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JULY, 1907

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Between Ourselves

A Chat with the Editors and Managers of GOOD HEALTH

GOOD HEALTH MAGAZINE IS PUBLISHED FOR philanthropic purposes only. To a great many readers this statement will convey pothing new. But there are a large number-those who have joined the Good HEALTH family within the past few months, for example—who know little or nothing about the purposes or policies of the magazine, more than they have gathered from perusal of the

few issues they have received.

There are so many new members in the family that we shall probably print in the near future an illustrated history of Good HEALTH, which will be of interest to both old

and new subscribers.

GOOD HEALTH IS IN ITS FORTY-THIRD YEAR, and, as stated, it has been devoted all this time to the philanthropic purpose of spreading health reform. And philanthropy usually means something more than the accomplishing of a good purpose. It means that in the accomplishing of that purpose sacrifices have been entailed. Is this true of the Good Health magazine work? Let us see. For nearly forty-three years this organization

zation, under one form or another, has been publishing a magazine ranging in size from a small, unpretentious sheet, in the begin-ning, to the magazine it is to-day, containing from eighty to one hundred pages each issue. During that entire period Good HEALTH has at no time yielded a profit to the private interests of any individual or organization. More than that, it has received the untiring efforts of scores of conscientious workers, for which absolutely no payment has ever been rendered or required. Many writers whose work is well paid by other magazines contribute their articles to Good Health, queither asking nor expecting compensation, beyond that afforded by the knowledge of the good they are accomplishing.

GOOD HEALTH is entering many new fields. It is bringing the truths of hygienic reform before a greater number of strangers. In this way it is entering upon broader possi-

bilities.

A GREAT MANY PEOPLE, NEVERTHELESS, GET the idea that the magazine's philanthropy extends to every bne but the subscriber. The subscriber, they contend, pays full price for a magazine which, in comparison with other magazines costing a dollar a year, is but half size. But is this true?
A man of wide experience, howbeit a

stranger to the magazine, happened into the

Good Health office a week or two ago. He picked up the current copy and examined it carefully. Then he exclaimed, "How in the world can you people put out a magazine like this for the price you receive?"

And this man understood the publishing business. The situation is this: The general magazines, such as McClure's, Everybody's, The Ladies' Home Journal, attain enormous circulations. Some print hundreds of thousands of copies. This means a great decrease in the cost for each separate magazine printed. But more important than that, it opens the way for a vast amount of advertising at high prices, and this is what really pays the cost of the magazine and the enormous profits many publishing houses are

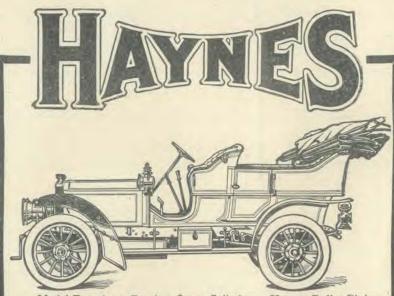
There are not nearly so many people interested in health reform as there are in stories, patterns, and fancy work. That goes without saying. So a health magazine, naturally, must have a smaller circulation, and that means opportunity for less advertising returns and accordingly a smaller income. But more than that, as has been repeated several times, for every advertisement actually printed in Good HEALTH there are probably two refused, so again the possible income from this source is divided by three.

EVERY READER MAY HAVE A PART IN THIS philanthropic work if he chooses. The simplest way is to help in the work of adding other subscribers. Another way is to purchase all health books, tracts, and supplies through our supply department. This de-partment is one of the sources of revenue from which the magazine derives its sup-The supply department has on hand or can obtain anything in the lines mentioned that can be desired. A great many valuable articles are listed in the supply catalogue, which is sent free to Good Health readers on request. The same catalogue tells how numerous articles of value, including many health books and supplies, may be obtained as premiums for new subscriptions.

It is the purpose of GOOD HEALTH to make

this supply department one which will be able to meet the subscriber's every need along health lines.

