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How to Keep Cool. Summer Hygiene for the Household, Especially the Children. The Woman with the Hoe-

Illustrated.

How to Recreate at Home.

Vacation Schools. Tenement Boys' Evenings-Il-Instrated.

"The Fitting of Self to Its Sphere."

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HOW TO KEEP COOL

BY J. H. KELLOGG, M. D.

THE first requisite to keeping cool is to have a mind at peace with God and man. Anger, hurry, worry, excitement, are totally incompatible with 90° in the shade. Horace Fletcher calls anger and worry "germs," and says that all evil passions are traceable to one of these two germs. Anger and worry involve heat and strife. Sweetness and light bring refreshing coolness and peace. The first principle of midsummer wisdom, then, is to cultivate peace with men and love to God. This is midwinter wisdom, also.

The daily bath is essential to midsummer comfort. The morning cool bath, taken on rising, is the very best tonic to prepare one for the labor and exposure of the day. The evening bath of tepid or cool water, or a short hot bath, if one be greatly fatigued, is grateful not only for cleanliness, but as one of the most effective means of bringing restful sleep.

Another requisite to keeping cool is that one be moderate, not only in the exercise of mind and body, but in the matter of diet as well. It is the oxidation and burning of the food we eat that gives rise to all bodily heat. Therefore, when a rise of temperature is not desirable, we should diminish the amount of fuel supplied to the body. A hot summer morning affords an intelligent person a good opportunity to show that he is a reasoning being, and not the unquestioning slave of habit.

In very warm weather the breakfast should be exceedingly light. Fourfifths of the food we eat is used for fuel; consequently, on a very hot day only enough food need be eaten to maintain the stores of vital energy, or to support muscular and mental work. A meal consisting of whole-wheat bread or zwieback and a dish of strawberries or half a dozen ripe peaches, a dozen plums, a melon, or a few ripe apples, is an excellent preparation for exposure to a scorching sun.

The man who takes a breakfast of griddle-cakes, soda biscuit, fried eggs, bacon or sausage, Worcestershire sauce, and strong coffee as an introduction to the work of a midsummer's day, should not be surprised that as the sun climbs toward the zenith, his suffering from the heat becomes more and more intense until, by midday, it is well-nigh unendurable, notwithstanding copious drafts of ice-water, cold beer, and other kindred beverages. The picture of such a man, fairly roasting and melting under the influence of the solar heat of the temperate zone, presents a strong contrast to the Hindu coolie, toiling, bareheaded, under the direct rays of the sun in an atmosphere twenty degrees hotter, and yet suffering no inconvenience whatever. The difference between the two men is less one of constitutional habit and adaptation than of diet. The man, who excites his heart and irritates his nerves by a diet of flesh foods and condiments, must expect to require the aid of an electric fan to cool the vital conflagration set up by his injudicious eating.

Englishmen residing in Bombay, Calcutta, and other portions of India who continue their flesh-eating habits, pay the penalty for violating a law of nature by succumbing to infectious jaundice, abscess of the liver, Bright's disease, and various digestive disorders. An American friend, who had spent some years in the hottest part of India, assured the writer that while living on a vegetarian diet, he experienced no difficulty whatever from the heat, even during the hottest portion of the season and the hottest hours of the day.

Fruits and cereals constitute the best dietary for human beings at all seasons of the year; but while the dog-star rages, this natural dietary is especially appropriate. Fruits and grains, with a few nuts, make an ideal dinner for a hot day. Two meals a day, with nothing between meals, are amply sufficient during the heated term.

There is a popular prejudice against the free use of fruit in summer, especially for children. The troubles arising from the use of fruits, however, are due to carelessness or ignorance of certain necessary precautions. Fruits, when whole and ripe, are the most natural of all foods, and suitable to all seasons. But they are as perishable as they are natural. As soon as fruit becomes stale, it swarms with bacteria of various kinds, and if these are introduced into the stomach, they are likely to set up fermentative and putrefactive processes.

Another cause of the prejudice against eating fruit is that a large portion of the fruit brought to market in early summer is picked green, and is entirely unfit for food. When fruit enters the stomach in this state, it dissolves very slowly in the digestive juices, and readily undergoes fermentation.

Another frequent reason why fruit apparently disagrees with the stomach is its improper combination with other food substances. Foods, as well as people, have incompatibilities.

Fruits alone are not capable of sustaining vigorous strength for any great length of time; but fruits supplemented by wholesome nuts or nut products constitute a complete and perfect dietary. From these most delicate and delicious of earth's products a bill of fare may be constructed which might well tempt the appetite of an epicure.

By the exercise of intelligence and good sense in the selection of one's bill of fare during the hot months, it is safe to say that at least nine-tenths of the inconvenience and sickness suffered at this season may be easily avoided.

IF thou art worn and hard beset With sorrows that thou wouldst forget; If thou wouldst read a lesson that will keep Thy heart from fainting, and thy soul from sleep, Go to the woods and hills! No tears Dim the sweet look that Nature wears.

- Longfellow.

SUMMER HYGIENE FOR THE HOUSEHOLD, ESPECIALLY THE CHILDREN

BY KATE LINDSAY, M. D.

SUMMER is here once more, regal in rich green foliage. Every blade of grass, every leafy tree, the growing grain and blooming flowers,— all proclaim life, activity, growth, and prophesy the coming harvest with plenty of stored-up energy for man and beast to live on in the coming winter of plantrest.

Every green leaf and every blade of grass is a busy workshop, where the green chlorophyl cells are engaged in starch making and storing up the sun's energy, to sweeten the fruit, fill the grain kernels with starch, and form the cotton and linen fibers, as well as make all the wood fabric of stalk and tree trunk. These cunning workers take the carbon dioxid (CO2) breathed out by man and beast, and, separating the carbon from the oxygen, return that needed oxygen gas to the air, and then combine the carbon with water taken from the earth by the roots, and the product is starch for animal food, and oxygen to keep up atmospheric purity.

Amid all this life and activity in the vegetable world, the heat and moisture which stimulate the grass, trees, and flowers to store up energy, also increase the activity of certain specific, low vegetable forms known as germs, many of which are disease-producing, and often impair health and destroy human life. The ravages of these deadly diseases are especially manifest now in an increase of death-rate from stomach and intestinal disorders among infants and young children.

All winter, with closed doors and windows at home and in schoolrooms, the children have suffered and died

from colds, bronchitis, croup, whoopingcough, measles, diphtheria, la grippe, etc. The old man with the scythe has gathered in a rich harvest of little ones because of these pestilences which flourish in bad air. Now, open doors and windows and housecleaning have freed the home from these infections, and the death-rate from these epidemic disorders lessens. The children are home from school, and thus protected from personal contact with the sick. But this lessening of measles, whoopingcough, croup, diphtheria, etc., does not reduce the general death-rate. Diseases of the alimentary canal often greatly increase the mortality among children, till, at the height of the warm season, from fifty to eighty per cent of children under two years of age in the cities die from such attacks. At the head of the causes of this fearful slaughter of innocents stands spoiled food, or food infection and water infection. Then come the debilitating influence of extreme heat, infection due to insect bites, want of sleep, inflammatory diarrhea, cholera infantum, dysentery, cholera morbus, and later on typhoid fever and malaria.

The important inquiry for each householder, each father and mother, with the health and lives of the members of their families to care for, and for whose welfare they are responsible, should be, What are the causes of these disorders ? and, What can be done to prevent them and to keep the children well through the summer months ?

First comes water infection, the danger from which is now much increased because each rain shower is liable to carry into running streams, lakes, fountains, wells, and cisterns infected fecal and other septic organic matter in an active state of fermentation and full of disease germs.

Infected dust may settle in the food, especially that which is moist and fluid. Thus the milk, jelly, sauce, etc., set in the windows to cool, may be seasoned with dust infected with germs, causing dysentery, diarrhea, cholera morbus, cholera infantum, cholera, and typhoid fever. The rich yellow cream, under even a moderate magnifying glass, may show a coating of infected dirt containing germs enough to stock a bacteriological laboratory. The milking, as usually done, means milk infected with dirt from the cow's body, the milker's hands and clothing, unclean vessels, improper storage, and often the transportation for miles in dust and heat before it reaches the babies. Under such treatment it is swarming with bacteria, and often proves to the babies a poison instead of a food.

But of all the insect germ carriers which inflict infectious diseases upon the human family, the common housefly is the chief. Raised in filthy animal excrement, and lighting on and partaking of every vile thing, it boldly enters the house with feet coated with typhoid, cholera, and other disease-producing germs, and settles in the food. It infects everything one eats, moist or dry. How often the writer has seen carefully sterilized milk set to cool in an open window, where flies and dust had free access to it, and when served at the family meal, flies were skimmed out, but the germs they left were thoughtlessly swallowed. Every one wondered why the family were all sick with summer complaint, or why there was in the family an epidemic of dysentery or typhoid fever, when the

country home had a faultless, deep-bored well and all the milk was sterilized; forgetting that their neighbors in the city half a mile or more away had just had an epidemic of this disorder, and that daily passing of teams on the busy highways brings with each, swarms of flies with infection from open closets, and dispenses them along the route.

At camp-meetings how often one has been astonished at the amount of sickness, and how many lives have been lost because of the steady traffic in germs carried on by flies between the outhouses and the tents, and especially the dining-hall.

Infection is also carried by mosquitoes and other parasitic insects, and injected directly into the blood vessels, causing malaria, yellow fever, and other blood-poison disorders.

The children, free from school, delight in being outdoors with the younger members of the family. The luscious strawberry, red and tempting ; the crisp watercress, green and fresh in the brook; the lettuce, green onion, etc.,-all tempt them to pick and eat, but the soil where these things grow, may be foul with excrement, and the beautiful, tempting fruit and crisp salad covered with a coating of germs. "O dear," I hear some say, "what shall we eat or drink? Wherever shall we go to get away from the ever-present microbe and his efficient allies, dust and insects." We are disturbed when we learn the causes of disease, but passive about the prevalence of the disease itself, and fatalists, to a greater or less extent, as to results.

The Lord of old warned the Israelites that he would leave their camp if he found uncleanliness there, and that disease and death would follow.

To keep water clean, means to get it from a pure source, or by filtering, distilling, or boiling to make it clean and sterile, and keep it so by covering it and keeping it free from all dust, flies, and outside infection.

The house must be kept open for the admission of air and sunlight, but screened to shut out all insects.

All foods, both moist and dry, should be carefully covered, and milk, especially, so protected that it can be aerated, yet at the same time kept free from dust and insect infection. All should be kept in a cool, clean refrigerator.

From sleeping-rooms, dining-room, and pantry keep out the insect pests. A few good screens and a few days' work by the carpenter, mean family health and absence of doctors' bills.

Keep everything clean around the premises. The outdoor closet is a great menace to the country home; so are the stables and the barnyard; and the fly is the carrier between these and the house. The safety of the home demands that the filth of both be kept covered with chlorid of lime or quicklime, or even dry coal ashes enough to keep the flies out; and that it be seen to that there is no drainage into any water supply or danger of dust blowing from them into the house.

Do not allow the children to play in the vicinity of decaying organic matter, especially human or other excrement. The playground should be a green shady lawn. Their water and food should be germ-free and clean. In hot weather protect them from the debilitating effect of the heat by the tonic effects of cool bathing and by plenty of sleep. Teach them to eat only at regular meals. All fruits and vegetables eaten raw should be washed in sterile water, and, if possible, peeled. If not, they should be dipped in boiling water for a minute at least, and then rinsed with sterile cold water.

The increased mortality of the warm months is due chiefly to infection from food and water and insect bites. The protection of the health of the children and lessening of the summer juvenile deathrate mean clean food, and fresh and sterile water, protection as much as possible from contact with insects and parasites, clean environment of out-of-door life, with plenty of sleep and nerve tranquility, and toning up with cold water to withstand climatic influences.

It is good missionary work to make even one home sanitary. This means a screened pantry, refrigerator, windows, doors, and even porches of the home; painstaking to secure clean playgrounds and to shut out all filth from the household, and at the same time to let in clean, fresh air and the bright sunshine. Then summer will mean life and activity to young human plants as well as to the vegetable world. The children will return to school, the youth to college, and the little ones to more or less unavoidable winter confinement,-all stronger and better able to contend with and withstand the causes of winter disorders. Their summer, out-of-door vacation will have been to them a real recreation of energy instead of a battle to maintain life against disease-producing infections.

An ounce of prevention is worth hundreds of pounds of cure.

My soul's religion is an earnest love Of all that's good and beautiful and true, My noblest temple is the sky above This vast pavilion of cerulean blue. -J. C. Prince.

THE WOMAN WITH THE HOE

BY HELENA H. THOMAS

N^O one who watched her last summer, from early springtime to late autumn, would, I am sure, have disputed her right to the foregoing title, which, when we consider that she



THE WOMAN WITH THE HOE

lived in the city, surrounded by aristocratic neighbors, meant far more than had her home been in the country.

The woman of whom I write, however, found herself, on the arrival of the harbingers of spring, in so debilitated a condition, as the result of too sedentary a life, combined with a case of "nerves," that physician and friends said : —

"A change of climate is imperative! If you value your life, you must go where, during trying spring days, you can live out of doors."

She did value her life, for she regards it as a sacred trust, though she then realized that, by too close application to pen work, she had endangered it. She realized, too, as physician and friends did not, that leaving home at that juncture was out of the question; but she resolved, then and there, to "live out of doors" as much as possible, just where she was.

This semi-invalid had always cultivated flowers to some extent, but usually confined her "constitutional"

> to transplanting, weeding, etc., leaving all else to a day laborer; but she well knew that the little left for her to do in this way would not give her sufficient exercise to meet her needs, and she resolved, in spite of what "they" might say, to substitute for pen, garden implements such as she had never before wielded.

> So, beginning, according to her weak condition, with toy rake and hoe, she worked on until her strength would admit of the use of heavier imple-

. ments — which was much sooner than those who saw her first weak efforts supposed possible.

Consequently, by the first of May she was heard to wail: -

"I have come to a standstill, until there is weeding to do, the grounds are in such perfect order!"

A fine vegetable garden had heretofore furnished her home, as well as her neighbors, the luxury of fresh vegetables; but beyond suggestions as to planting, and superintending the care of it, she had not before gone. Finding that digging in the dirt was giving renewed vigor and an appetite that made eating a luxury, she formed another resolve, which was that she would have a vegetable garden "all my own."

True, friends and neighbors counted her "crazy" to undertake anything so arduous, and hinted further that the garden, the only one in that neighborhood, that had given such universal pleasure, would, later on, be "only weeds."

Nothing daunted, however, the healthseeker summoned the former gardener and surprised him by saying : —

"John, you are only to spade the ground this spring. I need more exercise than the flowers afford me, so after you have made the soil light and raked it off, I will do the rest."

"You!" exclaimed the faithful helper of years, forgetting himself in his surprise. "You looks like one vind blow you away, lady! Your leetle garden, mit the posies, too mooch for you already."

But his employer, when her directions had been carried out, dismissed him, telling him that, should her courage fail her, she would turn the garden over to him later on. This evidently nettled the Hollander, who went off muttering: —

"I no take care of voman's garden!"

Did space suffice, I should like to picture the planting of that garden, in all its details, and all that followed, but will only add that it was one of such luxuriance and yield, with such a scarcity of weeds, that springtime jests gave place to highest praise.

Nothing, however, gave the "woman with the hoe," who all summer had remained at home, such satisfaction as the remarks made by the Hollander before mentioned, whom one day in August she saw passing, and calling to him, said:—

"I want to give you some vegetables to carry home, John. I have more than I know what to do with." The man, who evidently had held a grudge all summer because of a lost job, was speechless as he looked over the luxuriant garden, and then, too honest to tell anything but the truth, he exclaimed:—

"I not see so fine garden since I leave ole country! You looks like Holland voman, too, lady! All brown, an' not sick like odder days!"

