it calls to the surface constantly a fresh blood supply to be cooled, and thus prevents congestion of the internal organs.

The hot full bath is useful in cases where elimination by the skin is desired. It may be of a temperature of 100° to 110° or 112°. In dropsical diseases due to defective action of the kidneys, a hot full bath for five minutes, followed by a hot pack, will often induce a free perspiration equal to a Turkish or a Russian bath. When giving a hot bath, see that the room is well ventilated, or the patient may become faint. Always either reduce the temperature before leaving the bath, or give a cool spray or pail pour, wet sheet rub, or other tonic bath immediately after. This is necessary to tone up the surface, and prevent the patient from taking cold.

A SICK headache is a symptom of something wrong in the stomach. A stomach wash, or *lavage*, will often give complete relief; or better still, when a headache is threatening, fast over one meal, and all symptoms will disappear. There is some morbid matter in the stomach which must be disposed of before food can be successfully digested. Do not be afraid of starvation. The food digested and assimilated is what maintains existence — not what goes into the stomach simply. Undigested food decomposes, and instead of supplying the vital energies and tissue with the needed force and building material, poisons them with ptomaines, and deranges all their functions.

SUMMER COMFORT FOR BABIES; WITH A HINT ON COLDS AND HAY FEVER.

"MAN is not by nature a clothed animal," said Carlyle, in "Sartor Resartus," and the writer has three little ones, aged respectively nine months, two and a half, and four years, who seem to agree with the sage of Chelsea; they are never so happy as when they are naked. Four years ago (June 14, 1890), the eldest, a girl, was born, and during all the hot weather we kept her comfortable and happy "in her figure," literally. She was sufficiently blanketed at night and during the cool of the morning and evening, of course; but in spite of Mrs. Grundy she was kept naked much of the time, and with unfettered limbs she was creeping, or, at any rate, hitching, her way across the floor before she was four weeks old. Her unusual strength was due to our practice of non-tending, as well as to the freedom of body and limbs.

The more intelligent of our visitors to whom she was exhibited were delighted with the evidence of absolute comfort they beheld, and they straightway manifested a disposition to help their own little relatives as much as they could by stripping off some of the extra folds of flannel u. which the little wretches were sweltering and half-smothering. But some one (we never learned who) informed the S. P. C. C. of the outrageous treatment of the little innocent, and looked for our arrest and summary punishment doubtless, and perhaps the adoption of the babe by the State; but it so happened that my little nursery guide, "How to Feed the Baby," published in 1882, was dedicated to the Society for the Prevention of Cruelty to Children, and so the president smiled benignly on the good soul who lodged the complaint, and assured her that if Dr. Page's baby died of frostbite during the summer, the case should be carefully investigated.

Something like ten to twelve thousand children have died, under the age of five years, in this city, since the occurrence of the little episode referred to; while our little girl continues to thrive, and to pull off her shoes and stockings the instant she enters the house from her outings, and both she and her little brother have time and again distressed the maid by cutting up that caper and going barefoot on "the Avenue." Numbers two and three have since come to us, and they share their elder sister's dislike for clothes. All three go barefooted in the house all the year around, and much of the time when out, and wear very slight rig at all times.

Next to a bad inheritance — many children being born too tough to kill, while some are so frail by nature that no kind of management will enable them to pull through — the principal causes of infant mortality are: (1) Excessive feeding, digestive capacity being lessened by lack of exercise and overwrapping; (2) constant tending, and constant lack of natural exercise so essential to vigor of body and digestive power; (3) excessive clothing, so depleting in many ways to the animal organism — the skin, a breathing as well as an excreting organ, being forced to get on with foul air instead of fresh, while the pressure of clothing, all the worse if a bellyband is used, interferes seriously with the circulation of blood in the skin, etc.; (4) lack of fresh air in the home, very few homes being sufficiently ventilated.

"Why don't they catch their death o' cold?"— Perhaps one reason is that, if the truth were known, none of us catch the disease in that way; it is rather a disease of accumulation of foul matters from the refuses already named; and when the system becomes surcharged with filth, and certain symptoms appear, we say — those of us who know no better — "He has caught cold!" The fact of the matter is that it is rather a lack of cold, and hence the prediction of Dr. Felix Oswald, that the time will come when every sanitarium will be supplied with an immense refrigerator for the treatment of "colds" (I can never bring myself to repeat the name except with quotation marks). The adult victims of flannels and a diet unsuited to the season, hundreds of whom (physicians as well as laymen, it must be confessed) flock to the White Mountains every summer to avoid "hay fever," might take a hint here and live in comfort in any part of the country. They might go to the mountains for fun, but not as a lot of sneezing, overgrown infants, to babble about the hoped-for specific. How often I have observed a babe who could not suck and breathe at the same time for "snuffles," completely relieved within a half-minute by removing a large share of its clothing, and having a cold, damp towel pressed over the forehead, temples, and top of the head, sending a cool wave in to relieve the congested parts. It should be a cool, damp towel, by the way, not ice-cold for an infant; but the grown snuffler may employ more vigorous measures.— *Charles E. Page, M. D., in Medical Record.*

ONE CAUSE OF DIGESTIVE DISORDERS IN THE WARM SEASON.

THE death rate from acute disorders of the digestive organs is so markedly increased among infants and young children during the summer that it is the imperative duty of all having the care of children to become acquainted with the causes of these diseases and how to prevent them. Every organ is endowed with the power of self-protection in proportion to the organic soundness of its structure and the perfection of its functions. The digestive fluids are all antiseptics; and, when in health, either destroy or prevent the multiplication of disease germs. The saliva, gastric juice, pancreatic fluid, intestinal juice, and bile all do their best to destroy the dangerous living organisms entering the alimentary canal. But they are liable to be overpowered by the inroads of more enemies than they can destroy, or, abused and crippled by overwork in digesting food improper in quality and quantity, to become so depraved and weakened in their action as partially or entirely to lose the power to prevent disease. In warm weather disease germs grow rapidly, finding in the increased amount of decaying organic matter, a good soil in which to flourish.

The universal custom of allowing children to form the habit of eating and drinking at all times and in all places, regardless of the kind, quantity, or quality of food or drink, has cost many lives — just how many no statistics will ever be able to determine. Were all children, and grown people too, taught regular habits of eating and drinking; and did those caring for children understand the importance of clean food and drink, and how to secure them, diarrhea, cholera infantum, cholera morbus, dysentery, and the more grave disorders of cholera and typhoid fever would soon be, to a great extent, stamped out. The green, unripe apple and other fruit would soon lose their bad reputation as enemies of the small boy, if left until fully ripe and only eaten at mealtime, and the cramps of cholera morbus would cease to follow in their wake. The precaution of instructing children and youth to form the habit of controlling thirst when the water supply is likely to be infected, or when traveling, is also important. Desire for drink is much increased or decreased by the kind of food eaten. The usual traveler's lunch of ham sandwiches, cheese, and cookies, are all calculated to create a morbid thirst; and when this is quenched from the train tank, there is no telling what germs may be swallowed, or what disease contracted. From this cause, tourists, instead of the health and recreation sought, often reap disease and death from their summer outing. A trip of some five thousand miles taught the writer that fresh, juicy, ripe fruits would supply the needed fluid, and almost entirely abolish the desire for drink, even in passing over dry plains, and during an extended trip of six weeks. Eschew all salt foods, pastries, and candies, and the danger of contracting digestive disorders when traveling will be greatly diminished, and much of the minor discomforts of car sickness, sick headache, and disordered stomach, prevented. It pays to know how to avoid the cause of disease, and to skillfully use an ounce of prevention, especially since a pound of cure is so unreliable.

IN changing the dress of a patient suffering from rheumatism, or any sore on the arms or upper part of the body, there is often great and unnecessary distress caused in getting the arms in and out of the sleeves of the shirt or nightdress, or even a chemise, when fitted closely to the body. It adds greatly to the comfort of both patient and attendant, to rip open the sleeves and one side of the garment, and attach small strings of tape, just as is done with the sleeves of a man's coat when an arm is broken, but nearer together. Generally with a long sleeve the wristband may be left uncut, and the garment not opened lower than the waist, but this must be determined by the requirements of the case. In cases of extreme debility, where it is not safe for the patient to be raised even for a moment, all risk and inconvenience may be avoided by ripping open both the dress which is in wear, and the fresh one, and lifting the patient onto the latter just as is done in changing the bedclothes. This plan does not destroy or injure the clothing in any way, as the seams can be sewed again when the garments are wanted for ordinary use.—*Sel.*

RHEUMATISM is a very common disease of childhood, though often undiscovered. Its effects are manifested in after life by heart disease and stiffened joints and muscles. Cold, dampness, and disordered digestion favor its development. Children should be taught to change their damp shoes and stockings in the evening, instead of sitting around with cold and often wet feet and legs, courting colds, chronic catarrh, and inflamed joints.