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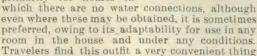
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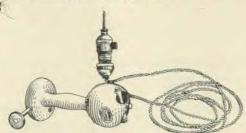
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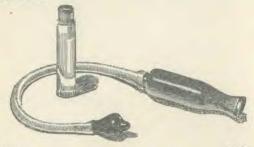
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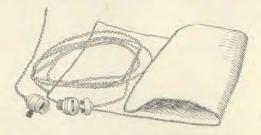
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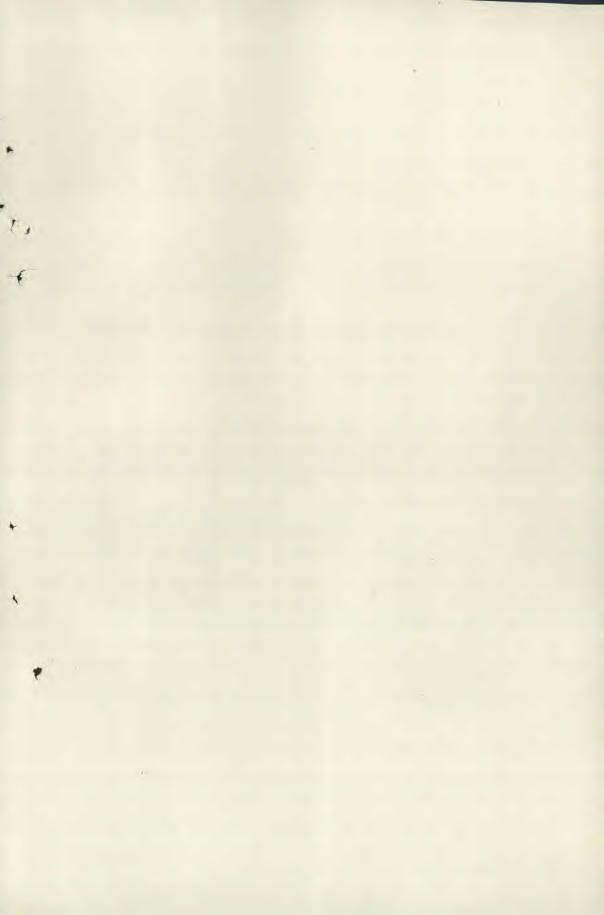
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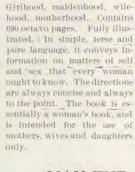
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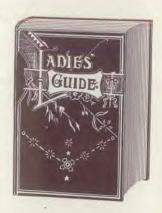


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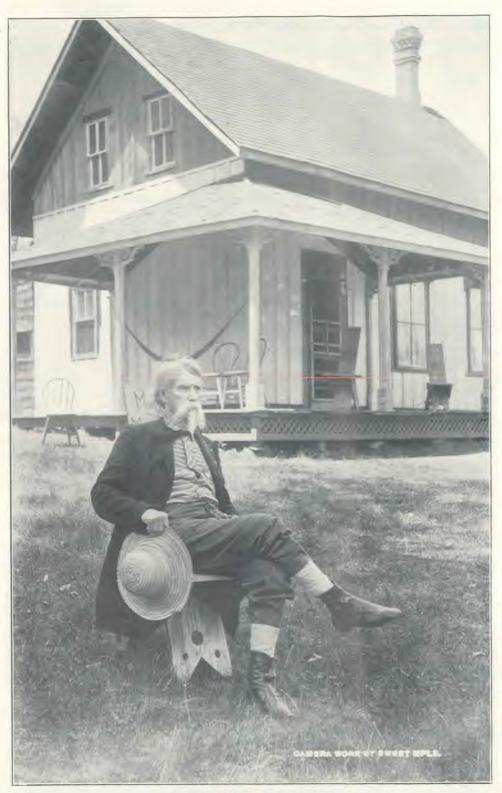
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Cold is a universal antidote for heat, as heat is for cold. We use water to put out fire, and fire to warm water. There are no disorders or morbid conditions which so readily respond to the use of water and which are so radically

Water an Antidote for Hot Weather

BY J. H. KELLOGG, M. D.

and readily benefited by hydriatic applications as those especially incident to hot weather. The public generally have found this out, and hence it is the custom for those who can do so to leave their business, and make a trip to the seaside to get the benefit of the hydrotherapy of the sea. Sea bathing, which from

the most ancient times has been considered a great health promoter, is nothing more or less than an empirical, unscientific, but nevertheless wonderfully beneficial form of hydrotherapy. And what is true of sea bathing, is true of bathing in natural sources of water of all kinds.