HOW TO RECREATE AT HOME

BY DAVID PAULSON, M. D.

A^T this season of the year, the average mortal instinctively longs for the cooling breezes of the seashore or the invigorating air of the mountainside, or, at least, some change from the daily grind of the ordinary occupation, and vast multitudes throng to popular watering-places, until existence at these resorts frequently becomes almost unendurable.

The unsuitable dietary, the apparent necessity to keep up conventional methods of living, often prompts the apparently fortunate individual to long for the unobtainable,— an opportunity to be natural.

After all, the greater portion of our population must necessarily remain at home, but if they would put forth onehalf the effort to utilize to the utmost extent the opportunity to secure an additional instalment of health and recreation at home that their wealthy neighbors expend in seeking at a distance, they might be even more successful.

If one maintains a proper poise while walking up a well-ventilated stairway, daily, the entire year, in his own home, it certainly ought to accomplish more for him than he could secure from indulging in a few weeks of excessive mountain climbing away from home.

A well-kept resolution to drink a much larger quantity of pure water from the home well is a far better plan than attempting to strain through the system an excessive quantity of brackish water from the mineral spring, even if the mind is laboring under the delusion that such water can in any way be more beneficial than when it is sparkling, wholesome, and pure.

Sleeping out of doors in a hammock under the trees in the backyard affords as great health possibilities as are to be found in fighting mosquitoes while attempting to sleep in a tent on the edge of a marsh, no matter however famous and popular its name. When one is thoroughly determined to take some general application of cold, daily, be it a bath, a wet sheet rub, or even an ordinary cold sponge bath, he will eventually accomplish far more in the devel-

opment of a sound, healthy physique and a strong nervous system than can possibly be secured by a few weeks' bathing even in famous waters, when the same treatment is practically neglected for the remainder of the year. The temporary physical uplift, which is all that the average individual acquires from a summer outing in favorable climates, is more than counteracted, a few weeks after he has returned home. by the unfavorable climate created within him by using an unnatural and unwholesome dietary; and, when his jaded nerves begin to utter their vigorous protests, sympathizing friends console him with the fact that he is being overworked. If he would only include in his daily program a vigorous, sensible, and scientific cultivation of that which is the most valuable in this world, next to character - health, - he would secure an abundant harvest of the same.

THE CHILDREN

WHEN the lessons and tasks are all ended, And the school for the day is dismissed,

And the little ones gather around me

To bid me good-night and be kissed; O, the little white arms that encircle

My neck in a tender embrace; O, the smiles that are halos of heaven,

Shedding sunshine of love on my face!

And when they are gone, I sit dreaming Of my childhood too lovely to last ;

Of love, that my heart will remember When it wakes to the pulse of the past ;

Ere the world and wickedness made me A partner of sorrow and sin.

When the glory of God was about me, And the glory of gladness within. O! the heart grows weak as a woman's, And the fountain of feelings will flow,

When 1 think of the paths steep and stony Where the feet of the dear ones must go;

Of the mountains of sin hanging o'er them, Of the tempest of fate blowing wild;

O, there's nothing on earth half so holy As the innocent heart of a child.

They are idols of hearts and of households, They are angels of God in disguise,

- His sunlight still sleeps in their tresses, His glory still gleams in their eyes;
- O, these truants from home and from heaven, They have made me more manly and mild,

And I know how Jesus could liken The kingdom of God to a child.

- Charles Dickens.

VACATION SCHOOLS

BY E. E. ADAMS

ONE of the enterprises of modern Christian charity in England is the creation of a Holiday Fund for the despatch of thousands of poor children from the crowded city slums to the fresh air and beautiful free life of the country for a week or two. This vacation spent in Nature's school, under wise supervision, has results much further reaching than mere physical benefit. It opens up an entirely new world to the starved natures of these neglected waifs, many of whom have even to be taught how to play.

Heavy burdens rest upon the shoulders of the children of the London poor almost as soon as they are able to walk. A child of eight years will often have to assume the responsibilities of motherhood to five or six younger children from early morning till late at night while the real mother is away at work.

The discovery that many of these "little mothers," were altogether ignorant of happy, healthy play, led to the establishment in West London of "The Guild of Play," a vacation school where "The Sisters of the Poor," women of refinement and culture, open up to their little brothers and sisters, defrauded of their natural birthright, some of the delights of social life.

The play-centers established in this country for providing space for play and the normal activities of healthy childhood, and the work of the Outdoor League in providing playgrounds and open-air gymnasiums, have shown that a large percentage of the arrests of boys was due to lack of space and opportunity for natural activity, which consequently found vent in mischief.

Besides being of incalculable benefit to the children, these play-centers and vacation schools are becoming the laboratories of the educators, where they can analyze and study the real child, not trammeled and restrained by conscious supervision.

Mrs. Shaw, a daughter of Professor Agassiz, established more than twenty play-schools, many of them for street children. These demonstrated to the Boston school committees the way to develop the social instincts and provide for the happiness of the children; and now Boston is filled with such schools. At first the space for them was provided by people, charitably disposed, giving up their gardens during their own vacation, to be used for this purpose, that the children might play among the birds and flowers.

Later, sand pens were provided, with part of the sand moistened, making a temporary clay, enabling the child to exercise the creative faculty in the construction of images, forts, palaces, landscapes, maps, and anything else that could be imagined. These schools were adopted by the school committee and put in charge of kindergarten teachers, as refuges where the children can develop their own happiness by the exercise of their faculties, each according to his natural bent.

To rescue the child for a time from the sordid and often squalid surroundings of life in a crowded city center, and place him in the midst of the beauties of nature, cannot fail to have an educating, refining, and ennobling influence upon the character. The contemplation of beautiful objects cultivates the faculties of admiration and reverence.

Finding that a certain statue in Germany was becoming injured by the children climbing over it, the authorities hit upon the happy idea of planting beautiful flowers in the surrounding space. The statue was then perfectly safe, for no German child would think of stepping upon a flower.

The admiration and love of the beautiful, which grows by what it feeds on, leads children simply and naturally to the worship and love of Him of whose unseen presence all beauty is the manifestation. Many, as a certain writer has said, "enter the temple through the gate called Beautiful," and thus, like the poet Spenser, —

"Learn to love with zealous humble duty The eternal Fountain of that Heavenly Beauty."

TENEMENT BOYS' EVENINGS

BY EMMA WINNER ROGERS, B. L.

A HANDSOME little lad sat on the curb with a group of older boys about him as I crossed the street at nine o'clock at night, returning from a settlement club. It was the typical street of the city's poorer quarter, badly paved, squalid, and dirty — with

many brightly lighted saloons between shops of small tradesmen, bearing unpronounceable foreign names over the doors. The small boy was so winning that I stopped for a word with him, and to ask why he was not in bed and asleep. The touch of innocent childhood lingered in his big brown eyes and lithe little form and fair skin. Pity stirred me to find him in a street like this at night, and that he was only one

age, gathered around me in a friendly way when I asked the small boy his age. He looked barely five, but said he was seven years old, and another boy volunteered, as if catching my point of view, that sometimes the small boy's mother let him stay up



of the many children of the streets did not make it the less pitiable to me. The whole group of six or eight lads, all apparently under eleven years of

until nine o'clock. I thought of the homes where a child like this one would have been cuddled and tucked in bed an hour before: and looking at the group of young boys about me, at home in the streets already, and being educated in its demoralizing atmosphere and environment, the waste and wickedness of this sacrifice of beautiful child-life struck me with new force. The inevitableness of this street life under present living condi-

tions and low standards of home life, and the fact that hundreds of boys in the small city and thousands in the large city spend their evenings on the

streets, means that street morals and street manners are the standard of a large and increasing proportion of the youth.

Good and bad boys are mixed in the street gangs, and this makes the chief problem. A gang is made up, generally, of neighborhood fellows, and the vicious or criminal boys go with the rest, unless some club or settlement or other outside influence has helped the better boys to separate from the worst elements in the gang. This happens when the group of boys is organized into a club with some ethical standards and a meeting-place. Recently such a club of young boys, organized about a year, and having eliminated the vicious and unmanageable element of their own club, protested earnestly against the use of their club-room by an older and newly organized group of boys, because they were a tough lot of fellows. "We wouldn't mind their using our room, but they are such bad boys," they said. The room was one provided by the settlement. This feeling one does well to respect heartily, and the reply was, "Let us give these older boys a chance to meet and improve. If they do not, we can stop their using the club-room."

Mr. David Willard, principal of the Tombs Prison School, and probation officer of the Magistrates' Court in New York, estimates that there are twenty thousand bad boys loose on the streets of New York, and says his experience shows him that only one bad boy in every hundred gets locked up. The thousands at large are mixed up with tens of thousands of boys in the process of becoming bad, or at least under influences which tend to deteriorate character. Conditions are precisely the same in the small cities, only the numbers are smaller. Indeed, the broader life and interests of the great city, felt even in its poorest sections, would be apt to turn out from its streets a better kind of bad man than the small city with its provincial narrowness and sluggish atmosphere.

In explaining to a Chicago police captain the movement to start a settlement in his precinct, his response emphasized the burden and the pressing need of the community : "Why, if you would build a place with a high stone wall around it," he said, "I could send you during the year twenty thousand boys coming out of these courts," and he pointed to the police court opposite. What to do with the thousands of boys, some bad, some only mischievous, some simply led into petty crime by older boys, is a problem that rightminded officials welcome every aid in the solution of, and that stirs good citizens to practical social experiments for the rescue of the rising generation of street boys. The majority of the population of cities live in overcrowded and unattractive tenements in the neglected quarters of the cities, and from these homes the army of boys, far outnumbering the protected classes of children, swarm the city streets at night, and from the school of the streets are graduated into citizenship. In the streets they find or make a world of their own, and develop in accordance with its environment and influences. This environment and these influences starve and blunt the boy's higher nature and tend to make him a barbarian. It is only the very worst element among the street boys that gets weeded out and shut away from civic life, and it is a testimony to the sturdy traits of the common people that of the vast numbers growing into citizenship from street life so many escape the worst moral contagion and become respectable citizens. It is inevitable, however, that the moral standards of these must be lowered by contact with the more reckless element of street life.

There is something to be said for the street as a place to live, versus the ordinary tenement home. Bad as the average street in the tenement region is, it has the sky above it and fresh air. as compared with the stuffy rooms inside. There is diverting life and interest and amusement in the street, and the restricted, joyless existence of the poor finds some outlet and enjoyment in the street panorama, while from the worst overcrowded and insanitary tenement homes the refuge of the streets is almost a means of self-preservation. Rarely is more than one room heated in winter even where the tenement contains three or more rooms. The air is steamy and stifling. The confusion of



STREET LIFE

family life in one room, used often as a workshop as well, and with possible boarders, necessitates getting rid of the noisiest members at almost any risk. "We can't do anything at home, it makes too much noise," one of the boys said dolefully. And so the boys of a neighborhood make up a little group or "gang" of congenial spirits and ages, and find a club-room on a street corner, unless by rare chance a

settlement or other friendly association invites them in. The boy who wants to learn his lessons or likes to read, is driven out by the same home conditions. One of these boys, who goes evenings to the study-room provided by the University Settlement of New York to study his lessons, said: "There is the baby crying and your mother trying to keep her still, and the children playing around, and your sister talking to someone, and maybe there is a neighbor or two in. And there you are. trying to study in the same room. A fellow don't have any chance to study at home."

Those who see the question of tenement boys' evenings in all its bearings realize that so much needs to be done along various lines that the mere mention of the progressive steps necessary to safeguard them may sound utopian. But the stake is large,-honest, kindly citizens from present-day, fair-faced, chubby little boys, instead of brutalized, dissipated, or criminal men, with a remnant saved by native sturdiness and chance opportunities. Moreover, what would save the boys to good citizenship would at the same time transform the social life conditions of the poor.

Reform the streets, reform the homes, reform the home-makers. Provide ample places indoors and out for recreation, popular entertainment and instruction, and for reading and study, in the city's poorest sections. Or, if one objects to that much-abused word — reform,—let us say: Bring up to a reasonable standard of comfort, safety, and attractiveness the streets and the homes of tenement dwellers, and help the home-makers in them to a higher ideal of home life. Anything less than this will fail to meet the issue. For generations yet the streets are bound to be

TENEMENT BOYS' EVENINGS

the playground and club-room of thousands of boys, unless a millenium should arrive among tenement homes and home-makers. For this reason,

and others as cogent, the streets ought to be made and kept clean, wholesome, and attractive; dark alleys paved and lighted; small parks and playgrounds opened; the co-operation of shopkeepers and tenement dwellers sought in transforming this common ground into a place of safety and comfort, and even beauty. It is not too much to expect that a civilized community will limit the number of saloons in a district, and so guard them as to make safer the home environment. Every consideration de-

mands that these and similar measures for a better and more beautiful city and a higher civic ideal should be begun and carried out first in the most squalid quarters of the city, among the most ignorant and helpless of the people. Not a few must feel that Colonel Waring enhanced his claim to honored distinction very greatly by beginning the cleansing of New York's streets in the tenement regions, and continuing to spend a large share of the street fund where it was most needed for the betterment of the health and morals of the community.

Improved housing for the masses of the people is a step of still more importance. It is fundamental for the health and morals of the tenement regions and for future good citizenship. Boys and girls can no more grow into industrious, honest, and intelligent citizens with the environment of the squalid and filthy streets and dark, insanitary tenement homes than lilies and roses can bloom in the dust and mire of the slum alley. Here and there, carefully guarded or exceptionally endowed children will grow up to be valuable men and women, as flowers



CHILDREN OF THE TENEMENTS

lovingly tended in the window-box might bloom even in an alley; but the mass of tenement-bred children in the most squalid quarters of the cities can never come to a fair average manhood and womanhood.

Fortunately, in all progressive communities, the importance of better houses and clean and attractive streets is understood, and some effort made to improve conditions, but the movement is so slow and the smaller cities so apathetic that the outlook for the present young generation is not very encouraging. If the home-makers, especially the mothers, could be helped to higher ideals of life and practical ways of realizing these, it would go far toward solving the whole question. People live down to their environment, and poverty and toil help on this tendency. Hence the vital need that the city, and citizens with a social conscience, cooperate with the more helpless and ignorant classes to lift the standards of life, material, social, and moral.

The settlements, the churches, and other associations. working many through the mothers and the children. are doing much to raise the standard of home life and environment. But the work being done is small compared to the numbers to be reached. To change the ideas and habits of large masses of people is a slow process at best, but a perfectly possible one where the community collectively and as individuals recognize their responsibility for the general betterment of social conditions.

With not only the normal proportion of the poor and the ignorant in our cities, but a share of this class from many lands added to our burden, the work to be done may seem discouragingly large. But the strong are called to bear heavy burdens. There are bloodless battles to be fought in the march of civilization, and would that arms and men and ships were provided for these with the speed and enthusiasm called forth by less important warfare.

One must never fail to acknowledge the vast debt of our cities to the public schools as the chief factors in Americanizing and civilizing their cosmopolitan population, and in raising the standard of social life on a scale impossible to any other agency or institution. In the extension of the work of the public schools beyond the intellectual field, into the social and the moral, there exists without doubt a most potent force for the betterment of the home and social life of the people.

Boys' clubs under the auspices of settlements, churches, and other associations have come to be an increasing factor in keeping boys off the streets at night, and in inspiring new ideals of conduct, and ambition for a broader

and better life. When it is a question whether the boy shall spend all of his evenings at the club or part of them in his own home, however poor and inadequate that home, there can be but one answer. The habit of home life ought to be encouraged in him. And here the opportunity offers to the friendly visitor, and to the thoughtful people who make friendships among the very poor, of influencing parents to provide a tolerable home life for their children. And here, too, plainly appears the necessity laid upon the community of insuring to its poorest citizens, tenements fit for homes: for bricks cannot be made without straw. If the alternative is between the street and the club, it is as easily settled. The influences and occupations and ordered recreations of the boys' club tend to good citizenship, while the associations and temptations of the street are bound to contaminate the boy.