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

THE PLAGUE IN CHINA.

So long a time has elapsed since the plague has made its appearance in such a way as to attract the attention of civilized countries, this dread malady had been almost forgotten. Two hundred years ago the same plague which is now prevailing in different parts of China, devastated Europe, but modern sanitary regulations have practically exterminated the disease among civilized nations. The condition of Chinese and most other Asiatic cities, is, at the present day, from a sanitary standpoint, about like that of London before the great fire. It is not surprising, therefore, that the genuine bubonic plague should recently have made its appearance at Hong Kong, Canton, and other centers of population in China. The disease has now been prevailing for several months in diffierent parts of China; and although at the present time it seems to be somewhat abating, it is by no means certain that some months more will not elapse before its ravages cease. From a recent paper kindly sent us by our friend, Dr. Kerr, by the overland China mail, we gather a number of interesting facts, one of the most curious of which is the belief of the natives that the disease emanates from the ground, through fissures which have recently opened up in great numbers in consequence of the prevailing drought.

The disease has become so widespread that the Chinese authorities have caused a house-to-house visitation for purposes of cleansing and disinfecting,—quite an innovation in China, but a most wholesome one, and one which, if the custom becomes a permanent one, may possibly lead to the saving of so many lives that the plague will prove, after all, to be a blessing, notwithstanding that so many thousands have fallen victims to it. So many houses have been condemned that it is stated as possible that one tenth of the entire city of Hong Kong may be destroyed and rebuilt, to put a stop to the dread malady. So far, only a few foreigners have suffered, although there is so great a dread of the disease that attempts have been made to restrict the disease to its present localities by preventing the migration of the sufferers. However, Tsung-Li Yamen has informed the British minister at Pekin that, unless the plague patients are allowed to leave the colony, the Chinese government will cease to be responsible for the safety of the lives or property of missionaries in China. There is, as usual among heathen people, when any national calamity befalls them, a general feeling of hostility against foreigners, and especially against missionaries. Mobs have produced serious disturbances in many places, and at Canton, recently, a conspiracy was discovered, the purpose of which was to murder all foreigners and destroy their property. It is probable that this great catastrophe was only averted by a premature outbreak of the hostile feeling, which nearly resulted in the death of two lady medical missionaries, but gave warning of the impending danger in time to permit of the adoption of necessary precautions.

The Chinese appear to be terror stricken by the plague, fleeing in great numbers from the public works upon which they are employed; and their terror seems not without cause, for thus far the disease has proved to be fatal in almost every case. Dr. Kerr writes us that he has succeeded in saving a half dozen or more in the floating hospital which he has established in the river, opposite the large hospital of which he has had charge for nearly half a century. Between the plague on the one hand, and war with the Japanese on the other hand, China would seem to be having a rather hard time just now; possibly she may learn a useful lesson from both calamities. If the Japanese should happen to come out best in the contest, China would doubtless be more ready

to adopt modern improvements, in which she has been far behind her rival; and the plague may teach her the importance of introducing some thorough-going sanitary measures for the suppression of the numerous nuisances which, according to the reports of missionaries, "smell to heaven" in almost every part of the empire.

BRAINS OF MEN AND WOMEN.

THE fact that the average woman's brain weighs less than that of the average man has been made the foundation for the argument that woman possesses less mental capacity, intelligence, etc., than man. By the same line of argument, man may be shown to possess less intelligence and brain power than the elephant, whose brain is considerably larger than the largest human brain ever measured. This mode of reasoning is erroneous. It is well enough known that small men with small brains sometimes possess as high a degree of intellectual activity as larger men with larger brains. It seems to be forgotten that a large part of the brain is concerned, not in intellectual activity, but in the management of the muscles, viscera, the heart, lungs, liver, etc. A man with a small brain in a small body may have a larger number of nerve cells devoted to intellectual activity than another man with a larger brain, but with a body disproportionately larger. The absolute size of the brain cannot be considered as the proper criterion for intellectual activity, but the size of the brain as compared with the body, leaving out, of course, cases of extreme obesity and extreme emaciation. When measured by this rule, the size of the brain of the average woman being compared with the weight of the average woman, and the size of the brain of the average man with the weight of the average man, the two results placed side by side show woman to have as large a brain in proportion to the size of her body as man.

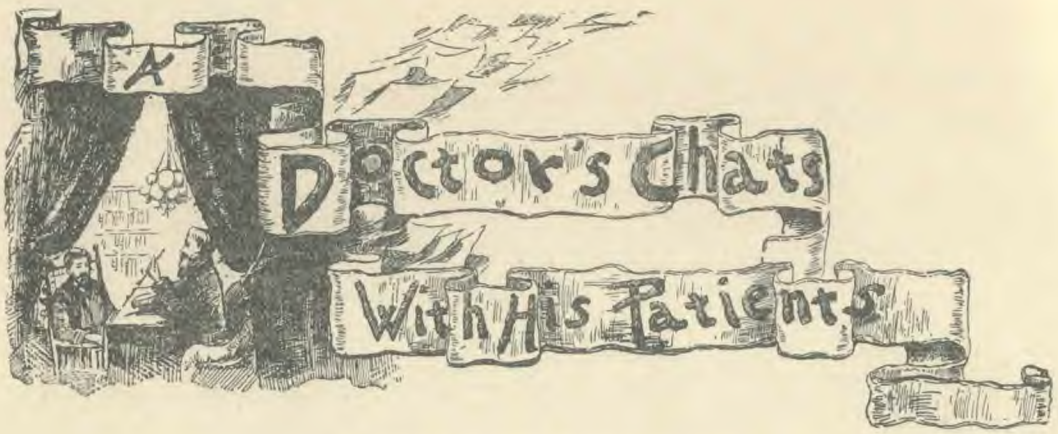
This is true, not only of the brain of the adult woman, but of the girl as well. The average boy of seven years has a brain weighing 1100 grams, his body weighs 20,160 grams. The brain of the average girl of seven years weighs 1000 grams, while the body weighs 18,450 grams. A comparison of the relative weights of the brain and body in the boy and girl of seven years, shows the girl to have a slightly larger brain in proportion to her weight than the boy.

The controversy upon this question, which has sometimes waxed very warm, has taken a wrong direction. It is not a question of quantity or capacity, but one of quality. Viewed from this standpoint, the question is comparatively free from difficulties, and its discussion should not give rise to disparaging reflections on either side.

COFFEE VERSUS DIGESTION.—Prof. Schutz-Schutzenstein, an eminent German scientist, has recently completed some interesting experiments in relation to the effect of tea and coffee on gastric digestion. He found that an artificial gastric juice was able, in eight hours to digest 94 per cent of coagulated egg albumen. When tea was added, other conditions remaining the same, only 66 per cent, or about two thirds as much of the albumen was digested; and when a decoction of coffee was mixed with the digesting albumen, only 61 per cent, or less than two-thirds of the albumen, was digested. This result was believed by the professor to be due to the influence of the tannin upon the albumen. The effect was found to be less in proportion as the infusion of coffee or tea was weaker, and the conclusion was expressed by the experimenter, that the deleterious influence of these common beverages is due, not to the thein and caffein which they contain, but to the constituent tannin, the suggestion being made that an infusion made by pouring water upon the tea or coffee and allowing it to stand for a few moments, instead of boiling for some time, is less deleterious in consequence of the extraction of a smaller quantity of tannin.

This conclusion is doubtless correct, but it is equally true that an infusion thus made contains a smaller amount of thein and caffein. These substances are less easily soluble in water than tannin, and consequently the less injurious effect of the lighter infusions is not due to the fact that they contain less tannin, but that they contain a less quantity of all the poisonous properties contained in the tea leaf and the coffee berry.

Dr. ERNEST HART, editor of the *British Medical Journal*, the leading medical journal of the world, in a recent editorial, calls attention to the same fact which we have stated above, namely, that tannin being more soluble than thein and caffein, the proportion of tannin contained in quickly made effusions is not appreciably less than that contained in effusions in which the tea leaves have been steeped for a longer time.



INFECTED FEATHER BEDS.