We must remember, however, that what is good for one person is not always good for another, and perhaps as many are injured as are benefited by sea bathing. Very frequently people are made sick at the seashore because they overdo. They spend hours in the surf, and when they come out, they are completely exhausted. If one is unaccustomed to sea bathing, the bath at first should be not longer than two or three minutes; the next time it may be a little longer, and may be gradually lengthened until a stay in the water of ten or fifteen minutes is safe. If the water is rather cold, one should remain in it not more than three or five minutes; if it is very cold, not more than five or ten seconds, —just long enough to get the impression of cold upon the skin. If one exercises vigorously by swimming hard, he can stay in longer. Fleshy people can remain in the water longer than thin people, and adults longer than the very young.

The benefit to be derived from sea bathing is due, first of all, to the low temperature of the water, the temperature of sea water seldom being above 70° or 75°. Water at that temperature very rapidly extracts heat from the body, so that if a person remains in water at that temperature a very great length of time, he loses considerable heat. So large an amount of heat might be carried off in this manner that one would suffer from shock, and the next day he might feel a great depression as the result. Fresh water is usually warmer than salt water; but in sea water reaction occurs more quickly than in fresh water, so that one may remain in it a little longer.

In connection with sea bathing there is a reaction from cold,—the reaction which follows the extraction of heat,—then a second reaction, in which there

is an elevation of temperature, the resistive forces generating an extra amount of heat. It is from this reaction that the great benefit of sea bathing is derived, and not from the salt in the air or in the water, as some people think. The benefit comes from nothing else but the cold water.

The cold water at first abstracts heat, then the body rallies its resources, sends blood to the skin, warms it, and produces an increased amount of heat. With this increased heat production there is an awakening and a stirring up of all the vital functions of the body.

Cold has the marvelous property of increasing vital work of all kinds. When cold water is applied to the skin, impulses are sent inward that awaken every organ of the body. Let us see what takes place: When a person dashes into cold water, the first thing he does is to draw a deep breath; the lungs swell out, a deep inspiration is taken, and the heart begins to pound away with wonderfully increased vigor and strength. This deep breathing is purely involuntary, just as is the jerking of the leg when the bottom of the foot is titillated; it is one of the functions which is carried on independently of the will.

This deep breathing increases lung activity, thus bringing in more oxygen; it increases heart activity, so that the blood is circulated with greater force; hence we have more blood and purer blood carried into every tissue of the body. The result is a stirring up of the bodily forces and a distribution throughout the system of a larger amount of highly vitalized and oxygenated blood.

Another very important function, the activity of which is increased by the application of cold or by sea bathing, is the digestive process, by which food is absorbed and taken into the blood. The application of cold water to the skin has the effect to stimulate the secretion of gastric juice. Every one knows the effect of taking a walk on a cool morning,—what an appetite it gives. The liver and the salivary glands are stimulated in the same way. All the organs of the body perform more effective work and a larger amount of it under the application of cold than otherwise.

Sea bathing, then,—the exposure to cold water,—puts one on a higher plane of life. This is a great advantage in hot weather.

At times in summer the heat is depressing. A hot wave comes over a great city, and the death rate increases there; perhaps in a week it will become three times what it was before. The babies die off with terrible rapidity; hot weather out-Herods Herod in the slaughter of babies. Cold weather can not be compared with hot weather in this respect. In cold weather one can shield the infant with clothing, keep it indoors, and put more fuel in the stove; but in very hot weather one can not get rid of the hot air, nor can he get away from it. He can not get ice enough to cool it off. Consequently, when the hot wave comes, every one is subject to its depressing influence. The babies suffer most, but adults often suffer greatly. Sometimes the mortality is enormous.