Wisdom is needed, and tact, to keep the street boy faithful to the club and to make it a force in his right development,-not a mere loafing place, or for play only, though a little loafing and much play are essentials of the program. For the young boys, still in school, with opportunities for exercise after school, and instruction and study about up to the point they can digest, the club may offer handicrafts, dramatics, readings, music, games, and many other entertaining plans. Two or three evenings a week at the club should be the limit for these younger boys where the possibility of home life exists or can be encouraged.

Older boys who come to the clubs from ten hours of factory or other work, their young faces dull and pale from the shut-in life and overstrain, need, above all, something to enliven their minds and rest their bodies; abundant fresh air, cheer, light and warmth, the stimulus of free movement and social companionship. The tired factory boy gets, in his evenings on the streets, the fresh air, diversion, and excitement that the ordinary fifteen-year-old schoolboy gets from his walk or drive or outof-door games after school hours.

To help these older boys is more difficult, because none of the usual outdoor pastimes are possible for them except on Sunday. Recently, at a boys' club meeting of boys between the ages of twelve and fifteen, the director announced in place of the usual Saturday evening meeting for that week, an afternoon walk to the country and a game of football, and for the following Saturday a tramp to the woods. How many of them could go, he inquired. About two thirds of the number raised their hands, while the other little fellows, undersized for their age and fagged looking, said that they had to work. Their faces fell, and one of their number said urgently that they could go on Sunday.

Both the large club, offering gymnasium, bath, and reading-and game-room privileges to members, and the small club, in which an individual responsibility and a sense of proprietorship is felt, are benefits hardly to be overestimated to the tenement boys, and in the work of uplifting community life. The proper extension and development of clubs and the

imperative need for betterment of the tenement homes and streets, call for a larger civic and social endeavor on the part of the more fortunate citizens, and for a municipal administration the first care of which shall be its neediest and most helpless



citizens. And it is well to remind ourselves that however helpful the school and the club work may be in solving the problem of tenement boys' evenings, the welfare of the boys and the future of the community depend most of all on better homes and home environment. While the tenements and streets are intolerably squalid, insanitary, and ugly, and the home life chaotic and unlovely, boys and girls alike, and men and women, more and more will find their pleasure in the streets, public halls, and saloons.



"THE FITTING OF SELF TO ITS SPHERE"

BY ROSE WOOD-ALLEN CHAPMAN

I T was a "town of brides," as the earliest comer laughingly said. After years of lethargy, the town had developed, two years before, a mild and perfectly normal case of boom, which drew to it, as a "good place to make a start," the young men of business and of the professions. With them came their brides, one displacing another in the town's eyes with unusual celerity.

The brides had naturally felt drawn to one another, and had fallen into the habit of gathering together once a week at the different homes to do their fancywork, and talk about things of common interest.

To-day they were in Mrs. Winthrop's 'home, and Mrs. Freeman had just picked up a book from the center-table and exclaimed, "Who's reading this?"

"What is it?" queried the others.

"'Essays on Work and Culture,' by Hamilton Wright Mabie."

"Are you reading it?" turning to her hostess, who smiled and nodded her head. "Well, I'd like to know where you find time for reading," sighed her interlocutor. "It's all I can do to get my housework done, and if I do snatch a minute or two for reading, I'm so tired I just have to take something light—the latest magazine, generally. But I do wish I could occasionally read some of the good things we dipped into when I was in school."

One after the other, the brides expressed a similar wish, all seeming to feel, however, that the attainment of their wish was not within the bounds of possibility, until finally one broke the monotony of repetition by exclaiming, "But see here, girls! Mrs. Winthrop has just as much work to do as we have, and yet she finds time and strength. Let's make her tell us how she does it, and then we'll 'go and do likewise.'"

With one accord the young women turned to their hostess with a demand for an explanation. Her protests were cut short, and she was given to understand that she must speak.

"Very well," she finally said. "If what I can tell will be of any real value to you, I shall be only too glad; but you must excuse the personality of what I say. I can't talk in generalities, you know. I'll just have to tell what I did."

"That is just what we want," murmured one, sollo voce.

"You all know," continued Mrs. Winthrop, "that I had had almost no experience in housework when I was married: I realized my inexperience to a painful degree. I was determined, however, to show all my friends that a girl who had been in an office all her life could, nevertheless, make a good housekeeper. With that ambition I started to work, determined to do everything just the way it should be done. I had learned, in visits to my husband's family before we were married, what elaborate meals he had been accustomed to, and these I tried to duplicate. Meat and potatoes, coffee and hot breads, for breakfast; soup, meat, potatoes, two vegetables, or a vegetable and a salad, with dessert of some kind, for dinner; meat and potatoes, sauce and hot bread, for supper.

"In spite of my inexperience I had "good luck," as they say, with my cooking. Things made from the cook-book turned out, in the great majority of cases, as they should, and I was correspondingly happy, albeit tired each day and growing more tired as the days went by.

"My house was small, but it seemed to call for a great deal of attention. Every day the parlor and dining-room must be thoroughly swept and dusted; every other day the bedrooms must be gone over.

"So I struggled on, day after day. My muscles were unaccustomed to the tasks required of them, and often ached so at night that I could not sleep. Each day found me more tired than the previous day, but I would not give in. As I grew more tired, I grew more irritable, more difficult to please, until I used to wonder that my husband would stay at home with me at all.

"I grew morbid over my growing sensitiveness; wept many heart-wrung tears over my inability to be the kind of wife I had hoped to be—but kept on in my struggle with the work.

"Often my husband would say to me, 'Now don't work so hard to-day; you're tired.' But I would reply, with my voice harsh from intense nervous strain, 'But I *must* do it; it *has* to be done, and there's no one else to do it.'

"To tell the truth. I rather wanted to impress him with the amount of work I had to do; for I was thoroughly convinced that men did not appreciate the work done by women, either as regards its quantity or its importance. When busy at home, I would be thinking how little my husband appreciated what I was doing for him or how hard I was working to make his home what it should be. So, with a mind full of thoughts of self-pity, I was not averse to impressing him with the weight of the burden I was carrying, so that he should pity me also.

"Finally, my husband was obliged

to leave home for several months. We packed our goods, and I went to my mother's home for a long rest; for I was at the point of a breakdown.

"I did some thinking while I was home. I realized in the first place that what my husband needed most was a home-maker, not a housekeeper. He needed some one to be bright and cheerful when he came home at night tired from his day's labors. For it suddenly dawned upon me that, while I was working at home for my husband, he was working for me at his place of business — and hard and disagreeable work I knew it to be, although he would never complain, nor, I felt sure, pity himself for a single moment.

"Then, as I came back to the simple fare of my childhood home, I began to wonder if we couldn't live more simply; for I saw that, no matter how experienced the cook, elaborate meals call for much time and strength.

"So I made a vow. When in my own home once more, I would see how easy I could make my housework, how rested I could keep myself; for I saw that physical weariness had been the cause of my 'crankiness,' and, because of that, physical weariness was a crime against my husband and my home. I must keep rested at all hazards.

"Moreover, I must cease pitying myself and find joy in my work. Selfpity, I felt convinced, was more than half the cause of my breakdown. Moods, as well as emotions, have a direct effect upon the physical being, and a careful observation of my feelings had shown me that self-pity had a most depressing effect upon my body. Just notice for yourself, sometime, the difference between your condition when overcome with self-pity and when filled with exuberant joy, and you'll reach the same conclusion. "I wanted to be strong; I was determined to become strong, and to make my housework a means to that end.

"Upon our return to the town we moved out here in the 'superbs,' where, as you know, it's almost impossible to get a girl. During the first three weeks of our unpacking and settling I had one who was a little better than nothing, but I finally had to dismiss her.

"Then came the real test of my 'converted state.' Here was a house in confusion, needing to be settled, and a certain amount of the routine to be done each day. Would I be able to keep my resolutions ?

"My husband had been living so long in hotels and boarding-houses that anything I cooked tasted good to him, and our present crisis was a sufficient excuse for simple meals.

"I tried to give him a good proportion of the kind of food he had been accustomed to, but every once in a while I would prepare some simple dish and try it on him. As he expressed his liking for these, I gradually replaced the richer foods with those of easier preparation, until, as the weeks went by, our meals more and more nearly approached the ideal simplicity.

"I made it a rigid rule to take to my couch whenever I began to feel tired. Oftentimes I would stop in the middle of a busy morning to lie down, and if I went to sleep, so much the better. Even if I had nothing more to give my husband than bread and milk, he was satisfied, for did I not give it to him with a smiling face, and season it with the brightest talk of which I was capable ?

"Gradually my house got into order, and gradually I felt myself growing stronger. One thing still tired me unduly, however, and that was work in the kitchen. At first I could not understand why it should be so much more exhausting than harder work performed elsewhere; but finally I came to the conclusion that it was the heat that exhausted me so. Whereupon, I got myself a pair of felt slippers with high fur tops coming close around the ankles, and, with feet protected by these, I kept my kitchen windows, and often my door also, wide open. Thus I was able to breathe pure, invigorating outdoor air while doing indoor work, and to live in a room of moderate temperature instead of a bake-oven.

"Whenever I felt a temptation to pity myself because I could not get a girl, even to do the scrubbing, I would say to myself, 'Remember, you're not doing this work because you have to, but because you wish to. It is a joy thus to express yourself in your home, and an especial joy to be strong enough for all this work. Thus I kept my heart full of joy over my work.

"When the house was finally settled and I came to make out my routine, I tried to see how many things I could omit, rather than how many I could do.

"First, with my meals. Breakfast now consists of fruit, some kind of grain, or some prepared food like toasted corn flakes or granola, and toast. No coffee, you see, for we no longer have that in our home. If I prepare more than the one main dish, my husband says I tempt him to overeat.

"Dinner consists of soup, a meat substitute, potatoes, and one vegetable. When there is no soup, there is either a dessert or a salad. My desserts are now of the simplest, generally either baked apples, apple dumpling, apple cake, apple fritters — something with apple in it, for we never tire of the fruit, and have a store of apples in our cellar. "For supper we have one main dish and a fruit sauce. That main dish may be fruit toast, or granose with cream, or rolls with fruit. Having such simple breakfasts, we often use so-called breakfast dishes for supper.

"With such meals you can easily see that I spend comparatively little time in the kitchen. Breakfast takes about five minutes for preparation; dinner, from half an hour to an hour; supper, fifteen minutes to half an hour.

"I bake my own bread, but very seldom do any other baking. Once in two or three weeks I may bake some pies, or some cookies, or some simple cake. But I do these things because I have extra time on my hands, not because they are required by the household. There is so much comment on all the 'good things' that we have every day that I do not feel compelled to bake extra dainties.

"Every week I make some kind of gems. Oftentimes they are apple sauce gems, or pumpkin gems, and these are greeted with the approval usually bestowed upon cake.

"We also have nuts and raisins on the table for every dinner and supper. I wonder sometimes that other housewives do not keep these on hand and use them for dessert instead of pies, etc. There is so much nutriment in them and they are so generally liked, yet seldom seen on the table save at Thanksgiving and Christmas.

"I cannot claim to be a 'model housekeeper,' for there are doubtless many corners where dust could be found. But I do not go seeking them out. I sweep and dust whenever it seems to be necessary, and that means every two days, sometimes three. The main point is that I do not let myself get tired. My husband sometimes worries for fear I am working too hard, because I 'never

let the house get out of order,' and as long as it seems neat and orderly to him, I am satisfied, even though I know of a dozen places that are not absolutely spotless.

"Once a week Mr. Winthrop sends up his office boy, to sweep the whole house for me, black the stove, and scrub the kitchen floor. Oh, I know that there are corners that he doesn't always pay proper attention to, and he scrubs with a broom, but the house looks livable and that's the important thing.

"I send my sheets, pillow-cases, towels, tablecloths, and napkins to the laundry. The rest of the things I wash, performing that task once in two weeks. I soak the clothes overnight, and then, with the aid of my washing machine, I get along with it very nicely. I try to arrange things so as not to have too much heavy work to do in one week. For instance, I generally let my ironing stand over a few days, so that if I wash this week, the ironing is done next week. Then every once in a while I manage my work so that I'll have a week entirely free from washing, ironing, or baking. In that free week I can get many little extra tasks of sewing, straightening out drawers, etc., done, and I generally get a little extra time to devote to my correspondence. I think it is a mistake for us to let go of all of our girlhood friends because we are so burdened with work. We need all the friends we can gather about us throughout our lives, and none can ever come quite so near to us as those who were with us in our younger years.

"Shall I sum up my experience for you and tell you what I think are the three most important things for a bride to do?"

"Yes, yes," was the eager chorus of assent.

"Well, first, she should simplify her

housework; second, she should take a nap every day; third, she should have some outdoor exercise every day."

Mrs. Winthrop smiled at the look of consternation that crossed some of the faces before her at her last two requirements.

"I never sleep in the daytime," said one. "It seems too much like a waste of time."

"Yes, I know it seems like a waste of time," said Mrs. Winthrop, "but did you ever hear what the poet said about rest?

" Rest is not quitting the busy career;

Rest is the fitting of self to its sphere.'

"You see, that is the work that we brides have before us, fitting ourselves to what is, for many of us, an entirely new sphere; and a daily rest is a very important part of the process."

"But I can't sleep in the daytime."

"But you can rest," said the hostess with a smile. "Lie down for fifteen minutes each day, relaxing every muscle and nerve, and see how peacefully quiet you can become. Such relaxation gives one a new lease on life; it gives the bodily forces a chance to repair the damage done by the morning's labor, and it allows the soul to regain its wonted poise. The little things that have annoved one during the morning retire into their native insignificance, and the truly important things of life come once more into prominence. I think that is the reason why one who takes a daily rest keeps younger and lives longer than would otherwise be possible. I feel that I owe it to my husband to keep as young as possible.

"Besides this, — I'll tell you a secret —I find that I am inclined to be cross and irritable, or, if not that, depressed and blue, if I fail to get a rest and some outdoor exercise every day. In that you'll find my most powerful argument. I want to make a model wife just as you each do, I know; I want to make the home bright and attractive, happy and harmonious. But I find that I can't do these things when I fail to get rest and exercise. I can't 'bear and forbear' when tired and nervous.

"But when I have my nap and a good run in the outer air, I'm bright and happy when evening comes, ready to play the piano, to read, to talk, to do anything to rest and amuse the man of the house, whose day of strenuous labor has given him no such opportunity for relaxation.

"I tell you, I am more and more impressed with the fact that we owe our husbands something more than well-kept houses and satisfying meals. We should also furnish them with some food for the soul. Their work is of a kind that allows no cessation from morning till night; ours is made up of many small items, some of which are comparatively unimportant and may be Therefore, I think we ought omitted. to find time each day, not only for bodily rest, but for soul refreshment. We should try to read a few pages of something uplifting, inspiring, that we may give to those we love the uplift and inspiration which they are prevented from getting for themselves. Is not this our greatest work? And should not all other things give way before 'Our sphere' is not so limited as it? we used to think it. It is broad, including care of soul as well as care of body. Let us but understand this, and our daily tasks assume their proper relation to the great whole."

A silence fell upon the little group which evidenced the effect of the last earnest words, and as the days went by, more than one bride showed the benefit received from this bit of personal experience.