THE most insanitary of all household articles is the feather bed. Quite too frequently it is an heir-loom which has come down through many generations past, and sometimes it proves to be a genuine Pandora's box of germs, and malodors, and other insanitary things which have accumulated during the several generations in which it has done service for all sorts of people under all sorts of conditions. In the larger cities, convenient renovating establishments afford facilities for the purification of feather beds, pillows, etc., which, to some degree remedies the evil of which we complain, but by no means altogether; for the feather bed, at best, contains a considerable amount of organic matter clinging to the quills and feathers, which, absorbing the waste of the body, is always undergoing decomposition, throwing off poisonous gases into the air and affording food for myriads of pestilential microbes which are ever in readiness to seize a favorable opportunity of infecting a weakened body, setting up suppurating processes and intensifying the effects of specific germs of various sorts which may become active in the body through the contagion.

Sometimes, also, a feather bed becomes infected by the contagious elements of scarlet fever, diphtheria, measles, smallpox, or other maladies, and constitutes thereby a most efficient vehicle for these dangerous disorders.

A case of this sort recently occurred in an Eastern town. The death of two children in Woburn, Mass., led to an investigation of the infection, which disclosed the fact that two weeks before the illness of the children, a barrel containing a feather bed had been dumped upon a vacant lot. A number of children playing in the lot next day discovered the feather bed, opened it and scattered the feathers over one another, thus effecting the most thorough exposure possible to whatever contagious element the feathers might contain. Within a few days five of these children were taken with scarlet fever; two died shortly afterwards, and at the time the case was reported, the third child was not expected to live. After the children were taken ill, some one, perhaps the originally guilty party, burned the feather bed. In such a case, the neglect to destroy so efficient an agent of dissemination of disease before giving opportunity for such a fatality as above reported cannot be looked upon as anything less than criminal neglect and carelessness.

That this fact was appreciated seems to be evidenced by the subsequent burning of the bed after the children were taken sick. It is to be hoped that the guilty party was discovered, and proper legal punishment administered. It is no less a crime to destroy human life in such a manner than by neglect of proper care for a steam boiler, or by carelessly running a steamboat upon a rock, or, through neglect, allowing it to take fire and burn up in mid-ocean.

FOOD FOR INFANTS.

DR. EILOART, of New York, after numerous experiments in connection with Dr. Chapin, Physician to the Infant's Department of the Post-Graduate Hospital, has prepared the following excellent recipes for the preparation of food for young infants: —

RECIPE I.

Materials.—Wheat flour or barley meal, two ounces (two tablespoonfuls heaped as high as possible); water, fifty-six ounces (a quart and three quarters);

extract of malt, half a teaspoonful or a small teaspoonful.

Process.—With thirty ounces (a scant quart) of the water, make the flour into a gruel, boiling ten minutes in a double boiler. Take out the inner vessel, and add the rest of the water cold, the malt extract being dissolved in the last few ounces added. Let it stand fifteen minutes. Put back the inner vessel, and heat again in the double boiler fifteen minutes. Strain through a coffee strainer of wire gauze.

If for any reason it is desirable, as in cases of diarrhea, to give a smaller proportion of maltose, the following recipe is used, and we get a food containing only one fourth of the solid matter in the form of maltose: —

RECIPE II.

Materials.— Same as in Recipe 1.

Process.—Proceed as before, but reserve only one pint of the water for adding cold. After adding the cold water with the malt extract dissolved in the last few ounces of it, let it stand only three minutes instead of fifteen minutes. Then heat ten minutes in a double boiler, and strain.

To make the gruel well and quickly, beat the flour with very little water. A little beating with little water is better than much beating with much water. Beat smooth, therefore, while the paste is still almost a dough; then add cold water to make a thin paste, and to this add the rest of the first part of the water boiling hot, with stirring. If these directions are followed, very few lumps will remain in the strainer; in fact, only about five per cent of the meal need be lost in this way. The water in the outer vessel of the double boiler must be kept boiling throughout. Whichever recipe is followed, the food should be taken mixed with milk.

ANSWERS TO CORRESPONDENTS.

INDIGESTION — CONSTIPATION — CRAMP COLIC.— L. P. is a great sufferer from the above ailments. The colic is seldom relieved in less than five or six hours. The attacks come on as often as every two or three weeks.

Ans.— It is impossible to make a prescription for cases of this sort, without knowing the patient's condition; this can be determined by correspondence. Acute attacks of colic may generally be relieved by general application of fomentations to the stomach, copious hot-water drinking, and the employment of large hot-water enemas. If the disease is due to the presence of a gallstone or renal calculus, relief will not be found until the calculus or gallstone has escaped from the constriction.

RAW OATMEAL AND MILK — ANIMAL FOOD.— C. W. M. inquires: "1. Would it be injurious to eat a teacupful of raw oatmeal and milk every morning, for the purpose of relieving constipation? 2. Would you advise entire abstention from animal food when it is impossible to procure much fruit?"

Ans. — 1. Yes. Raw oatmeal is not easily acted upon by the digestive juices, and is likely to give rise to indigestion. Waterbrash in a very severe form is prevalent among the Scotch who use raw, or nearly raw, oatmeal in what is called "Scotch brose." Coarse Graham bread and the abundant use of fruits will be found a preferable means of relieving an inactive state of the bowels.

2. Fruit in some form, either dried or fresh, can be obtained in all civilized countries. The conditions are very rare indeed in which fruit in some form cannot be procured as easily as meat. Flesh is a very inferior article of food; but its use is, of course, to be preferred to starvation.

REDNESS OF THE NOSE—BARBER'S ITCH, ETC.— C. R. N. asks: "1. What causes redness of the nose? 2. How can it be cured? 3. What is a cure for barber's itch? 4. What foods should a person take in warm weather?"

Ans.— 1. A disturbed condition of the sympathetic nerve, probably the result of indigestion; or it may be the result of the free use of alcoholic liquors.

2. The cause must be carefully removed, first of all. Bathing in hot water is sometimes advantageous. The application of flexible collodion is also serviceable.

3. The disease is not easily cured; it is due to the presence of parasites in the hair follicles. The treatment should be supervised by a competent physician. The remedies necessarily employed are such as could not be stated here.

4. Fruits, grains, fresh vegetables, and milk constitute the best dietary for hot weather, and for all weathers.

FLATULENCY, ETC.—"An interested reader" asks: "1. What is the cause of flatulency? 2. What is the remedy? 3. Is the use of 'silium' of benefit in diseases of women?"

Ans.— 1. Fermentations.

2. Disinfection of the alimentary canal by means of stomach washing, *lavage*, copious warm water enemas, and the use of food which is not likely to ferment, such as granola and zwieback, and food which requires thorough mastication.

3. We are not acquainted with the remedy; it is probably a quackish nostrum.

ELONGATED PALATE — INHALER.— S. J. C. asks: "1. Will an elongated palate produce a tickling sensation or an irritation in the throat? 2. If so, what is the remedy? 3. What remedy is best to use in connection with an inhaler for the throat?"

Ans.—1. Yes.

2. In mild cases the application of astringent remedies is all that is required. We have found good results from the use of a mixture of one part of tannic acid with three parts of glycerine; should be applied with a swab daily. Gargling the throat with hot water is a valuable remedy in these cases. In extreme cases it is necessary to remove a small portion of the uvula. Care should be taken, however, not to remove too much.

3. We find a mixture consisting of menthol, compound tincture of benzoin, wintergreen, cinnamon, and eucalyptus in solution in alboline, if to be used with an atomizer, or in alcohol if used with a volatilizer, most preferable, and an exceedingly valuable remedy in cases of this sort.

SALT — PROPORTION OF FATS NEEDED — NUTS. — A subscriber inquires: "1. Does salt aid digestion? 2. What proportion of fat is needed by the system? 3. Are nuts hard of digestion?"

Ans. — 1. It is probable that a small quantity of salt stimulates the digestive process.

2. From one to two ounces of fat in some form is needed daily. Such grains as corn and oats contain an abundance of this element; it is found in nuts in large proportion.

3. Nuts, like fruits and other raw foods with firm, hard flesh, are somewhat difficult of digestion. The difficulty disappears, however, if the mastication is made thorough and complete.

ASTHMA — BROMIDE OF POTASSIUM, ETC. — Mrs. E. J. M. would like to know: "1. What inhalant is best for asthma? 2. Is bromide of potassium the best remedy known for a shattered nervous system? 3. Which is the more injurious, tea or coffee?"

Ans. — 1. The volatile remedies to be used by burning for relief of acute attacks of asthma are all more or less harmful. We cannot recommend any of them. There are various antiseptic remedies which when used with a volatilizer are excellent means of relieving this disease and preventing attacks. The remedies named under (3) in reply to "S. J. C." in this number are valuable.

2. The remedy named has no curative virtues for a case of "shattered nerves." It is simply a palliative. Sometimes it is useful as a means of temporary relief to nervous irritability, but otherwise is valueless; and when its use is long-continued, great injury is done, both to the digestive organs and the general nervous system.

3. This is a case of "six of one and half a dozen of the other."

BOWLEGS — USE OF LIME WATER, ETC. — A subscriber asks: "1. What is the best plan of treatment for bowlegs in a child about one and one half years of age? 2. Can you suggest a cheap and simple apparatus for use at home? 3. Would the use of lime water in milk, as a food, tend to harden the bones so they would not bend? 4. What is the best food for an infant just after it is weaned? 5. Would graham mush and milk be good? 6. Is granola a good food for infants?"

Ans. — 1. It is possible the child may be relieved by the wearing of a proper apparatus. It is probable, however, that an operation may be required, at least if the case is an extreme one.

2. The apparatus required will have to be made by a competent instrument maker. Sharp and Smith, 73 Randolph St., Chicago, Ill., are a reliable firm.

4. A thin gruel made from barley, or whole-wheat meal thoroughly boiled, strained, and mixed with sterilized cow's milk.

5. Yes.

6. Yes. We also recommend the Sanitarium Infant Food, manufactured by the Sanitarium Food Co., Battle Creek, Mich.

WHITE OR GRAY HAIR TURNING YELLOW. — A subscriber asks: "1. What is the cause of white or gray hair turning yellow? 2. Is there any remedy? 3. What causes a distressed feeling in the stomach upon lying down? Often there is gas in the stomach or bowels, though the eructations are never sour."

Ans. — 1. We do not know.

2. We know of none.

3. The cause is probably distension of the stomach with gas. The application of a rubber bag filled with hot water, or heat in some other form, will probably give relief. The drinking of a half glass of hot water will be found beneficial. It is probable that the dietary requires correction.

STERILIZATION OF MILK — MASSAGE. — G. asks the following questions: 1. "In sterilizing milk, what proportion of salt should be used to a gallon of water? 2. Will any large bottles answer? 3. Must there be an air space allowed to prevent steam from breaking bottles? 4. Please detail the process of massage in the development of portions of the body. 5. Is massage to be relied on for specific development? 6. Must it be long continued?"

Ans. — 1. Add to the water as much salt as can be made to dissolve, and a little more, so as to be sure that the water is saturated. If there is some salt remaining and undissolved after the solution has been well stirred and has stood an hour or two, the water may be considered saturated.

2. Yes, provided the bottle is a strong one.

3. Yes.

4. Too much space would be required for reply to this question. A little work on massage will be published at an early date by the Modern Medicine Publishing Co., which will give full directions for treating all parts of the body.

5. Yes, in conjunction with such other measures as may be required.

6. Yes.

ERUCTATIONS OF GAS. — "Southwell" writes: "After a meal, I have constant belching of gas, which usually brings with it quantities of food. When I have eaten vegetables, the taste is very acid. Sometimes the presence of gas causes palpitation of the heart and shortness of breath, and often a lack of nerve energy. If you can advise me, I shall be greatly obliged."

Ans. — The patient should have an analysis of the stomach fluid made as the basis for a proper prescription. Special directions for this will be sent on application.

DRY TETTER — PIMPLES. — E. H. asks for information as to the treatment of dry tetter, and pimples on the face. He is a vegetarian, and drinks no tea or coffee.

Ans. — Bathing the face with hot water two or three times daily will be found a valuable remedy. It is possible that the disease may be parasitic, requiring the application of germicides. If not relieved by the use of hot water, try in addition the application of zinc ointment.

CATARRH OF THE BOWELS — BURNING IN THE STOMACH. — H. W. writes: "1. Is oatmeal or rolled oats good food for one who has catarrh of the bowels? 2. What is the trouble when the stomach burns after eating fruit?"

1. No, because there is much irritability of the intestines, causing watery movements daily. Coarse grain preparations should be avoided in such cases; otherwise they are not injurious.

2. Fermentation.

OILY SKIN — RED NOSE — DIET FOR A NERVOUS PERSON, ETC. — "A Constant Reader" desires to know: "1. What causes an oily skin, and what can be done for it? 2. What causes a red nose, when no intoxicants are used? 3. Is there any help for it? 4. What diet would you advise for a nervous person? 5. What sort of exercise ought a nervous person to take? 6. How can dark rings under the eyes be removed?"

Ans. — 1. Excessive activity of the fat glands of the skin. This condition is not easily cured. It is usually connected with a disturbed condition of the digestive organs resulting in irritation of the abdominal sympathetic.

2. Redness of the nose is the result of the same cause.

3. Bathing the face in very hot water two or three times daily is often very serviceable in cases of this sort.

4. Such a diet as will best agree with the digestive organs.

5. General all-round exercise in sufficient degree to produce gentle fatigue but not exhaustion. Bicycle riding is a most excellent exercise and is highly beneficial in such cases.

6. By improvementof the general vital tone, enrichment of the blood by exercise, a proper dietary, and an abundance of sleep.

NON-STARCH DIET — ZWIEBACK.— J. S. C. asks: "1. Is there any good to be derived from living on the non-starch diet advocated by Dr. Densmore, of London? 2. How is zwieback made?"

Ans.— 1. A non-starch diet may advantageously be employed temporarily in certain forms of indigestion. We have found, on an examination of one of the chief apostles of non-starch diet, an enormous dilatation of the stomach. An examination of the stomach fluid showed almost complete apepsia, which accounted for his enthusiasm in favor of a non-starch dietary; being unable to digest starch, he found other foods more convenient. For others in a like condition it may be well to suggest a non-farinaceous dietary, but we cannot commend this diet for all.

2. Zwieback is simply twice baked bread.

SENNA IN CONSTIPATION — COD LIVER OIL.— E. S. G. asks: "1. Is the use of senna harmful in constipation? 2. What are the benefits to be derived from a use of pure cod liver oil?"

Ans.— 1. Yes. The use of this, as well as other laxative drugs, ultimately leaves the bowels in a more inactive state than before it was employed.

2. Cod liver oil is digestible fat, much less agreeable, however, than sweet cream. Sweet cream, or even fresh sterilized butter, is in every way preferable.

CUCUMBERS — DRIED BEEF.— W. E. B. asks: "1. Are cucumbers nutritious? 2. Has dried beef nutritive properties equal to fresh, lean beef?"

Ans.— 1. In a very slight degree only. The proportion of nutritive elements is but four per cent.

2. Dried beef is somewhat less digestible than lean beef, but the proportion of nutritive matter is of course greater, since the proportion of water is less.

THE HOT-WATER BOTTLE—THE EXPOSURE OF THE FEET TO COLD, ETC.— A correspondent asks the following questions: "1. A person with slow digestion, after eating at night, places a hot-water bag on stomach when retiring, and water gets cold before he wakens. Is this injurious? 2. Ought an elderly lady in delicate health to stand with bare feet upon a cold surface, during the length of time occupied in dressing in the morning? 3. Ought persons of sixty or seventy years of age to bathe as frequently as younger persons? 4. Would a bath taken every fortnight be sufficient?"

Ans.— 1. No.

2. The effects might be injurious.

3. More frequent bathing is necessary. Neither very cold nor very hot water should be used. Care should be taken to prevent chilling after the bath. Long baths are injurious, but baths for cleanliness are required more frequently by aged persons than by young persons.

4. A tri-weekly bath is none too frequent for health. We find the daily bath very advantageous.

WEIGHT IN LEFT SIDE — PALPITATION OF THE HEART — BLOATING OF THE FACE, ETC.— A correspondent, "W.," asks: "1. What is the significance of the following symptoms: Weight in left side; on pressing it outward there is a gushing sound, as of water or gas; at times there are colic, palpitation of the heart, bloating of the face, and intense biting or itching of the nose. Digestion is bad, and bowels are constipated. 2. Would suppression of the menses cause these symptoms, or any portion of them? 3. What kind of food would you recommend? 4. When droppings from catarrh cannot be coughed up, is it probably because the throat has been eaten into by the disease?"

Ans.— 1. Dilatation of the stomach.