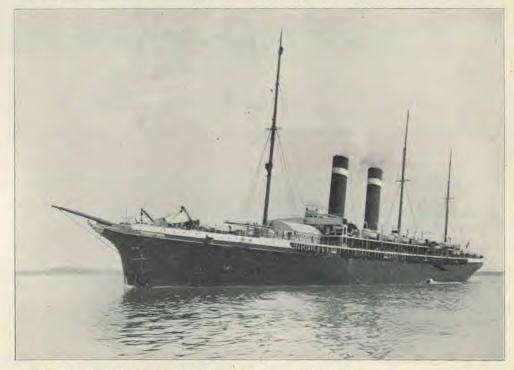
OCEAN TRAVELING*

THE ocean voyage incident to a trip to Europe is no longer to be dreaded as a necessary evil that must be endured by the would-be tourist. Thanks to the enterprise of the various steamship companies, travelers may now make the trip surrounded with every convenience and luxury. From the wide deck promenade, which forms an excellent recreation ground, one can look out unmoved on sunshine or storm, since the massive steamship which forms the temporary habitation is so little influenced by stress of weather.

The larger the boat, the less is it affected by the motion. But the largest boats are built rather for comfort than • for speed, and consequently take somewhat longer to make the trip. One who is not proof against seasickness may make the choice between six days of misery, the memory of which will stay by him and make the thought of the return journey a nightmare, or eight to ten days of healthful recreation which will be looked back upon as one of the most delightful parts of the trip to Europe.

Select a berth as near to the middle of the ship as possible, for the motion is there least perceptible. It is also convenient to be in close proximity to the bath- and toilet-rooms, since in case of sickness, the less walking, the better.

The preparation for the journey is a very simple matter to an experienced traveler, though usually quite formidable to one making the trip for the first time. The inexperienced traveler can usually be detected by the amount of



* We are indebted to the American Line for the views accompanying this article.

OCEAN TRAVELING

luggage which accompanies him, much of which is merely an encumbrance. The more one travels, the less one takes, until the things which experience teaches to be absolutely essential can be condensed into the small compass of a traveling-bag. Thus equipped, one is master of the situation, independent of expressmen, railway porters, etc., and can come and go as he pleases. He can look upon his encummensions allow of its being pushed under the berth, out of the way. Trunks can be packed much more comfortably, and without fatigue, if supported upon two chairs during the process. In this position one avoids the necessity of stooping, and can stand and pack with no more inconvenience than in packing a bureau drawer.

For one whose time is to be spent in travel, the traveling costume is the all-



bered fellow-travelers with the superior, self-complacent pity that caused Thoreau to remark concerning the immigrant whom he saw carrying upon his back the bundle that contained his all, that he pitied him, "not because it was his all, but because he had *all that*." The writer came over from Europe last year with two girls who had made the tour of the continent most comfortably and enjoyably with no more baggage than they could actually carry with them.

The only kind of trunk that is permissible in the stateroom, is the regular steamer trunk, twelve inches high and thirty-six inches long. These di-

important thing. For this, nothing equals a good, health-fitting, tailor-made suit. Dark colors should be avoided, and some soft shade that will not show dust selected. A small hat, slightly trimmed and well-fitting gloves and boots complete a costume in which one can virtually live. This suit, to be kept in the best condition, should be taken off on going on board, placed in a bag with a drawstring at the top, and hung on the hook in the cabin. If nothing better is available for this purpose, a pillowcase will answer very well. In this way the dress and hat will be preserved from the salt, damp air.

In these days of the shirt-waist, it

is an easy matter to vary one's costume with a small wardrobe. A skirt of some weather-proof material, which will admit of sponging if necessary, some flannel shirt-waists, and one or two lighter and more dressy waists for afternoons, will be found the most convenient things to take for wear on board. Dainty waists, collars, etc., should be packed closely together in a box before being placed in the trunk,

The number of changes of linen, etc., that one carries is a matter of personal taste and convenience. A good supply of such articles will help to keep one fresh and in the best condition to enjoy the trip. The packing of soiled linen for the unwelcome inspection of a custom-house officer, may be avoided by taking old garments that can be dispensed with, and leaving them with the stewardess for disposal.



to avoid tumbling them every time the trunk is overhauled.

A costume of one of the soft, clinging, summer silks that are "all the go" this season will pack into a very small space, and be useful during the trip. It should not be folded, but rolled into a compact bundle. Packed in this way it will take less space, and the marks of travel will not be so apparent.

A dressing-gown is indispensable, and should be of some dark and inconspicuous material and of simple make. A pair of slippers that can be easily slipped on and off should be packed with the gown. A generous supply of handkerchiefs is a necessity.

All toilet articles left in the stateroom unattached are liable to be found somewhat remote from the place where they were deposited. This contingency should be provided for beforehand by taking a linen toilet case or "place for everything" hanger, with pockets of various sizes, and a pincushion in the center. This should be fastened by its four corners to the wall of the stateroom, and by means of it all small toilet articles in frequent use may be kept in place in spite of the ship's motion. Among the toilet articles in-

OCEAN TRAVELING



ON DECK

clude a collapsible tube of lanoline or some other good face cream, which will prevent burning and roughness of the skin from the sun and wind.

A rubber bag for hot water, and a smaller one for ice, should be included among the necessaries. If not needed for personal use, they will enable one to play the part of the Good Samaritan to some one in need.

A supply of stationery and all the necessary writing materials are always to be found in the ship's library for the use of passengers. One's literary wants are also met by the large assortment of books contained in the library to suit all tastes.

A chatelaine or hand-bag with pockets is handy for keeping the various small articles that are likely to be needed at any moment: penknife, scissors, pencil, smelling salts, stamps, and a box of assorted safety-pins, etc.

It is nearly always more or less cool in mid-ocean, even in the warmest months. A long warm coat is the most comfortable garment for deck wear. The ocean breezes are likely to make a cloak or cape a somewhat flapping and inconvenient garment. If there is not room for the coat in the trunk, it can be strapped up with the steamer rug. The hat in the ordinary sense disappears altogether on board ship, and its place is taken by traveling caps, hoods, or soft felt hats with long gauze veils. Much hair dressing is out of the question for most people, and this part of the toilet has sometimes to be altogether neglected by those who are not quite sure what will happen if they attempt to raise their arms over their head. For such it is a great convenience to have

a soft woolen wrap or hood that can be thrown over the head to enable one to go on deck.

"Fletcherizing," or the mastication of all food until it is reduced to a liquid, has been proved to be one of the best preventives of seasickness. If one has not acquired this habit, it should be cultivated for some time before the prospective voyage. The system is thus relieved of all waste and surplus material, and the stomach and nerves put in the best condition to encounter the unaccustomed conditions. The continuation of this practice while on board will prevent what is probably one of the chief causes of seasickness—overeating.

A steamship steward, who had excellent opportunities for observation, when asked why so many people suffered from seasickness, whispered to his questioner, "I think folkses eat too much." There are many temptations in this direction, as the tables of an Atlantic liner are spread with delicacies prepared by firstclass chefs, and meals are the principal events of the day. Many an attack of "seasickness" is a sort of precipitated "bilious attack."

One is much less liable to seasickness if able to remain on deck in the fresh, bracing ocean air. As a general

thing, those stand the journey best who take the most vigorous exercise up and down the quarter of a mile of deck promenade available for this purpose. If, however, one cannot in this way overcome the tendency to nausea, the horizontal position will usually give comparative comfort. Lying down and keeping the eyes closed will help to minimize the effects of the ship's motion. If the sickness persists even then, the best remedy is an ice bag to the back of the neck and a hot water bag to the stomach or feet.

A party of vegetarians traveling together can make arrangements beforehand with the head steward, who will see that they are provided with whole-meal bread, eggs, and an extra supply of vegetables and fruit. The solitary vegetarian may find it more difficult to satisfy his appetite and stick to his principles. The stewards are, as a rule, very obliging and accommodating, and will endeavor to get anything within

reason that is asked for. It is well, however, to take a small supply of nitrogenous food to supplement the ship's rations if necessary. For this purpose bromose tablets, protose, and malted nuts are excellent, containing a maximum of nutriment in a minimum of space.

It is well to plan to go on board

some time before the ship sails. The necessary things should be unpacked and adjusted, the dust of travel washed off, and the hair braided and coiled close to the head. It may be a day or two before one finds it advisable to make a lengthy toilet again.

The garments should be such as can be easily adjusted. A warm union suit, linen freedom waist with under-skirt attached, flannel shirt-waist with buttons around the waist corresponding with buttonholes in the skirt-band, will be found most convenient and healthtul.



DISEMBARKING AT LIVERPOOL

These can be rapidly donned, enabling one to reach the deck very soon after rising.

Many women find it advisable to sleep in a dressing gown while on shipboard, as they can then get to the bathroom or the ladies' saloon without the unwelcome effort of making a change of garments. E. E. A.

"IT always comes — the summer, with its blooms, Its suns, distilling from them rich perfumes; Its earing corn, its grasses strong and tall, And waiting for the rhythmic scythe-strokes, all: Its still, sweet nights, more odorous than the days, Its ripening things, its blossom-bordered ways. Unto one chilling wind our faith succumbs, We say, 'It is not near.' But still it comes."

SUMMER DISORDERS OF INFANCY AND EARLY CHILDHOOD

BY KATE LINDSAY, M. D.

WRITERS on children's diseases ascribe more than half of the disorders of infancy to defective digestion. Such diseases prevail especially during the summer and early autumn months, when fermentation of organic matter is active and water and food are likely to be infected with disease germs, and food to ferment and become unfit for use.

The alimentary tract of the infant and the young child is not so well fortified and prepared to repulse and destroy germs and neutralize toxins as is that of the adult. An infant's natural food, when the mother is in normal health, is practically germ-free, and the solids and liquids are in proper proportion. Such milk is of alkaline reaction, and recent investigations of its properties point to certain constituent compounds, called "enzymes," with digestive principles, and others, called "antibodies," which destroy toxins. Nature thus makes provision for the lack of these elements in the feeble digestive fluids of the infant by supplying them in its food.

Most digestive disorders of the first. year arise either because of want of mother's milk and the use of artificial foods, or because the milk is furnished by unhealthy mothers whose environments are unhygienic.

All infections enter the body from without, either through the mucous membrane of the alimentary tract or the respiratory surfaces or through wounds in the skin and mucous membranes. Diseases of the mouth are often the starting-point of serious infectious disorders of the stomach and intestines. So this important and muchneglected cavity should be well looked after. All redness, swelling, heat, and other symptoms of inflammation, as well as all thrush spots, ulcerations, decaying teeth, and other symptoms of germ infection, should lead the caretaker to cleanse the mouth. If there are cavities in the teeth, have them filled, thus preventing food infection in this way. It is almost useless to expect good digestion with a foul, inflamed, infected, ulcerated buccal cavity, even when the little ones are fed the best of foods.

The most common stomach disorder is known as acute gastric catarrh, acute indigestion, or acute dyspepsia,-all three terms signifying the same disease. The chief cause is irritation due to food, improper in quality and quantity, spoiling in the stomach and forming toxins, instead of being digested and prepared for absorption. This malady rarely occurs in infants fed on good breast milk, unless something occurs to upset the mother ; as, mental shock, or some physical change due to overwork, illness, change of habits of life, etc., this causing a change in the quality of the natural food. Older children often have attacks from eating too much candy, unripe fruit, pastry, and the like. In grown people this disorder is called a bilious attack.

In bottle-fed infants, especially during the summer months, it is a very common complaint, and is most often due to an excessive amount of artificial food of improper quality, and unclean and partially spoiled when fed to the infant. The symptoms are loss of interest in play and surroundings, starting in the sleep, crying with colic pains, drawing up the legs on the abdomen, sharp, shrill cry, paleness around the mouth, blueness of the skin, and cold feet: in severe cases (fever 101°-103° F.), nausea, and vomiting of mucus and undigested food. When the food has been more than usually indigestible, there are often convulsions. and symptoms resembling those of inflammation of the brain and spinal cord. The child may be delirious or even comatose from the acute intoxication caused by the poisons absorbed from the alimentary canal. The writer remembers well a typical case in her own practice. A child of three years, after eating a number of windfallen apples and drinking two cups of milk, was suddenly seized with convulsions, occurring every half hour or less, and remained unconscious for hours. Some effort had been made by vomiting to empty the stomach, but in vain. An emetic and tickling the throat with a feather brought up a spoiling mass of lumps of unripe apple and large sour curds. This soon restored the little one to consciousness. A thorough enema and dose of castor oil freed the alimentary canal of the spoiled food and toxins; but several days of fever followed, during which no food could be retained by the stomach, and even water was rejected for a time.

The treatment indicated in case of an attack of acute indigestion is to empty the alimentary tract at once by an emetic of warm water or the stomach lavage; a thorough enema and a mild cathartic, to free the bowels. Stop at once all food, and do not try to put anything into the stomach until the vomiting ceases, unless it be ice-pills from ice made of sterile water, or sips of hot water. Often the colic pains can be relieved by fomentations. In

the chill stage at the onset, a warm full bath, 100° - 104° F., or a warm sheet pack is good; and a hot mustard footbath when the feet are cold. If there is diarrhea, hot enemas, followed by tepid or cool ones, are often very soothing. Complete rest in bed is required, with heating compresses to the abdomen, or the employment of the wet girdle. The alimentary canal must be kept clean.

The next most important consideration is the diet. In cases of infants, especially bottle-fed babies, all milk should be kept out of the food for a time. During the first twenty-four to thirty-six hours only clean, sterile cold water or ice should be given. After vomiting and purging cease, the child may be fed a teaspoonful or two of white of egg and barley water or wellstrained gruel and white of egg (the white of one egg mixed with four ounces of water or gruel). The stomach should be washed out occasionally, and the sufferer put under the best of hygienic conditions : plenty of fresh air. sun baths, oil rubs, short cold mitten frictions, and when there is fever, neutral baths or tepid compresses. When the patient begins to convalesce, milk, modified and sterilized, may gradually be given. Or, if nursing, a small meal of breast milk, say one-fourth the usual meal, may be given; if bottle-fed, onefourth the usual amount of solids.

Watch the effects of the change of food, as the stomach is likely to remain irritable for a long time afterward, and relapses are very common, which may terminate in chronic glandular dyspepsia and chronic vomiting, and lay the foundation for impaired digestion for life; or, in hot weather especially, cholera infantum or some other acute inflammatory disorder may result.

365

(To be continued.)

HEALTHFUL AND DELECTABLE DAINTIES

THE preparation of the daily meals for the family during the hot weather is at best a trying and generally tiresome task, particularly so if one attempts to keep up the round of courses and variety of dishes characteristic of meal-getting in many households. At no season is simplicity of diet more essential than during the heated term; and at no time can it be accomplished with greater facility than when Nature provides us so lavishly If for dessert one wishes something in addition to the delicious fruits so abundant at this season, the following recipes for articles prepared from fruits and vegetable gelatin, a convenient and nutritious material, will afford something wholesome, easily prepared, and tempting to the eye as well as the palate :—

Lemon Jelly.— Soak one-fourth of a box of vegetable gelatin in hot water (that of a temperature of about 140°)



with sun-cooked foods. Supplied with breads, nuts, fruits, and salad greens, one may, if one chooses, dispense with the need of the kitchen range almost

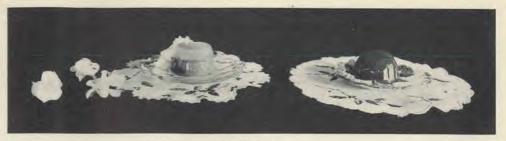
Some hot foods are, of course, desirable, but these may be limited to such as can be prepared in the early morning, requiring only to be reheated over a lamp-stove or in a chafing-dish as a soup or purée for dinner, or to such as require but a minimum of heat to prepare, as an omelet, a fruit toast, hot milk, or malted nuts. If bread cannot be purchased, its preparation can with painstaking be gotten out of the way before the greatest heat of the day. Pastry, roasts, puddings, and complex dishes may well be reckoned among the non-essentials during hot weather. for twenty minutes. Remove from this water, cover with one cup of boiling water and let it boil rapidly until perfectly clear, which it should be in eight or ten minutes. Strain through cheesecloth or a very fine wire sieve to make sure there are no lumps. Have in readiness one-half cup of lemon juice, to which add one cup of sugar, one and one-fourth cups of water, and then one cup of the prepared gelatin. Pour into molds previously wet with cold water, and set in a cold place or on ice to mold.

Serve with a dressing of whipped cream or beaten meltose, flavored with vanilla.

Raspherry Mold.— To one and one-half cups of raspberry juice add one-fourth cup of lemon juice, one cup of sugar,

altogether.

HEALTHFUL AND DELECTABLE DAINTIES



FRUIT JELLIES

and one cup of the cooked gelatin. Mold, and serve the same as lemon jelly.

Other jellied desserts may be made by using pineapple, grape, cherry, strawberry, blackberry, or other fruit juices in place of the raspberry.

Banana and Other Fruit Molds.— Prepare a lemon, pineapple, or other fruit jelly. About one minute after it has been poured into molds, slice into it some ripe bananas. If the slices do not readily sink to place, they may be put there with the end of a knife.

Other fruits may be substituted for the banana, viz., cherry, strawberry, raspberry, pineapple, etc.

Orange Fruit Mold.—Line individual molds with thin slices of orange, then pour into the mold an orange jelly prepared by using one cup of orange juice, one cup of sugar, one-fourth of a cup of lemon juice, one-half cup of water, and one cup (one-fourth box) of gelatin cooked as previously directed. Set on ice until ready to serve, then turn out into individual dishes.

An orange jelly prepared as above, used to fill one-half a mold, and when this has become slightly hardened, the remainder of the mold filled with pineapple, lemon, or other jelly of a differing color, makes a very pretty layer jelly.

Strawberries in Jelly .-- Prepare a lemon or pineapple jelly as previously directed. Pour a shallow laver in the bottom of a round mold, and when it has become somewhat hardened, place a smaller mold of similar shape, wet on the outside with cold water, inside the large one and fill the space with the pineapple jelly. Set on ice until firm. When ready to use, brush the inside of the smaller dish with hot water, and remove it, taking care not to crack or break the jelly. Fill the center thus formed with strawberries or other small fruit. When ready to serve, turn out into a glass dish and serve with meltose sauce.

E. E. K.



STRAWBERRIES IN JELLY

FRESHNESS AND FRIPPERIES

BY STILLETTA PEYTON BURKE

THOSE "Disciples of Unrest" who are always on the lookout for distraction, emotion, entertainment, and the newest fad, lose, surprisingly soon, the zest, élan, of real, spontaneous enjoyment. The almost breathless endeavor of "society" to devise fresh schemes for its own diversion, hints oftentimes of an appalling lack of resources, almost equal to that of the perplexed lad who was having extraordinary difficulty with his "sums," and when his father suggested that he ask God to help him, he replied, "I have asked God, but he has made several mistakes already !" A break-neck pace in the pursuit of life's "crispest novelties" is almost sure to finish in a tip-up over some snare-line of hygienic law, and evolves premature age with the precision of a theorem in geometry.

Some experiences are like books with shockingly abrupt endings, where the whole truth ends with a bang. And wofully disappointing they are, too, no matter what the thrall of fascination by which they may have held us. There is, indeed, an ineffable satisfaction in being able to separate by a clean-cut cleavage the essentials of life from the non-essentials, the substantial enjoyments from the frills and fripperies; for this way lies not only true comfort and peace of mind, but a fine freedom from cosmetic necessities.

The woman who deliberately chooses the simple, hygienic mode of living and steadfastly declines to use nerves in the place of brains as she pursues her unruffled course, possesses in this attitude of mind a veritable talisman for the preservation of freshness of face as well as of real physical well-being. She has learned, happily, that to plan everything quietly and in advance is a very important principle in the elusive art of keeping young. Her hurried, worried sister who "runs on her nerves" and who "really cannot spare the time " to sit down and calmly think out the best way of doing things before attacking them, is pushing Youth away from her with both hands.

Unthinking, breathless achievement, like the musketry of Queen Anne's soldiers, is most deadly in its rebound, and is sure to leave its blighting imprint on face and figure.

Restlessness is not energy : it is simply the friction of overwrought nerves. Those women who are always "doing things" and never dodging them, serve to keep the atmosphere in motion, but fail, frequently, of any real accomplishment because they have made no intelligent selection beforehand of their duties, and do not bring rested bodies and responsive minds to the carrying-out of their activities. To leave off doing useless things in the way of social exactions, the preparation of food, the clothing of our bodies, and the furnishing of our homes, is to leave a wide, white margin of joyous leisure in which to get the best things out of life, and to retain the freshness and receptivity of youth. We should bring our best thought and brightest ideas to our every-day living, just as we should use our best manners and brightest cutlery for our every-day dining. But there is no "brightest and best " for the woman who is wearing her nerves to a wire edge in an unintelligent effort to compass superfluities. She is exhausting body and brain in an attempt to straighten out non-essentials

— a task as absorbing and depressing as that of a mother crab who is trying to teach her little crabs to walk without getting tangled up in themselves.

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Few of us realize the tremendous amount of life force that is consumed in the digestive process. Men and women grow old and die, daily, from "overwork," but it is much more often from overwork at the table than at the world's big work-bench. To turn the crude mass of a great variety of food into blood and tissue, brain and nerve power, is a mighty, mysterious, physiological task. While it is true that the intricate enginery of digestion will work more smoothly if we really enjoy our food, it is also true that a fine discrimination is necessary in order to separate the things that simply "taste" good from those that "build" good. Overfeeding means invariably under-living, and under-living soon shapes its protest in withered faces and waning forces.

The highest medical authorities agree that the majority of men and women eat too much and rest too little. Those resolute souls who cheerfully take the stand that they will not put into the stomach more than the body demands for its highest efficiency, allowing every function of the body generous periods of rest for its rejuvenation, and who turn with dogged serenity from all those "robber pleasures that plunder sleep," are, it would seem, almost as rare as ripe cherries in a snowstorm. For the privilege of indulging in palatal pleasures regardless of bodily necessities, we are almost all paying the price in premature wrinkles, dull eyes, and rheumatic limbs. All of this complicated machinery of the digestive process is run by orders outside of ourselves - "sealed orders," with which

we cannot meddle. It takes what it needs of our life-force for its own immediate purposes, quite independent of our volition after we have thrust work upon it; and whether there be anything left for thought and action and giving "spring" to our bodies is none of its affairs.

But it is not alone those who "feast in folly" who pay a penalty of hastening ills. The thousands of fagged, jovless housewives who spend the shining hours of the day, and work, often, far into the night planning and preparing the three "square" meals in a never-ending round, soon become victims to the maddening repetition. There is something pathetic in the way ceaseless drudgery takes the snap and sparkle out of life for both men and women. Monotony and unthinking toil lead slowly but surely to an unresponsiveness touching life's higher joys and beauties that virtually amounts to coma.

But the sacrifice is, in reality, needless. The hurried, harried sister who is almost always at her last gasp, mentally and physically, needs to swing herself squarely around and look at life from a new view-point. Let her rest quietly, close her eyes, fold the hands of thrift, until she becomes clearvisioned enough to see that true homemaking is a sane, simple, joy-giving calling, and that it not only means freshness of body and freedom of soul to those to whom it ministers, but also allows "sweet leisure for keeping young" to the home-maker, herself.

That poor, worn-out housewife who, with her last breath, said to those at her bedside that she hoped the Judgment Day might not come for a thousand years, as she would not be rested enough before to "take part" in the resurrection, was only one of a grea company of deluded martyrs who are wearing themselves out, body and soul, over the odds and ends of living.

A recent writer has said, effectively: "Every physical state has inwoven with it a mental one. A gloomy mood blocks every bit of work the organs are trying to do. Worry, whether it be over trifles or matters of large moment, is a foe to the heart, to the digestion, the circulation, to every nerve, vesicle, and brain-cell, and will leave on them all, as well as on the outer flesh, its evil mark of age."

"The science of life is realizing ever more clearly the exact co-ordination between the physical and spiritual states."

"To the extent to which the soul is

wrong, every part of us, from top to toe, is out of gear. The time is coming when we must all see clearly that, while the inevitable years produce their results, the inner spiritual conditions are, at every point, modifying them."

"In this matter of 'keeping young,' it seems often as if the passing years had least to do with it. There are men and women who are young and fresh at eighty, and others who, in their third decade, are disillusioned, disenchanted, — aged at heart and in body."

To cut out with relentless stroke all the superfluous out-croppings of daily existence, and to live always in our inmost being without fret or strain or haste, is to insure the true comfort and happiness of those nearest us as we pitch our own tent "hard by" the Fountain of Youth.

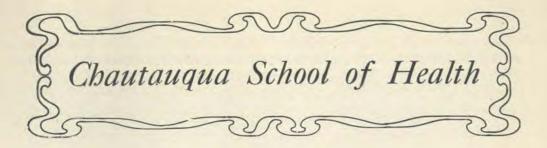
THE QUIET WAY BEST

WHAT's the use of worrying, Of hurrying, And scurrying, Everybody flurrying And breaking up his rest, When everything is teaching us, Preaching, and beseeching us To settle down and end the fuss, For quiet ways are best ?

The rain that trickles down in showers,— A blessing to thirsty flowers,— And gentle zephyrs gather up Sweet fragrance from each brimming cup. There's ruin in the tempest's path, There's ruin in the tempest's path, And they alone are blest Who early learn to dominate

Themselves, their violence abate, And prove by their serene estate That quiet ways are best.

-Josephine Pollard.



THE COLD WET SHEET RUB

BY J. H. KELLOGG, M. D.

THIS is a very vigorous tonic measure. It consists in wrapping the body in a sheet wrung out of cold water, then rubbing over the sheet. The water must be cold, 70° to 60° at least. Even colder water may be employed with advantage. The sheet may be wrung very dry for feeble patients, or may be applied dripping wet to patients

who are strong and able to react well.

There are three things to which particular attention must be given:—

1. The wringing of the sheet.

2. The application of the sheet to the patient.

3. The rubbing of the sheet.

Make ready a pailful of water at a temperature of 70° to 60° , two sheets, and two towels. If the patient is feeble or does not react well, prepare also a footbath at 102° to 104° . Let the patient stand in the foot-bath, which should be placed in the center of a large rubber sheet if necessary, to protect the floor from water. Wrap one of the sheets about the patient, including the tub, so that the heat can ascend about his body. While he is getting well warmed up, prepare the other sheet. Shake it out and gather one side (the long way of the sheet) in the right hand. Grasp the other end with



FIRST STEP

the left hand. Immerse in the cold water, keeping hold of the ends. Wring until the water ceases to fall from it in a stream, then drop the end held in the left hand, shake loose, and while holding the wet sheet in the right hand, remove the dry sheet from the patient with the left and apply the wet sheet as quickly as possible. The patient raises both hands above his head while the attendant, standing in front of him. grasps the upper left hand corner of the sheet and places it at his right armpit. The patient at once

THE COLD WET SHEET RUB

lowers his arm to hold the sheet in place while the attendant carries the sheet across the chest, under the left arm, across the back, over the right shoulder, across the chest again, and over the left shoulder, then on across the back, tucking the corner under the sheet by the side of the neck so as to keep all in place.

The wrapping of the sheet about the patient must be done quickly, so the patient will not chill. The sheet should be drawn tight, so as to touch as much of the surface as possible.

As soon as the sheet is applied, the rubbing must begin, and must be done in a most energetic manner and continued for one or two minutes or until the sheet is well warmed. Every part of the surface must be rubbed, the hands moving quickly from one part to another; the chest, back, and arms first, then the abdomen, loins, and legs, repeating until each part has been gone over six or eight times at least. At the conclusion of the application, the skin should be well reddened everywhere. As soon



THIRD STEP

as the rubbing ceases, the wet sheet is removed,



SECOND STEP

and the patient is quickly dried and 'rubbed in the usual manner.

It should be remembered that the rubbing should be over or on the sheet, but not with it. If necessary to encourage reaction, spatting or percussion with the flat surface of the hand may be practiced. This is especially useful over the back and over fleshy portions. Care must be taken to cool the head, neck, and face well with water colder than that from which the sheet is wrung before the wet sheet is applied. The hair should be saturated, and a cold, wet towel applied to the head.

The wet sheet rub is one of the most effective of all known means of exciting the surface circulation. By its use the blood may be diverted from congested internal organs to the skin. The powerful nervous impression made by the cold water and the rubbing awakens the vital energies of the body, creates an appetite, increases digestive power, strengthens

the muscles, and encourages all vital processes.

The wet sheet rub may be used as a tonic measure once or twice a day. It is generally employed in connection with some other bath, as after a wet sheet pack, a hot blanket pack, a warm sitz, a vapor or electric-light bath, or a large fomentation to some part, as the back or abdomen.

The wet sheet rub may be applied in bed, when necessary, by protecting the bedclothing with a rubber sheet. It may be employed thus as a means of lowering the temperature in fever when the patient does not react well to the wet sheet pack. In such a case the sheet is made very wet, and the rubbing is continuous, but less vigorous than in ordinary applications. The duration of the application may be as long as necessary to produce the effect The patient's temperature desired. should be taken at intervals of five minutes. When it has been lowered one or two degrees, the wet sheet should be removed, the patient gently wiped, and covered with a dry sheet and one blanket, to prevent slow chilling of the surface by evaporation, which is always dangerous, and must be carefully avoided.

METHODS IN HYGIENIC COOKERY

BY MRS. E. E. KELLOGG

THERE are comparatively few foods which are not rendered better adapted to the needs of the body by proper cooking. Food well cooked is already partly digested. In addition to making food more digestible, good cooking makes it more palatable, more inviting to the eye, and more fully develops its flavors. Hygienic cookery requires the attainment of these objects through simple processes, and the exclusion of all unwholesome ingredients, such as chemical leavening agents, vinegar, peppersauce, mustard, and other pungent and irritating condiments, and the excessive use of free fats.

Five basic methods are variously employed in the cooking of foods. Juicy food substances may be *cooked by radiant heat*, by broiling or grilling, or by roasting. This may be accomplished before an open fire, above glowing coals, under a gas jet, or in other ways whereby the food material is brought in contact with direct radiation of heat. This method is frequently approxi-

mated by what is termed "pan boiling," the food being cooked on or in some heated utensil. Moist foods may also be cooked by dry heat in some closed receptacle, as by baking in an oven. Only foods containing a considerable degree of moisture are adapted for cooking by this method. The hot dry air which fills the oven is always thirsting for moisture, and will take from every moist substance to which it has access, a quantity of water proportionate to its degree of heat. Foods containing but a small amount of moisture, unless protected in some manner from the action of the heated air, or in some way supplied with moisture during the cooking process, come from the oven dry, hard, and unpalatable.

Food substances, both moist and dry, may be cooked in *liquids at boiling temperature* (212°); the solvent property of liquids kept just a few degrees below boiling temperature (185°) is also employed for *stewing* foods. This process is necessarily more lengthy than

HYGIENIC COOKERY

ordinary boiling, but for many foods it is much superior. *Steaming*, as its name implies, is cooking by hot vapor. For foods not needing the solvent powers of water, or for such as already contain a large amount of moisture, this method is preferable to boiling. The foods may be placed in a perforated utensil which admits of direct contact with the steam, or they may be cooked in a closed receptacle placed inside another vessel containing actively boiling water — a double boiler.

The superiority of these various methods as regards nutritive results, depends much upon the composition of the food substance to be cooked. The effect of heat at different temperatures and of the length of exposure varies with the different food elements. Foods composed largely of albumin require cooking at a low temperature, as albumin coagulates at 160° , and the effect of heat as great as that of boiling water upon albumin is to harden, toughen, and render it leathery and indigestible in proportion to the period of exposure.