2. Probably not.

3. You should have an examination of the stomach fluid. Write for directions respecting this.

4. No. Probably the secretion is thick and tenacious.

POPCORN — CREAM ON STERILIZED MILK, ETC. — Mrs. J. M. D. asks: "1. What is the value of popcorn as a food, and is it difficult of digestion? 2. Does cream rise on milk sterilized in Sanitarium milk sterilizer? 3. What is the proper size of bottles for use in sterilizing milk?"

Ans.— 1. It is very nutritious and easy of digestion.

2. Yes.

3. Bottles of any size may be used; pint bottles are preferable.

PAINFUL MENSTRUATION—WILLIAMS'S PINK PILLS, ETC.— Mrs. E. F. D., Oregon, inquires as follows: "1. What home treatment would you prescribe for painful menstruation which is accompanied by chills and fever, earache, and pain in the head, extending down to the shoulders? 2. Is there any virtue in Williams's Pink Pills? 3. Would you advise their use, or the use of any of the so-called patent medicines, for the above mentioned difficulties?"

Ans.— 1. This patient requires the attention of a skilled physician; it is not a proper case for a home prescription.

2. We cannot recommend patent nostrums of any name or color.

SAULT'S PINK PILLS AND SENNA — CASTOR OIL IN DIARRHŒA, ETC.— Mrs. P. M., Manitoba, asks: "1. Are Sault's Pink Pills and Senna good for constipation? 2. Would you give castor oil to a child in a case of diarrhœa? 3. What is the cause of a burning pain in the stomach immediately after eating? 4. Would poor teeth have anything to do with it? 5. What is a cure for salt-rheum and erysipelas? 6. What diet would you recommend for a person having these complaints?"

Ans.— 1. No.

2. No; the hot enema will be preferable.

3. Possibly an ulcer of the stomach; probably hyperpepsia; perhaps both.

4. Poor teeth indicate mouth dyspepsia, which is generally associated with some disorder of the stomach.

5. These diseases are generally associated with a disordered digestion; measures should be taken to improve the general health. Attention should be given to diet, and local treatment is also required in many cases. There is no panacea. Different forms and stages of these diseases require different remedies; a physician should be consulted.

6. Such a dietary as will secure the most perfect digestion. What this must be will depend upon the condition of the stomach in each individual case. It is often necessary to make an examination of the stomach fluid to determine this. Further directions will be given with reference to such an examination if asked for by letter.

RELIEF DEPARTMENT.

[THIS department has been organized in the interest of two classes: —

1. Young orphan children, and
2. The worthy sick poor.

The purposes of this department, as regards these two classes, are are follows: —

1. To obtain intelligence respecting young and friendless orphan children, and to find suitable homes for them.

2. To obtain information respecting persons in indigent or very limited circumstances who are suffering from serious, though curable maladies, but are unable to obtain the skilled medical attention which their cases may require, and to secure for them an opportunity to obtain relief by visiting the Sanitarium Hospital. The generous policy of the managers of the Medical and Surgical Sanitarium has provided in the Hospital connected with this institution a number of beds, in which suitable cases are treated without charge for the medical services rendered. Hundreds have already enjoyed the advantages of this beneficent work, and it is hoped that many thousands more may participate in these advantages. Cases belonging to either class may be reported in writing to the editor of this journal.

It should be plainly stated and clearly understood that neither orphan children nor sick persons should be sent to the Sanitarium or to Battle Creek with the expectation of being received by us, unless previous arrangement has been made by correspondence or otherwise; as it is not infrequently the case that our accommodations are filled to their utmost capacity, and hence additional cases cannot be received until special provision has been made.

Persons desiring further information concerning cases mentioned in this department, or wishing to present cases for notice in these columns, should address their communications to the editor, Dr. J. H. Kellogg, Battle Creek, Mich.

☞He wishes especially to state that those who apply for children will be expected to accompany their applications by satisfactory letters of introduction or recommendations.]

No. 231 is another Michigan boy. He is but nine years old, and is left in the world with no one to care for him but the county authorities, as his mother is dead and his father has deserted him. He has dark blue eyes and brown hair, and is said to be kind, easily governed, and to have fine sensibilities. Who will offer a home to him who is worse than an orphan?

WORD has come from Colorado telling us of a thirteen-year-old boy (No. 232) whose father is dead. His mother desires to place him in some home, but does not wish to give up full control. He has brown eyes and hair, and has not been allowed to run the streets. Will some one offer this boy a home for a few years?

Is there not some good home in the Southern States where a twelve-year-old boy (No. 233) can find parents? This boy's father and mother are both dead, and just at this age he surely needs to be surrounded with good influences and to receive kind advice and encouragement, so that he may grow to be a useful man. He has black eyes, and is said to be intelligent and in good health.

NOS. 235, 236, AND 237.— The father of two girls and one boy, aged respectively twelve, eleven, and nine years, now living in Massachusetts, is anxious that his children may have the care and training such as only some kind mother could give. He desires that homes be provided for them in the New England States. The children all have dark eyes and hair, are industrious, and have not been neglected.

No. 240.— A YOUNG girl sixteen years old has made application for a place to work where she can earn moderate wages and at the same time attend school, so as to obtain a good education. She wishes to follow the occupation of nursing as her life work, but owing to her age and lack of education she is not as yet prepared to enter the Training Class for Nurses. Will some one offer to assist this young girl to prepare herself for the noble work of laboring for suffering humanity?

No. 241.— A HALF orphan baby boy living in Michigan needs the care of some kind hearted mother. He is but four months old, with blue eyes and dark hair. He will need kind attention, and the love which only a true mother can bestow. We doubt not that the friends who will take this little one into their home will be fully rewarded for the time spent in caring for him.

ONE of our orphan boys, who is ten years old, has found a home on a farm in Southeastern Kansas. We learn through friends that he is making himself very useful; he has learned to milk the cows, and when his new father is sowing grain, he is permitted to drive the team, of which accomplishment he is very proud. He has also learned to ride on horseback, which gives him great satisfaction.

In this same family is a little motherless three-year-old girl, who has been with them for about a year. They write that "she makes what sunshine she can."

THE following word has been received from one of our friends living in South Dakota, concerning the children she has taken into her home: —

"I received your kind letter of inquiry some time ago, but have neglected to answer till now. We obtained the little girl. She is a bright, intelligent child who will soon be four years old. She has dark eyes and hair, is rather small of her age, and not very strong. She is of an extremely nervous temperament, which I think is the result of improper diet,

but we trust that, with proper food and treatment, she will outgrow that.

"The older girl is getting along nicely. She reads well, and always has her Sabbath-school lesson perfectly. She does not go to school, as it seems too long a distance for a child of her age to walk; for it is three miles away. She is strong and active and of a very kind disposition. She writes pretty well for her years, and says that when she can write good enough, she will write to Dr. Kellogg.

"I have never been sorry that I took the little ones. If our crops were not an entire failure this year, I would take another, but under the circumstances I cannot see the way clear just now to take any more. I find the task much easier than I anticipated; and I believe, if we work for the Lord and his children, the work will not seem hard."

OUR readers will remember the call made for missionary homes in a previous number of the *Medical Missionary*, and some will probably wonder if anything has been done in this work.

In response to this request, a number of persons have expressed themselves as being willing to cooperate with us in the work of caring for those who are in need of a home and Christian surroundings.

THE following incident will show that the efforts put forth by one family have been appreciated by the one cared for: —

An aged lady seventy-three years old, whose children had cast her off, had been living at first one place and then another. At last it looked as if the only home for her was the poorhouse. She was willing to go the poorhouse if there was no other home, but she greatly desired the privileges of a Christian home. A friend who was acquainted with the circumstances wrote to us respecting the matter. We at once wrote to a brother who we thought would look after her, and he kindly took the aged woman into his own home.

In writing in reference to her, he says, "We are glad to have her with us. My little boy overheard her saying one evening after she had retired, 'Who has it as good as I have it? Who has it as good as I have it?' This she kept on repeating."

We doubt not that there are others who would consider it a great privilege to do as much for one who had borne the burdens of life and needed a place of quiet and rest.

PERSONS making applications for children advertised in this department are requested to send with their applications the names and addresses of two or more persons as reference. If possible, these should be known, either personally or by reputation, to some member of the Board of Trustees.

VISITING DAYS AT THE HASKELL HOME.

PERSONS intending to visit the Haskell Home will please note that the visiting days are Sunday, 4 to 6 P. M., and Wednesday, 2 to 6 P. M. It is necessary to make this announcement, as so large a number of visitors have been calling at the Home that the very interest of the friends, which we have no desire to discourage, has been something of a hindrance to the workers. J. H. KELLOGG.

CLOTHING FOR THE POOR.