Food articles containing considerable cellulose and fibrous material require the solvent aid of water, and are best cooked by boiling, stewing, or steaming.

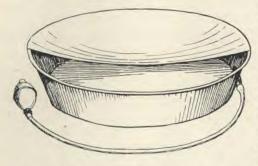
Substances in which starch predominates, need long cooking and high temperature in order so to change the starch as to render it easy of digestion. Starch passes through five stages in undergoing digestion. First, it is converted into *amylodextrin*, or soluble starch; second, *erythrodextrin*; third, *achroödextrin*; fourth, *maltose*; and fifth, *levulose*, or fruit-sugar. By cooking, it is possible to carry the starch through the first three stages. The last two changes are the result of digestive action.

The preliminary digestive work done by cooking varies in degree with the method employed. The cooking in water of boiling temperature for a short period only, simply carries the starch through the first step of the digestive process by changing the raw starch, which is insoluble, into soluble starch, or amylodextrin. To secure a further conversion into erythrodextrin requires a prolonged cooking at or near the boiling temperature, or the application of a higher degree of heat, as by baking in an oven. The third stage of starch digestion is attained only in articles from which the moisture is already evaporated, by exposing such to the action of heat at a temperature of at least 320°, as in the toasting or rebaking of foods by which they are browned throughout. Zwieback, roasted rice, and crystal wheat are examples of foods thus changed.

TREATMENT FOR THE HELPLESS INVALID

BY LENNA F. COOPER

THE success of a hydriatic treatment depends upon the care with which it is given. A treatment which leaves the bed wet or damp and the patient chilly or uncomfortable will do little or no good. Of course, the bedding should be changed for dry if it becomes damp, but the important thing is to be so skilful in the application of the treatment that such a change will be unnecessary. Especially is this imperative if the patient is very weak, or is a surgical case, when changes are tiresome and even dangerous. Before any treatment is begun, everything should be in readiness. The patient's feet should always be warm before beginning the treatment. If they are at all cold or clammy, administer a hot foot-bath. A foottub is the most convenient vessel in which to give this, but any vessel



which is large enough to receive the feet and sufficient water to cover them above the ankles, will serve the purpose. An infant's bath-tub or a large wooden pail reserved for the purpose are excellent substitutes.

Place an oilcloth or several thicknesses of newspaper under the patient, extending from the knees to the feet when outstretched. Over this place a folded sheet. Have the patient flex the limbs, place the tub filled with warm

water $(102^{\circ} - 105^{\circ})$, immerse the feet, and add hot water until the bath reaches a temperature of $110^{\circ}-115^{\circ}$. The duration of the bath should be from five to ten minutes. Finish by a dash of cold water to the feet. Dry thoroughly.

An important treatment for bedridden patients, especially those who do not have access to a full-bath tub, is the sponge bath. This may be given for different purposes; viz., cleansing, cooling, and tonic effect.

The bed should be thoroughly protected by two old blankets or Turkish bath sheets,— one above the patient, the other below. If two are not at hand, one may be used by folding the blanket and placing the patient between it, with the open side toward the front of the bed.

If the bath is given for cleansing purposes, have ready a cake of soap, two soft washcloths, two Turkish towels, and two pails or bowls of water, one at a temperature of 100° , the other at 90° (the first for cleansing, the second for rinsing). Only one portion of the body should be exposed at a time. With one washcloth and the warmer water apply the soap, and with the second washcloth and the cooler water rinse the part thoroughly, then dry quickly with the Turkish towel, using considerable friction in so doing, to insure good reaction.

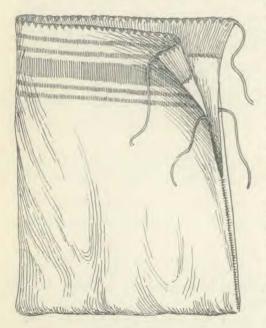
If for cooling purposes, as in cases of fever, use one pail of water, 60° to 90° , and bathe each part several minutes or until the part is thoroughly cooled. Dry and proceed to another part. The



temperature may be reduced two or three degrees in this way.

If the cold application produces chill or "goose-flesh" appearance, this may often be remedied by applying heat to the spine while administering the cold application, or very hot $(130^{\circ}-140^{\circ})$ sponging may be advantageously used, but it must be applied with very rapid strokes. This reduces the temperature by acting reflexly upon the heat-producing centers.

When given for a tonic effect, one pail of water $(50^{\circ}-35^{\circ})$ is used. The cloth is wrung quite dry and the body is



rapidly covered with short, quick strokes.

One of the most difficult treatments for an inexperienced nurse to give is the enema, or rectal injection. To give this successfully, a bedpan should be employed. There are several kinds of bedpans in use, but one of the best is a simple arrangement that can be made in any tinshop. An ordinary milk pan fourteen inches in diameter, with a top soldered to the rim, extending over about two-thirds of the pan and inclined one-half inch toward the center, thus forming a support for the hips, will serve quite as well as a much more expensive one. But this can be improved upon by adding a drainage consisting of a one-half inch opening at the bottom with a funnel-shaped spout to which is attached two feet of one-half inch rubber tubing and at the end of this a bulb with an air outlet.

The patient should be placed on one side of the bed while the other side is made ready for the treatment. Over the central portion of one side of the bed place an oilcloth about two and onehalf by three feet, and over this a folded sheet. Put the pan near the center of one side of the bed, with the covered portion toward the head. Close behind this place a pillow. From this build an inclined plane of pillows to the head of the bed. Place a newspaper over the covered portion of the pan, to prevent chilling of the patient.

Have ready one to three pints of liquid $(70^{\circ}-102^{\circ})$. If for chronic constipation or for reducing temperature, use cool or cold water. If for mere cleansing effect, use tepid or warm water, to which may be added enough pure soap to make a good soapsuds. If for pain, hot water $(112^{\circ}-110^{\circ})$ should be used.

See that the patient's feet are warm. Lift the patient to the built-up side, with hips upon the pan and the knees flexed. Set a newspaper in the pan and let it incline toward the knees. This is to prevent soiling the bed. Instruct the patient to take as much of the liquid as possible. Stop the flow of water for a moment or two, then repeat the process, and have the patient retain the liquid for a few minutes if possible.

Many little things, if observed, add much to the comfort of the sick one.

376

Even a hot water bag can be made soft and pliable by letting out the air before closing it. This may be done by placing the bag against a flat surface, holding up the mouth with one hand and expelling the air with the other.

If the patient is troubled with cold extremities, it is better to apply extra clothing than artificial heat continually. A convenient arrangement for keeping the patient warm is a bag made by folding a single blanket once each way and sewing it up; thus making a bag of two thicknesses of blanket. This can be slipped over the patient's feet and will extend almost to the waist, and allows ample room for free movements of the limbs. If the blanket is irritating to the patient, the bag may be lined with eiderdown or some soft cloth.

Thirst in fevers is often allayed by a

compress wrung out of ice water and applied to the throat.

Compresses should never be so wet as to drip. Large cool compresses applied to the abdomen in typhoid fever will help to keep the temperature down. The skin may be kept soft and smooth by giving an oil rub occasionally. The feet should be well oiled at least once a day.

Bed-sores are likely to occur in cases of long and wasting illness, and being extremely difficult to cure, all precautions should be taken against them. If tenderness or reddening of the skin occurs, massage or rub the tissues about, and rub the parts well with alcohol two or three times a day. A cushion made in the form of a ring to fit the affected part will relieve it of pressure and irritation.

LIVER DIGESTION

BY THE EDITOR

In the liver the food is acted upon by the cells of this important organ in a very remarkable way. The albumins which have been digested in the stomach and intestines, are, as one might say, inspected by the liver, which puts on certain finishing touches, rejecting any unusual or poisonous materials which may have crept in. The starch which has been converted into sugar, is, by the liver, reconverted into animal starch, or glycogen, in which form it is stored up in the tissues of the liver until needed for body-work or heat production, when it is doled out as needed. The digestive function of the liver is not the least of its many most interesting and important activities. There is no more wonderful manifestation of organic intelligence in the body than that shown by this great brown gland in the regulating of the supply of sugar to the blood in the interim between meals. In this respect, the liver might be looked upon as a sort of living, automatic "stoker," which supplies fuel to the body as needed, as devices made for the purpose of supplying coal to the furnaces of steam boilers.

Here we have another proof, not only of the marvelous benevolence and wisdom of man's Creator, but of his constant watchcare and unfailing vigilance in guarding the interests of the body, and providing for its needs. If all the sugar formed from the digestion of starch, which constitutes more than half of the bulk and weight of our natural dietary, or about one pound a day, were thrown at once into the blood and general circulation when absorbed

LIVER DIGESTION

from the stomach, the heat-making processes of the body would be excessively excited; or, if the sugar was not oxidized, or burned, the kidneys would be at once called into activity to eliminate the sugar, and it would thus be lost to the body. This condition is sometimes present, as in a disease known as diabetes, in which varying quantities of sugar are discharged through the kidneys. The liver does not deal with all kinds of sugars with equal facility. Just as some fuels are more easily handled than others, so some sugars are more easily stored and distributed by the liver. Of all the sugars, cane-sugar and milk-sugar are least readily dealt with by the liver. Maltose, the sugar formed from starch in digestion, and levulose, the sugar of fruits, are most readily utilized.

SCHOOL OF HEALTH SEARCH QUESTIONS

THE COLD WET SHEET RUB

1. What materials are necessary for the giving of this treatment ?

2. What precaution should be taken with feeble patients ?

3. Describe the, method of applying the sheet.

4. How may reaction be encouraged during the process ?

5. What is accomplished by this treatment when skilfully given?

METHODS IN HYGIENIC COOKERY

1. Describe the five methods that are employed in the cooking of foods.

2. At what temperature should foods composed largely of albumin be cooked ?

3. What kind of foods are best cooked by boiling, stewing, or steaming ? and why ?

4. Name the five stages through which starch passes in undergoing digestion.

5. Tell how much of this work may be accomplished by cooking, and the methods by which it is done.

TREATMENT FOR THE HELPLESS INVALID

1. How should the bed be prepared for the giving of a foot-bath to the patient ?

2 At what temperature should the water be for a cooling sponge bath in case of fever?

3. How may chill caused by the cold application be remedied ?

4. Describe the best method of giving an enema to a bedridden patient.

5. What precautions should be taken to prevent bed-sores ?

LIVER DIGESTION

1. How is the supply of sugar to the blood regulated?

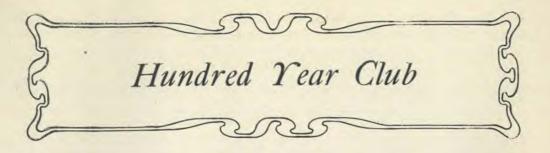
2. About how much sugar is formed in the body each day from the digestion of starch ?

3 What would result if this amount were at once thrown into the circulation ?

4. What disease is characterized by too much sugar in the blood ?

5. What sugars are least readily dealt with by the liver, and which are most readily utilized ?

378



"GRANDPA" SEYK

In this degenerate age it is seldom that one reaches the age of one hundred years in full possession of all his faculties. This has been accomplished by Mr. Frank Seyk, familiarly known as "Grandpa" Seyk, of Kewaunee, Wis. He completed a century of life last September, without ever having experienced what it was to be sick, owing to the temperance of his dietetic habits.

The accompanying illustration gives a good idea of his still hale and hearty appearance. He shows every indication of living for a number of years yet. On pleasant days he may be seen in the streets enjoying a quiet walk and responding to the greetings of his many friends. The steadiness of his nerves is shown by the fact that he still shaves himself, never yet having trusted his face to any hand but his own.

20

Mr. Seyk was born in Bohemia in 1803, and came to America with his wife and only son in 1854. Much of his time was devoted to the study of music, and he became especially proficient in both the vocal and instrumental branches of this art.

After the death of his wife, in 1888, Mr. Seyk, who was then eighty-five years of age, made his home with his son, one of the prominent business men of Kewaunee. At the present time there are living in that city four generations of the Seyk family.

"Grandpa" Seyk is a favorite with old and young. He is a good conversationalist and keeps well posted on



FRANK SEYK

current events. The Bohemian papers have never lost their interest for him, and he spends several hours each day in looking them over, reading sometimes with and sometimes without glasses.

A VETERAN SENATOR

HON. DAVID WARK, of the Canadian Parliament, is one of the twentytwo out of 100,000 who, according to Dr. Farr's English population table, reached the age of one hundred years. He is in marvelously good health, physically and mentally, and during the sixty-three years that he has been a member of some legislative body, he has never missed a session.

The venerable senator is a north-of-Ireland man, of rugged Scotch ancestry, and in his prime was a burly, broad, muscular type of country-bred manhood. He immigrated to New Brunswick, Canada, when he was twenty-one years of age. As a boy of eleven he distinctly remembers the battle of Waterloo, and the celebration of Napoleon's downfall. He was sixteen years old when George III died, and has lived through the reigns of George IV, William IV, Victoria, and three years of the reign of Edward VII.

The habits, and especially the diet, of a centenarian are always a matter of interest to the younger generation, since these play so prominent a part in the problem of longevity. With this in mind, Senator Wark wrote a letter, in his own handwriting, which is remarkably firm and legible for one of his years, to the young people, to be published in the *Globe* (Toronto), on his hundredth birthday anniversary. No doubt he gives much of the secret of his old age in the following words: "I have made it a rule to eat nothing that disagrees with my digestion, no matter how palatable." This rule, he says, led him to discard the use of beef, mutton, and pork many years ago. He also abstains from both pie and pudding, eats no suppers, and retires at or before 10 o'clock, rising at 7:30, thus insuring at least nine hours' sleep.

Always a temperate man in every way, Mr. Wark has for many years been an abstainer from intoxicants. On only one occasion has he used tobacco, being persuaded by his friends to try it as a preventive of quinsy; but the resultant sickness was so sore that he could never be prevailed upon to repeat the experiment. He says that he has ever been thankful for that sickness.

Mr. Wark has always lived on a very simple diet, and has all his life spent most of his time out of doors. In all his habits he is as methodical as clockwork. These, he tells with pride, are the reasons he has attained such a great age.

The aged statesman travels alone to the sessions at Ottawa, disdaining assistance, and takes an active part in the proceedings, doing his work as thoroughly and efficiently as a man of sixty. Last year Sir Wilfred Laurier offered to place a government car at his disposal, so that he might travel with more comfort from his home in Fredericton, N. B., to the federal capital; but he declined the offer, preferring to make the journey like anybody else.

44



GOOD HEALTH CAMPS

MAN is naturally an out-of- door dweller. The indoor life imposed upon him by civilization is a prolific source of disease. A multitude of maladies may be traced directly to the sedentary life in the dustfilled, germ-infected, sunless homes in which multitudes of human beings are compelled, by the conditions brought about by modern civilization, to spend their lives. Consumption, one of the most frequent and fatal of these indoor maladies, is multiplying at such a terrific rate that a general interest has been awakened to battle against this deadly foe of human life. In numerous States, governmental aid has been secured and laws enacted having for their purpose the suppression of this fearful disease.

One of the most effective plans thus far devised, has been the creation of establishments for the open-air treatment of this disease. Wherever this plan has been adopted, marked evidence of benefit has been secured. Many persons in the incipient stage of the disease have been restored to health; others further advanced have been rendered comfortably well; still others, too far gone to recover, have been temporarily helped.

The return to nature by the adoption of the out-of-door life arouses the defensive powers of the body in a remarkable way. The resistance of tissue gradually increases to such a degree that the germs are killed off, and recovery comes as the natural result. The greatest difficulty has been to provide for the poorer class, so that they could for a sufficient length of time enjoy the advantages of the treatment. A New York paper publishes an account of a successful effort recently made by Mr. N. O. Nelson, in southern California, to provide for this class. Mr. Nelson has established at Indio, in southern California, what he calls a health camp for consumptives. We quote the following description of this worthy enterprise with the hope that it may encourage others to do likewise; for certainly no more beneficent work can be undertaken by anyone: —

"The camp is located in a desert valley, cut off from the ocean by the mountains. There is no rain, no fog, no clouds. The winter days are all warm, the nights comparatively cold.