THE call for clothing of all kinds and the numerous offers to supply assistance of this sort, have led us to organize a Clothing Department to receive and properly distribute new or partly worn garments which can be utilized for the relief of the very poor. In connection with this work it is very important that a few points should be kept in mind and carefully observed: —

1. Clothes that are so badly worn that repairs will cost more in money or labor than the garment is worth, will of course be of no service. Garments that are old, though faded, or which may be easily repaired by sewing up seams, or made presentable by a few stitches judiciously taken at some point in which the fabric is nearly worn through, may be utilized to most excellent advantage. But garments so badly worn that they need extensive patching, or clothes which have become much soiled and grimy by long use in some dirty occupation, should find their way to the rag bag instead of the missionary box.

2. Freight must always be prepaid. It costs as much to send 25 pounds or any amount less than 100 pounds as to send the full 100 pounds; consequently it would be well for those who think of sending clothes to be used in this department, to put their contributions together in one shipment, so as to get the benefit of the 100-pound rates. *We are obliged to ask that freight should be prepaid as a means of preventing loss to the work in the payment of freight upon useless packages.*

3. Clothes that have been worn by patients suffering from any contagious disease — such as typhoid fever, erysipelas, consumption, and skin disorders of all sorts, as well as scarlet fever, measles, mumps, diphtheria, and smallpox — should not be sent. Infected clothes may be rendered safe by disinfection, but we cannot trust to the proper disinfection of such garments by those sending them, who, in the majority of cases, are quite inexperienced in such work; neither should those who unpack the clothes be exposed to the risk of contamination while preparing them for disinfection at this end of the line. Such clothes should, as a rule, be destroyed. If they are not destroyed, almost infinite pains is required to render their use perfectly safe.

4. All articles received here are carefully assorted and classified, and are then placed as called for, where they will do the most good.

5. Clothing intended for the Chicago Medical Mission should be sent to 40 Custom House Place, Chicago, Ill.

LITERARY NOTICES.

TAKEN as a whole, "The Book of the Fair," by Hubert Howe Bancroft, is probably the best presentation of the Columbian Exposition, historical and descriptive, which has been attempted. The plan is comprehensive, and yet not too extended, the aim being to give the Exposition entire in pictures and print, in one thousand imperial folio pages, that is to say, twenty-five parts of forty pages each. By taking the leading exhibits of a class as representative of the whole, giving the rest minor mention to a greater or less extent, the entire round can be made, and yet the total result be a work not too cumbersome or expensive for the general public to handle and purchase.

"THE BICYCLE IN RELATION TO HEALTH."— The Pope Manufacturing Company, of Boston, have recently issued a little pamphlet with the above title, which gives the opinions of a large number of physicians in relation to the utility of the bicycle as a mode of exercise for the promotion of health. More than seventy-five physicians have here testified to the superior merits of the bicycle as a health-promoting means. The writer has known a number of chronic invalids who have ridden themselves into health on the Columbia wheel, and is himself personally indebted to a Columbia for improvement in health after a severe attack of la grippe, and ability to do continuous hard work with seldom a day off. The pamphlet contains many valuable suggestions in relation to riding, one of the best of which is from Robert J. Roberts, a professor of gymnastics in Boston. Prof. Roberts says: "Why will so many of you sit on your seats like monkeys on a stick, and try to grind your noses off on your front wheel?" Mr. Roberts asserts that no occasion can arise in the use of the bicycle which requires a person to sit "with his back humped up like a camel." We entirely agree with Prof. Roberts. Nothing does greater discredit to bicycle riding than the way in which some city dudes lie down upon the front handles in the effort to make the public believe that they are cultivating great speed in preparation for a tournament. Sanger, a noted fast rider, sits upon his wheel as erect as a post.

THE September *Arena* is filled with articles of interest. The number opens with a paper by Rev. Minot J. Savage, on Walt Whitman's poems, which will lead many to open their Whitman in a new spirit. Judge Walter Clark, Associate Judge of the Supreme Court of North Carolina, writes in favor of the Election of Senators by Popular Vote, and the limiting of the power and patronage of the President. Charles S. Smart, an ex-State Superintendent of the Public Schools of Ohio, makes a very damaging criticism of our school system, in a paper called "Public Schools for the Privileged Few." It should lead to salutary discussion and ventilation. B. O. Flower, the editor of the *Arena*, in a paper on "Early Environment in Home Life," protests against the unwritten social code which keeps young people in a dangerous ignorance of the true functions of their bodies. Walter Blackburn Harte contributes "A Review of the Chicago Strike of '94." Thomas E. Will, A. M. and Dr. Lucius F. C. Garvin write on "Municipal Reform, and How to Effect It." Prof. Will also furnishes a valuable bibliography of the subject for students. Dr. Albert Leffingwell discusses "An Ethical Basis for Humanity to Animals," with some special relevance to the question of vivisection and the limits of scientific curiosity. James G. Clark, a Western poet, contributes some stirring verses, "The Message of M. Lowe." A unique and interesting paper is "An Astrological Forecast of the Administration of President Cleveland," made at the moment Mr. Cleveland took the oath of office on March 4, 1893. G. L. McKean writes on "The True Basis of Money." M. Louise Mason deals with the new psychological question of "Pre-Natal Influence." Will Allen Dromgoole contributes a story, "Ole Logan's Courtship," and this, with W. B. Harte's "On Certain Satisfactions of Prejudice," represents the purely literary element in the number.

"OUR HOME PETS: HOW TO KEEP THEM WELL AND HAPPY." By Olive Thorne Miller, Illustrated. 16mo, Cloth, Ornamental, $1.25. Harper and Brothers, New York City.

Mrs. Miller discourses, as only she can discourse, of birds, dogs, cats, and other pets, with lucid directions and wise hints in regard to their proper care, training, and treatment. Her popular method may be inferred from a statement recently made by her, to the effect that she does not care about the science of ornithology, nor how many bones and feathers a bird has, but how it lives, the making of nests and the bringing up of the young; in a word, the domestic life of the objects of her special studies. This particular phase of the lives of our pets the author has a special faculty for placing before her readers in most interesting and amusing detail.

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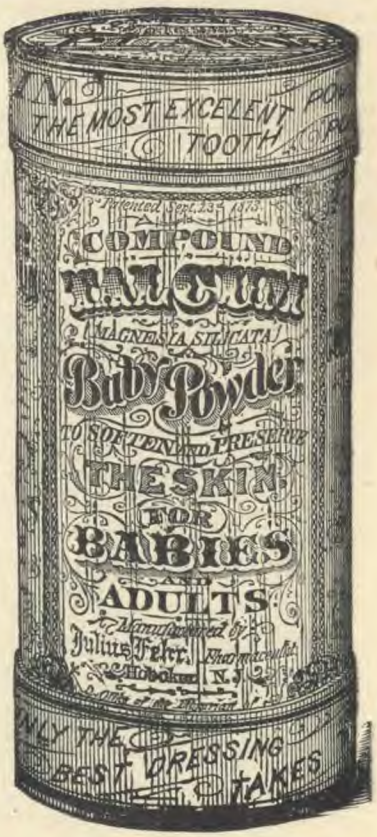

PUBLISHERS' DEPARTMENT.

A SANITARY Convention under the auspicies of the Michigan State Board of Health will be held at Union City, Michigan, October 25 and 26, 1894. Among the subjects to be considered are the following: —

1. The Prevention and Restriction of Tuberculosis.
2. The Disposal of Waste and Excreta in Union City.
3. The Water Supply of Union City.
4. The Milk Supply of Union City.
5. The Restriction and Prevention of the Dangerous Communicable Diseases.
6. The Germ Theory of Disease.
7. Ventilation and Heating.
8. Alcohol and Narcotics.
9. Smallpox and its Prevention.
10. School Sanitation.

These conventions, first proposed and instituted by the able Secretary of the Board, Dr. H. B. Baker, have for many years been employed as a most effective means of educating the people of Michigan upon sanitary subjects. In every city where they have been held, a lively interest has been awakened in sanitary subjects, and the convention has been succeeded by important improvements in the sanitation of the city, or the better enforcement of the sanitary rules and regulations already existing. The discussions at these conventions are always highly practical in character and not of a technical or strictly medical nature, as might be supposed from the fact that they are, for the most part, conducted by medical men. There is no subject in which the public generally ought to be more interested than that of sanitation, it being a matter which intimately concerns the welfare of every human being.