"The camp was established in December, 1902, to provide in part for the large number of consumptives and other invalids who go to southern California. Most of the invalids have little means; they cannot afford expensive sanitariums, and are not wanted by hotels and boarding-houses.

"To meet the requirements of such patients, Mr. Nelson bought one hundred and twenty-five acres of land adjoining the Indio depot. This tract he has improved by sinking artesian wells, and by putting most of the land under cultivation, in order to give convalescents something to do.

"Tents, with all necessary equipment for sleeping and taking meals, have been set up. Land and water are free to those who have their own outfit. A small rental for tents is made to those who can afford it. No charge is made to those who cannot pay, and, where necessary, board is given them. All expenses need not be more than from \$2,50 to \$4,00 a week.

"Work is provided for those who are able to do it, so that their care does not become a burden on the camp.

"The camp is situated in the midst of a sandy valley one hundred miles long and three to ten miles wide. The mountains on each side rise by degrees to four thousand and five thousand feet high. In some places in the foothills there are springs and vegetation. "In the valleys most of the land has been taken up in the past few years. The crops of melons and vegetables are early, and bring high prices. From \$100 to \$200 an acre is an ordinary yield. Alfalfa hay is cut ten times a year, giving twelve to fifteen tons an acre.

"When the campers get well enough to work, they buy or lease a few acres. They can either buy the land on the instalment plan, or lease it on shares for such length of time as desired."

COLLEGE DIETETICS*

WE learn from recent newspaper reports that 250 students of the University of Missouri have decided to adopt the twomeal-a-day system. It seems that two students in the law department, Mr. Stafford and Mr. Robinson, became interested in the question of dietetics, and after some study of the subject were persuaded that they would be better off for dropping the midday meal. Their views were soon adopted by another law student, a Mr. Schurmeyer, and all three announced their determination to make the experiment for thirty days.

At the end of the thirty days, they made their report. All had about the same experience. The first two weeks they suffered considerably from hunger, as the result of omitting the midday meal. The third week they began to experience good results from the change; and by the end of the fourth week they suffered no inconvenience whatever, and found themselves enjoying a marked improvement in health and spirits. One gained in weight, four pounds; another, six pounds. All agreed that they were able to study more hours, and that they could master a subject in much less time than formerly. This was evident to all the students, for Stafford stood at the head of his class after the month's work. and the rating of the others was considerably above their previous average.

These results naturally led other students to take a deep interest in the twomeal-a-day plan of eating. A mass meeting was called. The interest had become so great that nearly all the students of the University attended. Each student made a report of the result of his experiments in writing, and the reading of these reports aroused such enthusiasm that a resolution abolishing dinner was offered at once. Some discussion occurred as to which meal should be omitted. The experimenters had information to give upon this subject, as they had made a trial of omitting each one of the usual meals. Stafford reported that when he went without his breakfast he was not able to study in the morning. When he went without his supper he became so hungry at bedtime that he did not sleep well. Some of the students of the medical department opposed the movement on the ground that dinner was the most important meal of the day, and should not be omitted. But the investigators had the facts on their side, and the result was an almost unanimous vote on the part of the students in favor of the following petition, which was presented to the faculty :--

"Whereas, by scientific investigation it has been discovered that man's health, comfort, and convenience are best conserved by eating two meals a day instead of three, and —

382

^{*} Editorial in May Modern Medicine.

"Whereas, we desire to live as economically as possible, we most respectfully request that in the future no noon meal be served in Lathrop Hall."

The faculty did not care to take the responsibility of saying whether the students should eat their dinner or not, so referred the matter back to the students, who held another mass meeting and carried by a large majority a resolution to abolish the midday meal. The experiment is to last for four months. Two hundred and fifty students have pledged themselves to give the plan a fair trial.

No doubt a large proportion of those who are making this experiment will find themselves so much improved by dropping one of the three meals that they will permanently adhere to the practice. The writer has followed this practice for nearly forty years, and with great benefit. The only criticism that can be made of the plan offered is that the last meal should be taken early enough so that the work of the stomach shall be fairly completed before bedtime. Students generally work a little later at night than do other persons, and consequently no special injury may be apparent from the lateness of the second meal. If the supper or dinner could be taken not later than four o'clock, beneficial results would probably be somewhat greater through the advantage gained by sounder and more refreshing sleep.

If reasonable attention is given to the quality of food furnished the students in this experiment, the results will be so excellent that the students of other universities will be likely to follow the example set them by these enterprising food reformers.

If the progressive and sensible students of the Missouri University could be informed respecting the great benefits to be derived from thorough mastication, or "Fletcherizing" the food, they would experience a still further and tremendous increase in mental and physical vigor which would surprise them fully as much as the advantage gained by omitting an unnecessary meal.

The economy in dollars and cents is a matter of consideration for the struggling student, but a still greater economy is experienced in the wear and tear of the constitution, and the saving of vital energy for some more useful and elevating purpose than the digestion and elimination of unnecessary foodstuffs.

A DYSPEPSIA DINNER

MADISON, N. J., is considerably stirred up over a recent event in that usually quiet town. Encouraged by their success of previous gastronomic feats, it seems that the Orchard Campaign Club of that village had for some months been plotting a unique feast, the special feature of which was to be the indigestibility of the viands furnished. The following is a copy of the menu: —

> Weehawken Cigars DESSERT

Peach Tarts with Vinegar and Tabasco Angel Food and Fried Pickles Lemon Meringue Pie and Cucumbers Coffee and Champagne

ROAST

Roast Pork and Caramel Custard

SALAD

Chopped Nuts and Onions Raw Potatoes with Maple Sugar

ENTREES

Soft-shell Crabs and Buttermilk

Corned Beef Hash and Caviar in Wine Jelly

Frosted Weakfish with Cranberries Lobster Salad and Ice-cream

> Blended Burgundy and Mixed Ale SOUP

SOUP

Green Turtle with Cold Molasses Clams en brochette with Cauliflower and Choc-

olate

Oyster Cocktail with Syllabub and Mustard One hundred of the élite of the town gathered at the appointed hour in a beau-

EDITORIAL

tifully decorated dining-room, where they found the table groaning under the weight of a ponderous load of tasty, but indigestible viands. An hour or two later the diners were doing the groaning, and performing all kinds of contortions, while the tables were still standing up straight.

It is said that only two or three out of the whole one hundred who partook of this villainous dinner escaped the proper retribution, and that two or three dozen doctors were kept busy looking after the victims.

This event affords us much gratification. It is to be hoped that a similar feast will be held in every city throughout the length and breadth of the land, Such an enterprise serves a double purpose. First, it performs an important function as a foolometer. Only those who have parted company with sound sense and good judgment would ever conceive of such a silly mode of entertaining themselves, or consent to have any part in it. Second, the consequences of such a swinish repast ought to serve as a good object lesson to those who have not yet become so bereft of normal instincts as to be altogether unsusceptible to the salutary influence of a wholesome lesson. If a few fatalities should occur after such a fools' feast as the one described, the world would be none the poorer.

GOOD HEALTH PRINCIPLES IN FOREIGN PARTS

THE editor has recently received an interesting communication from a lady who visited Battle Creek and became

interested in the principles represented at the Battle Creek Sanitarium and advocated in this journal, and who has since found opportunity for making use of them in a very practical way in one of the great European cen-The lady sends ters. a photograph, which we take the liberty of reproducing, together with some extracts from her very interesting letter. After referring to her stay at the Battle Creek Sanitarium five

or six years ago, on account of "a dreadful case of nerves as the result of not knowing how to live rationally," she says: "By your example, and through your splendid teachings, together with my God-given reasoning power, I have become the healthy, useful woman I am to-day. Being offered a chance to come

abroad in 1900, I at once took up the subject of massage and hydrotherapy very seriously. I have visited all parts



of Europe for the best instruction from the greatest masters. I am a Hungarian, and speak five languages, so it was not too difficult for me to 'arrive,' as the French say."

The reception accorded in the highest circles to the principles she advocates, and the confidence inspired by her rational methods of treatment, are shown in the following statement: "I have worked tremendously hard for the position I hold, but,

thank God, I have been rewarded with not alone magnificent health, but with a *clientele* second to none. I have treated all but kings, and diagnose my own cases. I am called first, and it is left to me to suggest if medical aid is necessary."

Having visited all parts of Europe in

384

the interest of rational hygiene, this lady states that she has yet to find the equal of the Battle Creek Sanitarium "in genuine, effective work in restoring physical and moral health," and she is proud to be known as a faithful follower and advocate of the principles there inculcated.

Acid Fruits.*

Nearly all fruits contain more or less acid. The acids of fruits are three: citric malic, and tartaric. Tartaric acid is found in grapes ; citric acid, in cranberries, lemons, and oranges. The principal acid of other fruits is malic acid - the acid of apples. The pear and the blackberry contain the least acid of any fruits, the proportion being about one fifth of one per cent. The strawberry, grape, cherry, peach, apple, and prune contain one per cent of acid; while one and onehalf per cent of acid is found in the whortleberry, raspberry, gooseberry, plum, and apricot. The cranberry, the currant, and the orange contain two and one-half per cent of acid: while the lemon, the most acid of all fruits, contains seven and one-half per cent of citric acid.

All fruits contain sugar in larger percentages than acid, and in some instances the proportion of sugar to acid is so great that there is almost no acid flavor, but the acid is present and exercises its special purpose just the same as if the sugar were not present. The grape contains the largest proportion of sugar, more than fourteen per cent. The cherry comes next, with ten per cent. The lemon and the pear contain a little more than eight per cent of sugar; the strawberry, currant, and prune, six per cent; the orange, apricot, peach, blackberry, raspberry, and whortleberry, from four to five per cent; the plum a little less than four per cent, and the cranberry least of all, only one and one-half per cent. The cranberry is the only fruit which does not contain more sugar than acid. The cur-

* Editorial in May Modern Medicine.

"I still treasure," she says, " a pair of fomentation cloths used on me in the Battle Creek Sanitarium. They seem to be my talisman, and have already covered the bodies of royal princesses of Russia, as well as famous titled French army officers."

rant contains three times as much sugar as acid, yet it is still quite acid, while the lemon is intensely acid, although it contains nearly one per cent more sugar than acid. The strawberry contains nearly six times as much sugar as acid, and the cherry ten times as much.

The acid of fruits gives to them their most important value. They are natural disinfectants for the alimentary canal. None of the ordinary germs which thrive in the stomach and the intestines can live in ordinary fruit juice. It is only of late that this germicidal property of fruits has been appreciated.

Water Purification.

A physician connected with the United States Agricultural Department has recently called attention to the fact that an extremely small quantity of sulphate of copper will prevent the growth of algæ in lakes, ponds, and storage reservoirs, and will also destroy typhoid and cholera The question at once arises germs. whether this method can be considered thoroughly hygienic. The probability is that the small amount of copper thus employed would be neutralized by combining with vegetable substances so that the water will be left practically pure; nevertheless, the addition of chemical substances to water cannot be considered the most desirable method of purification. Boiling and filtering through a Pasteur filter are really the best methods. Filters are cheap, and boiling is an easy and simple process. The old-fashioned charcoal and gravel filters cannot be relied upon.

Ouestion Box

10,079. Hay-fever – Bronchitis – Furnace Heat. – Mrs. G. W. B., Tennessee: "1. I have had hay-fever for several years, had grippe last summer, and in the fall bronchial trouble, from which I am still feeling the effects. I am over forty years of age. Can you give me any useful hints as to diet and hygiene? 2. Is furnace heat harmful? 3. Does any grocer in Knoxville carry your goods?"

Ans. -1. Live as healthfully as you know how. Especially spend much time in the open air, in active exercise. Take a cold bath every morning. Consult a good specialist for the nose, and get into as healthy a state as possible before the hay-fever season arrives. You will probably have to make a change of climate, as this disease is largely due to local causes which operate through the atmosphere.

2. No; if the furnace is a good one, and does not leak smoke or gas. The air may be too dry. There should be a water pan in the furnace, and this should be kept supplied with water. Care should be taken to bring fresh air to the furnace from out of doors, and not from the basement, cellar, or front hall.

3. For information, address the Battle Creek Sanitarium Co., Ltd., Battle Creek, Mich.

10,080. Pimples and Blotches on the Face. — F. K. P., Ohio: "I am twenty years old, and have been troubled with a blotched, pimply complexion ever since I was eight or ten. I would be grateful for suggest ons as to diet, habits, and any means by which I may remove and prevent this diseased condition of the skin."

Ans.— You are suffering from autointoxication. Follow an aseptic diet, as suggested for 10,067 in the June number. The digestion is impaired. Would recommend Pan-Peptogen especially as a means of sterilizing the stomach and intestines. Take a cold bath every day. Bathe the face with hot and cold water alternately for five or ten minutes twice daily. Live out of doors as much as possible.

10,081. Earache.- H. A. R., Washington: "My right ear pains me so much, into my 386 head and back of the ear, that it seems to affect the hearing. What is the cause? "

Ans. — You probably have nasal catarrh and disease of the middle ear. You should consult a good specialist at once,

10,082. Falling of the Hair – Backache. – Mrs. H. B.: "1. What is the best treatment for falling of the hair, with soreness of scalp? 2. Suggest treatment for aching in the lower part of the backbone, with which I have been troubled for eight years, without relief."

Ans. -1. Live out of doors as much as possible. Going bareheaded in the sunshine is an excellent practice. Bathe the scalp with cold water two or three times daily, rubbing the scalp well with the tips of the fingers for ten minutes. Apply once a day a lotion consisting of twenty grains of resorcin to the ounce of alcohol. If the hair is dry, add two or three drops of castor oil to the ounce of alcohol.

2. Apply fomentations to the lower part of the back at night, and after the fomentation a towel wrung out of cold water dry enough so it will not drip. Over the towel place mackintosh or oiled muslin, and over this several thicknesses of flannel bandage around the body to hold it all in place. In the morning take this compress off and rub the parts with the hand, and then with a towel wrung out of cold water.

10,083. Abscess. — H. A., Nebraska: "What will cure an inflammation about a pore of the skin on the nose? For two months 1 have been able to get matter from it by squeezing."

Ans.—It is a small abscess. It should be opened so it will drain well, then bathed alternately with hot and cold water two or three times a day, for five minutes.

10,084. Pain in the Nose.—Mrs. S. K., Wisconsin, is troubled with great pain in the nose, especially when sifting flour, and would like to know what to do for it.

Ans. — Protect the nose with a handkerchief while sifting flour. Bathe the face with very hot water twice daily. 10,085. Itching Scalp.—Mrs. S. J. S., Canada: "For about a fortnight my head felt as if the hair were all combed the wrong way: then an unbearable itching set in, with a nettly feeling under the skin. Can you advise me what to do?"

Ans.— Treat the scalp as suggested in reply to 10,082.

10,086. Overeating — "Bills of Fare." — Mrs. H. W., Washington: "An incurable nervous dyspeptic finds it impossible to decide when she has taken enough food. She eats only two meals, but never feels satisfied, and often suffers from taking too much food. She always uses zwieback, fruits, green corn, green peas; at long intervals eggs, chicken stew; occasionally butter, rolls shortened with butter or cream and sweetened with meltose, and walnuts and almonds. Please suggest several bills of fare with these foods properly combined, giving the proportion of each article by weight."

Ans.—Send ten cents for "Balanced Bills of Fare," which will give many valuable suggestions. Take pains to chew the food very thoroughly, three or four times as long as usual. This will set the natural instincts in operation and prevent overeating.