* * *

ALWAYS IN THE LEAD. — The handsomest illustrated brochure of the season has just been issued by the General Passenger Department of the Chicago, Milwaukee & St. Paul Railway, giving a woman's opinion of the compartment sleeping cars run on the solid vestibuled electric-lighted trains of that line between Chicago, Milwaukee, Kilbourn City (the Dells of Wisconsin), La Crosse, Winona, St. Paul, and Minneapolis. It contains time-table of express trains to and from points above named, as well as between Chicago, Cedar Rapids, Sioux City, Council Bluffs, and Omaha. Gives the sleeping and parlor car rates between Chicago and the principal cities west.

Write to Harry Mercer, Michigan Passenger Agent, 82 Griswold Street, Detroit, Mich., for one of these charming little brochures, and a new map of the United States, furnished free.

* * *

"WHERE FARMING PAYS."— Is it in the Northwest, with wheat at less than 50 cents a bushel, with zero weather, and blizzards in winter and cyclones in summer? — No! Go to Virginia; land is cheap, climate perfect all the year round. Ask any one who knows, and he will tell you that in the tidewater section one acre of land has produced as high as $2000 in one season.

It is worth looking into. Apply to C. H. Bovee, Gen'l Land and Excursion Agent, Coldwater, Mich., for pamphlet, "Facts for Farmers," free. No statements are made that are not corroborated by practical farmers who have grown rich on their Virginia farms.

* * *

WHERE TO LOCATE NEW FACTORIES.

THIS is the title of a 150-page pamphlet recently published by the Passenger Department of the Illinois Central Railroad, and should be read by every mechanic, capitalist, and manufacturer. It describes in detail the manufacturing advantages of the principal cities and towns on the line of the Southern Division of the Illinois Central, and the Louisville, New Orleans, and Texas Railroads, and indicates the character and amount of substantial aid each city or town is willing to contribute. It furnishes conclusive proof that the South possesses advantages for the establishment of every kind of factory working wool, cotton, wood, or clay. For a free copy of this illustrated pamphlet, address C. C. Power, Foreign Representative, 58 Michigan Ave., Chicago, Ill.

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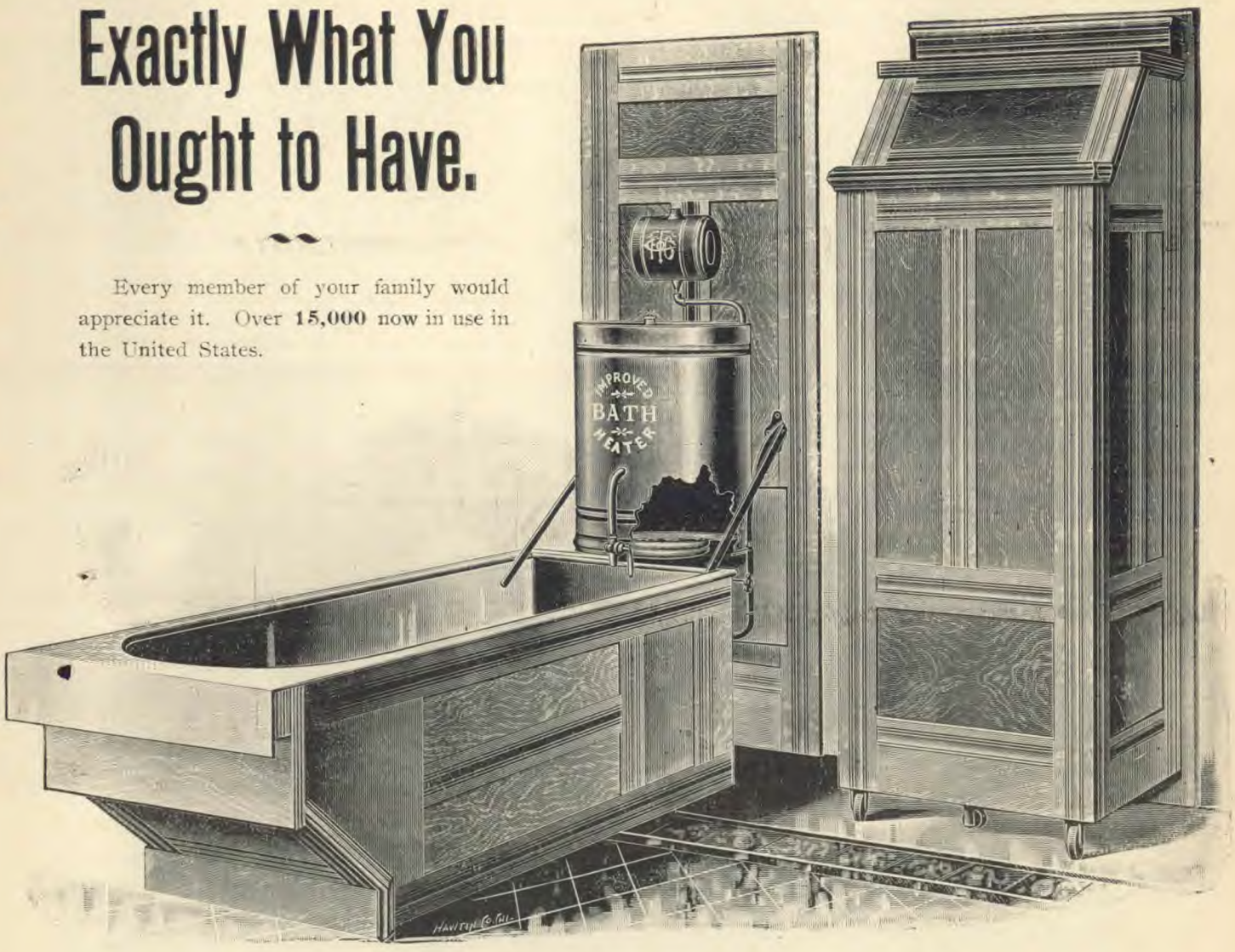

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IN the effort to meet the necessities of a large Sanitarium, with its great variety of patients, we have produced a number of food preparations adapted to different diseased conditions, the merits of which are such as to secure for them a very large and increasing sale, not only to persons belonging to the invalid class, but to those who wish by "good living" to avoid disease. Unsuccessful attempts have been made to imitate some of these foods under various names. None are genuine unless bearing our stamp or made under our authority. The following are our leading preparations :—

	Cts. per lb.		Cts. per lb.		Cts per lb.
Oatmeal Biscuit	12	White Crackers	10	Wheat Granola (bulk 10)	12
Medium Oatmeal Crackers	10	Whole-Wheat Wafers	10	Avenola (bulk 10)	12
Plain Oatmeal Crackers	10	Gluten Wafers	30	Granola (bulk 10)	12
No. 1 Graham Crackers	10	Rye Wafers	12	Gluten Food No. 1	50
No. 2 Graham Crackers	10	Fruit Crackers	20	Gluten Food No. 2	20
Plain Graham Crackers, Dyspeptic	10	Carbon Crackers	15	Infant's Food	56

SAMPLE PACKAGES CONTAINING SPECIMENS OF EACH OF OUR FOODS SENT POSTPAID FOR 50 CENTS. SELECTED SAMPLES, 25 CENTS.

All grain preparations can be supplied in large or small lots, as we keep a fresh supply constantly on hand of goods which are largely made expressly for us, of a superior quality of grain. Address—

SANITARIUM HEALTH FOOD COMPANY
BATTLE CREEK MICH.

CHICAGO & GRAND TRUNK R. R.

Time Table, in Effect June 3, 1894.