10,087. Cinnamon — Food Combinations. — Mrs. W. L. M., Maine : "1. Are there any objections (from a health standpoint) to using a little cinnamon in foods, for flavoring ? 2. Can potatoes and fruit be taken together with impunity ?"

Ans.-1. Cinnamon in very minute quantities probably does no harm.

2. Yes, if both are very thoroughly chewed.

10,088. Distilled Water.—C. P. H., California: "1. Is it true, as Dr. Koppe in the *National Druggist* tells us, that 'distilled water withdraws the salts from the animal tissues and causes the latter to swell or inflate. Isolated living organic elements, cells, and all unicellular organisms are destroyed in distilled water — they die, since they become engorged therein. They lose the faculty, upon which life depends, of retaining their salt and other soluble cell constituents, and consequently these are allowed to diffuse throughout the water. Distilled water is, therefore, a dangerous protoplasmic poison. . . . The same poisonous effects must occur whenever distilled water is drunk'? 2. Can any bad effects result from the use of distilled water as a beverage ?"

Ans.—1. This theory is entirely pernicious. Distilled water never comes in contact with the living tissues. When taken into the stom-

ach, it is quickly rendered saline by mixture with the serum of the blood. There is no possible danger from this source.

2. No.

10,089. Nettle Rash.-Mrs. S. J. C., Oregon: "Please give advice for treatment of nettle rash in an infant."

Ans.—Bathe with very hot water containing a dram of salt or soda to the pint. The child's diet should be corrected. Nettle rash is due to indigestion.

10,090. Eye Examinations. - E. E. A., Michigan: "1. Do you think that the diagnosis of an optician can usually be relied upon in diseases of the eye? 2. Is it necessary to consult an oculist concerning failing sight?"

Ans.-1, Yes.

2. Yes.

10,091. Nutmeg — Beans — Peanuts. — G. E. C., Michigan: "1. Is there any objection to the use of nutmeg as a flavoring? Isitany more objectionable than vanilla? 2. Is not the starch in cooked beans as imperfectly cooked as it is in mushes? 3. Why is it necessary to cook peanuts to prepare them for digestion? They consist almost wholly of fat and albuminous substances, and both of these are, if anything, more easily digested raw than cooked."

Ans. 1. It will be difficult to trace any serious injury to the use of a minute quantity of nutmeg. However, the oil of nutmeg is irritating — much more so than the oil of vanilla. In certain cases in which the stomach is highly sensitive, it is better to discard all articles of flavoring.

2. Boiled beans are notoriously indigestible. Many persons with slow digestion have a great deal of trouble with gas, and often with colic, as the result of the use of beans. There are thousands who cannot use beans on this account. Baked beans are more digestible than boiled beans. The digestibility of beans is increased by the removal of the hulls, which secures more perfect cooking.

3. Peanuts are more closely allied to beans than to nuts. Botanically, they are not nuts at all; they are legumes. They contain a small amount of starch, but a considerable amount of woody matter which needs to be softened by cooking so as to render the albumin and fat accessible to the digestive fluids.

LITERARY NOTES

You will find that the habit of minimizing annovances or difficulties, of making the best of everything that comes to you, of magnifying the pleasant and the agreeable, and reducing to the least possible importance everything that is disagreeable or unpleasant, will help you wonderfully not only in your work, but also in your attainment of happiness. Tt transforms the disagreeable into the agreeable. takes the drudgery out of the distasteful tasks. eases the jolts of life wonderfully, and it is worth infinitely more than money. You will find yourself growing to be a larger, completer man .- Orison Swett Marden, in June Success.

Genuine gripping readableness is the marked quality of the June **McClure's.** This is supplied by a number of live, vital articles, and some significant editorial comment.

The letters of Lewis and Clark, the great explorers of this continent, written to each other just a hundred years ago, at the outset of their expedition, have remained unknown and unpublished until this time. They will appear in the June number of Scribner's magazine, with facsimiles from the notebooks of the explorers.

Fresh food is the basis of summer hygiene, and it has two corner-stones; one is fire, and the other is ice. A good refrigerator *kept clean*, with plenty of ice, is an economy in the matter of both food bills and doctors' bills; but ice, like fire, should not be used to cover sanitary sins. Don't try to see how long food can be kept on ice without spoiling. Keep it just as short a time as you can, even with ice. -Dr. Charles V. Chapin, in Good Housekeeping.

The American Prohibition Year Book for 1904, compiled by Alonzo E. Wilson. Published by the United Prohibition Press, 92 La Salle St., Chicago, Ill. Price: cloth, 35 cents postpaid; paper cover, 15 cents postpaid.

This publication, which appears annually, is now in its fourth year. It is a standard authority on the liquor question, and its one hundred papers are packed with the most potent facts and reliable statistics. The Almanac, which forms Part I of the book, gives for each day in the year a pithy quotation on the drink evil, from its most prominent opponents. Other departments are Total Abstinence, Criminology, Cost of the Drink Traffic, Legislation, Results of Legislation, Election Figures, and Organization. Every phase of the drink question is covered in this useful book, which is just the thing for all who have to deal with it in any way,—pastors, Sunday-school workers, young people's societies, as well as temperance workers.

"Return to Nature," by Adolp Just. Translated from the fourth enlarged German edition, by Benedict Lust. Published by the translator, 124 East 59th St., New York.

While we cannot endorse all the author's theories respecting a truly natural life, we are entirely in sympathy with the aim of the book and the heart of his message - the return to the natural method in diet, dress, exercise, bathing, the treatment of disease, etc. So natural has our conventional and artificial mode of life become that it is difficult for us to realize how far the human race has departed from the truly natural condition furnished by the Creator. "My mind is unable to grasp," says the author, " how much less sorrow and want, how much less misery and despair, there would be in the world if we should once more trust ourselves wholly to the air, to the earth, and to a natural mode of nutrition.

"But to-day the fond mother still dresses her children in heavy clothes and cloaks, and wraps thick bandages about their limbs, and especially the head and throat. She runs after her husband to fetch him an extra wrap. If a crisp wind and bracing air reign outside, inviting human beings to be refreshed and strengthened by them, the mother takes care that her own dear ones remain inside in the warm, stuffy room. The fear of colds will not give her a moment's peace. From sheer anxiety for the health and welfare of her loved ones, she works incessantly, in her untiring love, to dig their early graves.

"However, we have already again taken to cold water, and the day will surely come when we shall also give our confidence to air, earth, and a truly natural diet. Then men will drink in new health, serene enjoyment of life, and the freshness of youth to a ripe old age at the fountain-head of all life and happiness."

PUBLISHERS' DEPARTMENT

GOOD HEALTH

A Journal of Hygiene

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

Subscription Price, \$1.00 a year Single Copies 10 cents : : : : PUBLISHED MONTHLY BY

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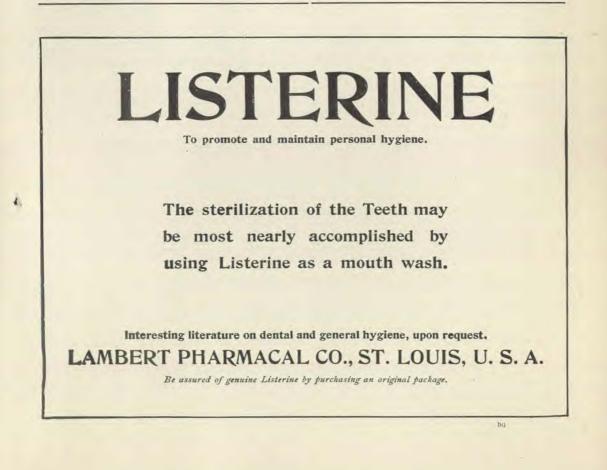
BATTLE CREEK. MICHIGAN

WHAT A COMMERCIAL CONCERN THINKS OF US.

LAST month we made mention of the fact that the National Cash Register Company, of Dayton, Ohio, had ordered 1,000 copies of that number to be distributed among its employees. Mr. Patterson, the head of this gigantic manufacturing concern, has visited the Battle Creek Sanitarium a number of times. He fully endorses the principles which are the foundation of the Battle Creek Idea, and deems the placing of this magazine in the hands of his workers the best possible means by which they may individually become acquainted with these ideas.

In a future number we shall present an article from the N. C. R., a paper published expressly for the company at Dayton. This article is written by a former Battle Creek Sanitarium nurse, who is now stationed at Dayton, to look after the health of the many employees.

We are indeed gratified that such a progressive man as Mr. Patterson is making so practical a demonstration of his faith in the principles which GOOD HEALTH represents.



GOING somewhere this summer? Of course you want to go somewhere, and when you come to look into it carefully you will find that somewhere isn't necessarily very far away. Every city and town in America is surrounded by numerous interesting somewheres. It may be only ten miles away, and a visit thereto may give you enough food for thought to last for a year, if you go with your eves open and your heart in a responsive mood to see, and absorb, and enjoy. If not, you might as well stay at home. There is no use traveling, even ten miles, unless vou are keved to the receptive pitch and are prepared to make the most of the environment into which you project yourself.

But go somewhere! The world is full of delightful places to go, and they all offer inducements of one kind or another; inducements that are as varied as the whims and tastes of man.

After you have been to somewhere and back and have had a change and a rest, you will realize more than ever before that this old earth is a pretty good place to tarry in for a few years on our journey through this vale of lights and shades.— From "Vest Pocket Confidences," in Four-Track News for June.

"What Shall We Eat?"

THE food question, from the standpoint of health, strength, and economy. Containing numerous tables showing the constituent elements of over three hundred food products and their relations, cost, and nutritive values, time of digestion, etc., indicating best foods for all classes and conditions. By Alfred Andrews. 120 pp. Price, 50c. The Health-Culture Co., Publishers, 481 Fifth Ave., New York.

This condensed and practical work opens with a consideration of the purposes for which we eat, and how food material is converted to our needs and used in sustaining life. The causes of indigestion are considered, showing how it interferes with nutrition. In addition to numerous valuable extracts from authorities on dietetics, the book contains tables showing the results of some 1,500 analyses of food products to determine the comparative values of most of the articles of food in common use. These tables show that one pound of protein can be obtained from commeal for twenty-two cents, while from oysters it would cost \$5.00; and the cost of 1,000 calories of energy runs from one cent in potatoes to \$1.25 in lobsters. The legumes and nuts are found to be greatly superior to meat as regards nutritive value, economy, healthfulness, and purity. The large amount of information condensed in this book into such compact and convenient form will be of great value to housekeepers.

Just Ready. New (5th) Edition. "Simon's Clinical Diagnosis," A Manual of Diagnosis by Microscopic and Chemical Methods. For Students and Practitioners. By Charles E. Simon, M. D., Late Assistant Resident Physician at Johns Hopkins Hospital, Baltimore. Thoroughly revised and much enlarged. Octavo, 695 pages, 150 engravings, 22 colored plates. Cloth, \$4.00, net.

"An Epitome of Diseases of Children." By Henry E. Tuley, M. D. Cloth, \$1.00, net. "Scott's State Board Examination Questions in Surgery." Cloth, \$1.50, net.

Lea Brothers & Co., Publishers, 706-8-10 Sansom St., Philadelphia; 111 Fifth Ave., New York.

"The Body Beautiful." Common Sense Ideas on Health and Beauty without Medicine, by Nannette Magruder Pratt. Published by the Baker & Taylor Co., New York.

"Some women want to be well; some want to be strong; all want to be beautiful. My opinion is that unless a woman is well and strong she is not beautiful," says the author of this work ; and consequently her system of beauty culture is no mere surface treatment, but relates altogether to the acquisition of perfect health through intelligent exercising, proper eating and bathing. That health is within the reach of all who desire it enough to work earnestly to obtain it, is indicated in the following passage: "Chronic ill health is a thing to be ashamed of. Without exception it is the result of laziness, ignorance, wrong mental attitudes, and foolish eating and drinking. One or all of these causes lie at the root of all confirmed ill health."

Perhaps the most valuable feature of the work is the beautifully illustrated series of exercises of all descriptions for developing and strengthening all the muscles of the body.

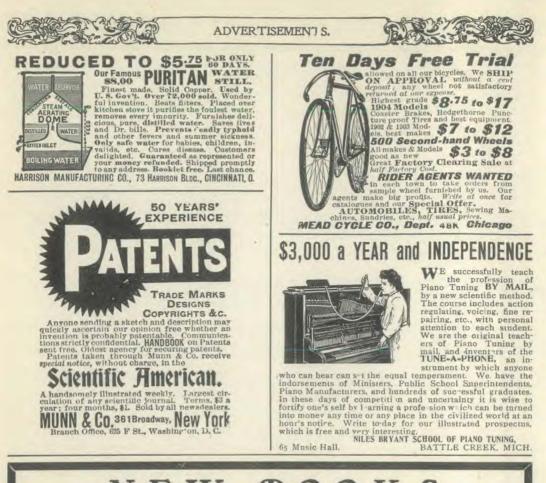


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Bicycle news.

JULY.

Never since the beginning of this industry have bicycles been so near perfection, both in construction and equipment, as they are to-day. Modern inventions like the two-speed gear and new coaster brake have brought the chainless wheels to a wonderful stage of development.

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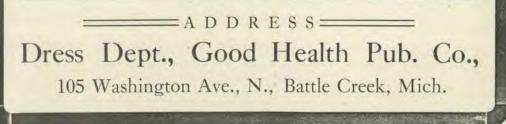


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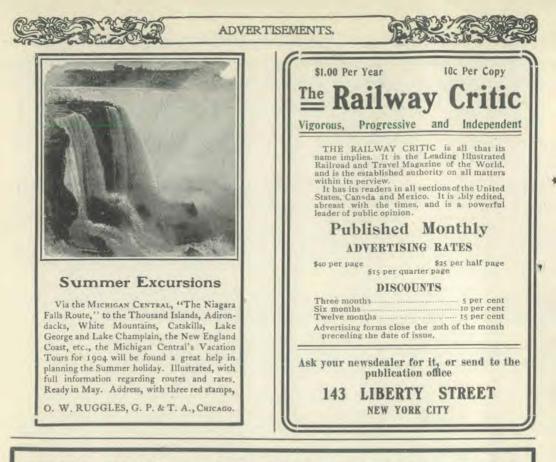
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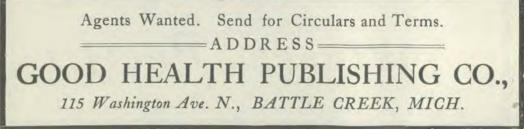
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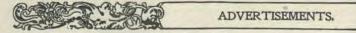
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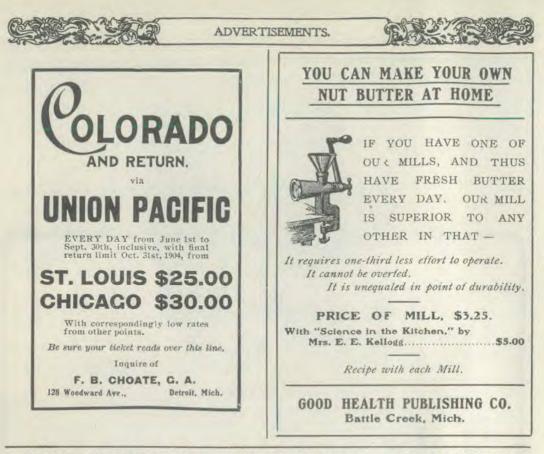
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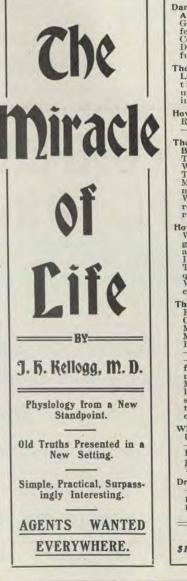


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Special ward for surgical cases with perfect appointments."

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Baths of every description, including the Electriclight Bath.

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