GOING EAST. Read Down.						STATIONS.	GOING WEST. Read up.						
10 Mail Ex.	8 Erie Lim.	4 L'v'd Ex.	6 All. Ex.	42 Mixd Tr'n.	2 Pt. H Pass		11 Mail Ex.	1 Day Ex.	3 R'd L'v'd	23 B. C. Pass.	7 Erie L'v'd	9 P' Bo Ex.
a m	a m	p m	p m				p m	p m	p m		p m	a m
8.40	11.25	3.40	8.15	a m	.....	..D.Chicago A..	7.28	4.50	9.10	.....	10.30	8.00
11.10	1.20	5.05	10.30	6.00	.....	...Valparaiso...	5.05	2.45	7.10	.....	8.30	5.45
p m												
12.40	2.35	6.30	12.00	10.05	.....	..South Bend..	3.10	1.20	5.44	.....	7.10	4.10
1.29	3.07	7.12	12.45	12.40	.....	..Cassopolis ..	2.15	12.40	5.13	.....	6.30	3.28
2.21	.....	.....	†1.33	3.42	.....	..Schoolcraft..	1.20	12.02	.....	.....	.....	.....
2.33	.....	7.55	1.48	4.00	a m	...Vicksburg...	1.10	12.53	.....	p m	.....	2.37
3.40	4.30	8.36	2.40	6.20	7.00	..Battle Creek..	12.25	11.15	3.55	9.35	5.18	1.50
4.33	5.11	9.26	3.25	.....	7.47	....Charlotte...	11.14	10.29	3.07	8.40	4.33	12.53
5.10	5.40	9.55	4.00	.....	8.20	....Lansing....	10.40	10.02	2.40	8.00	4.03	12.20
6.30	6.30	10.45	5.03	.....	9.30	.....Durand....	9.35	9.05	1.55	6.50	3.20	11.28
7.30	7.05	11.17	5.40	.....	10.05	..... Flint.....	8.35	8.35	1.28	5.47	2.53	10.55
8.15	7.35	11.50	6.15	.....	10.43	.... Lapeer.....	7.49	8.02	1.00	5.10	2.25	10.01
8.42	.....	a m	6.35	.....	11.06	...Imlay City...	7.28	.....	.....	4.48	.....	.....
9.50	8.45	1.00	7.30	.....	12.05	Pt. H'n Tunnel	6.25	6.50	11.55	3.50	1.20	8.45
	p m	p m					a m	a m	a m	p m	p m	p m
9.25	9.25	.....	.....	.....	.....	.... Detroit.....	.....	6.40	10.40	4.05	...	8.45
	a m	a m	p m					p m			a m	p m
.....	8.40	8.30	5.25	.....	.....	....Toronto.....	.....	10.10	.....	.....	7.20	1.00
	p m	p m	a m					a m			p m	
.....	8.05	7.50	7.25	.....	.....	...Montreal.....	.....	6.00	.....	.....	10.15	.....
	a m	a m	p m					p m			a m	
.....	8 12	8.12	7.15	.....	.....	.....Boston.....	.....	7.30	.....	.....	11.30	.....
	a m	a m	p m					a m	a m		a m	p m
.....	3.05	7.55	4.25	.....	.....	.....Susp'n Bridge.	.....	1.20	7.05	.....	8.40	2.25
	a m	a m	p m					a m			a m	p m
.....	4.15	8.30	5.40	.....	.....	.....Buffalo.....	.....	12.00	.....	.....	6.15	1.00
	p m	p m	a m					a m	p m		p m	p m
.....	4.52	9.23	8.03	.....	.....	.....New York...	.....	8.20	6.10	.....	5.00	8.00
		a m	a m								p m	p m
.....	.....	8.12	10.20	.....	.....	.....Boston.....	.....	.....	.....	.....	3.05	7.00

Trains No. 1,3,4,6,7,8,9, run daily ; Nos. 10, 11, 2, 23, 42, daily except Sunday.

All meals will be served on through trains in Chicago and Grand Trunk dining cars.

Valparaiso Accommodation daily except Sunday.

Way freights leave Nichols eastward 7 :15 a. m.; from Battle Creek westward 7 :05 a. m.

† Stop only on signal.

A. R. McINTYRE, *Asst. Supt., Battle Creek.*

A. S. PARKER, *Pass. Agent, Battle Creek.*

MICHIGAN CENTRAL

"The Niagara Falls Route."

Corrected Aug. 12, 1894.

EAST.	*Night Express.	†Detroit Accom.	†Mail & Express.	*N. Y. & Bos. Spl.	*Eastern Express.		*Atlantic Express.
STATIONS.							
Chicago	pm 9.30		am 6.50	am 10.30	pm 3.30		pm 11.30
Michigan City	11.35		8.50	pm 12.17	5.20		am 1.19
Niles	am 12.45		10.15	1.15	6.25		2.45
Kalamazoo	2.15	am 7.20	11.55	2.30	7.40		4.35
Battle Creek	3.00	8.10	pm 12.50	3.05	8.18		5.22
Jackson	4.30	10.00	2.55	4.20	9.35		6.50
Ann Arbor	5.40	11.05	4.05	5.10	10.25		7.47
Detroit	7.10	pm 12.20	5.30	6.10	11.25		9.20
Buffalo				am 12.25	am 6.45		pm 5.20
Rochester				3.17	9.55		9.00
Syracuse				5.15	pm 12.15		10.45
New York				pm 1.45	8.45		am 7.00
Boston				4.15	11.45		10.50

WEST.	*Night Express.	*N.Y. Bos. & Chi. Sp.	†Mail & Express.	*N. Shore Limited.	*Weste'n Express.	† Kalam. Accom.	*Pacific Express.
STATIONS.							
Boston		am 10.30		pm 2.00			pm 7.15
New York		pm 1.00		4.30	pm 6.00		9.15
Syracuse		8. 5		11.25	am 2.10		am 7.20
Rochester		10.25		am 1.17	4.10		9.55
Buffalo		11.20		2.20	5.30		pm 3.30
Detroit	pm 8.45	am 6.05	am 7.20	8.30	pm 12.55	pm 4.35	11.10
Ann Arbor	10.25	7.45	8.43	9.25	1.13	5.57	am 12.15
Jackson	11.40	8.10	10.43	10.30	2.55	7.35	1.25
Battle Creek	am 1.17	9.20	pm 12.15	11.43	4.19	9.13	2.55
Kalamazoo	2.10	9.58	1.00	pm 12.22	4.52	10.00	3.36
Niles	4.00	11.13	3.00	1.40	6.14		5.00
Michigan City	5.09	pm 12.10	4.25	2.45	7.13		6.00
Chicago	7.10	2.00	6.35	4.30	9.00		7.50

*Daily. †Daily except Sunday.

Kalamazoo accommodation train goes west at 8.05 a.m. daily except Sunday.
Jackson " " east at 7.27 p. m. " "

Trains on Battle Creek Division depart at 8.10 a. m. and 4.20 p. m., and arrive at 12.40 p. m. and 7.15 p. m. daily except Sunday.

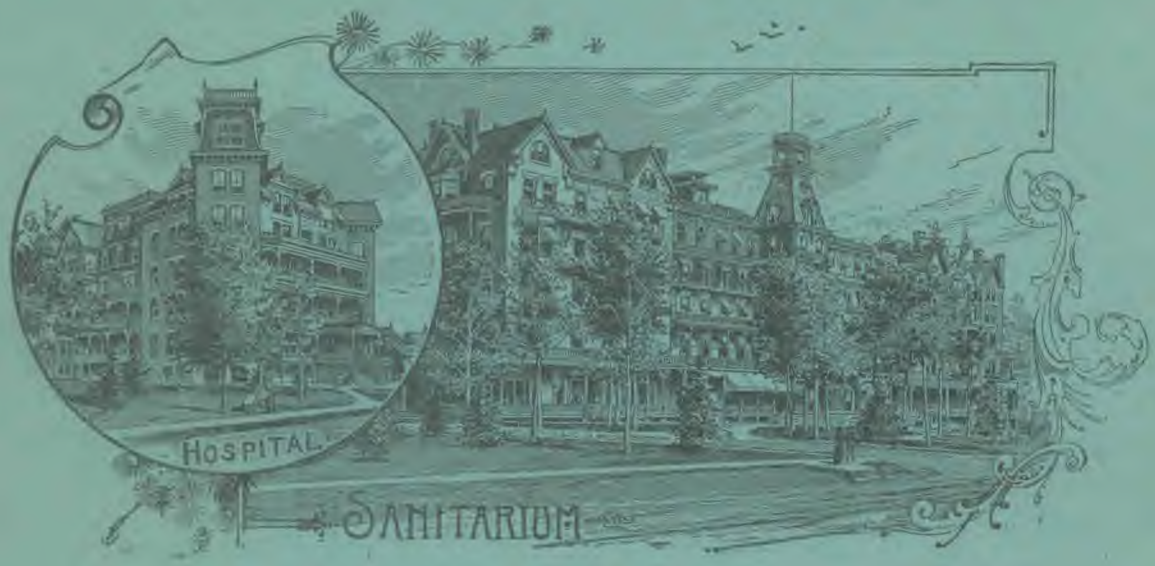
O. W. RUGGLES, General Pass. & Ticket Agent, Chicago.

GEO. J. SADLER, Ticket Agent, Battle Creek.

MEDICAL AND SURGICAL SANITARIUM,

BATTLE CREEK, MICH.

The Oldest and Most Extensive Sanitarium Conducted on Rational and Scientific Principles, in the United States.



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SANITARIUM, BATTLE CREEK, MICH.