But cold water comes in as an antidote for these bad effects. One can not cool the atmosphere, but he can get into a tub of cold water. Man can live in water if he can not live under it. Did it ever occur to you that we are practically amphibious animals? We think in water, digest in water, make bile in water, and make blood corpuscles in water. All the living, active processes of the body take place under water. Our bodies are about nine-tenths water, and so we live in water; and if on a dangerously hot day, one can get into a tub of tepid water (92°-94°), he can live there.

AMOS BRONSON ALCOTT

The Life of Another Member of this Famous New England Family Is Discussed by His Kinsman

BY WILLIAM PENN ALCOTT

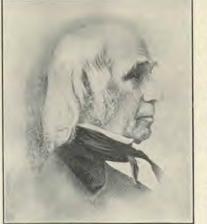
THIS name brings before us a remarkable man. In many practical ways he was a reformer far in advance of his age, and much may be learned from his life, as elsewhere more fully recorded. In this article we can but outline his career. Our biography runs from

Wolcott, Conn., to Concord, Mass.; from Nov. 29, 1799, to March 4, 1888. Spindle Hill, a breezy district of the former town, was the early hive of the Alcotts. Here "Captain John" settled in 1731. His great-grandson was my father, Dr. William A., concerning whom I refer the reader to Good HEALTH for 1899. Another greatgrandson in another line from the same settler was our subject.

Amid the shining ledges of mica schist, stimulated by the aroma of the sweet-fern bushes, broadened glimpses of far-away lands and water, grew up this student, helping his father cultivate an ungenerous soil or shaping from the hard laurel stems pinions for the clock-making of adjoining towns. The neighbors were all farmers. With other crops they raised flax, which the women spun and even wove; hence the name of the district. In this family the father was a quiet, skilful, successful man, who, in those primeval days, "always lived in a frame house." Anna Bronson, his wife, of a prominent family in Waterbury, was a leader in the culture and refinement of Wolcott. "Amos," as our boy was called in earlier life, was the oldest of eight children who survived infancy. Next came a brother, and then twin sisters, Pamelia

and Pamila.

Thus Bronson Alcot: was one of a large family, had excellent parents, a mother superior in every way, and was educated to industry. In his father's shop he became skilful in the use of tools. Till thirteen he attended "the district school as it was." Scarcely "three r's" were taught. Amos and his cousin William, being ambitious for a higher education,



Bronson Alcott

studied evenings, holding their slates on the left arm and grasping in the hand a potato wherein a tallow candle was stuck. This was their "potato gospel"!

Books were scarce, and these cousins scoured the region to borrow them, and finally started a small library. They became very familiar with the Bible and with "Pilgrim's Progress," a great favorite with Bronson Alcott and his children, Louisa reading it through almost every year. The father thought it had more influence on him than any other book—though one can not see how. His wise mother suffered Amos to practice writing with chalk on her kitchen



Early Home in Wolcott

floor, and he became an expert in penmanship. After he was thirteen he shared the instructions of neighboring clergymen for a few terms—his only college. Most of their higher studies these boys carried on by reading and mutual help. When twelve, Amos began a diary, which he kept till aged a habit he taught his children, and one of value in various ways for us all.

The blue lowlands were ever beckoning him. He early began to visit towns nearer or farther away. He saw the buildings of Yale College, but he was one of a large family, and he was content. At this time many Connecticut young men went South "to peddle wooden nutmegs and silver lanterns." In the fall of 1818, young Alcott joined the flight, hoping to teach school in Virginia. Finding no opportunity, he became a peddler of small wares and was quite successful, com-

ing home in May with a substantial balance for his father. During this trip he purchased almanaes for threepence and sold them for nine. No lack of worldly wisdom in those days! He spent the summer of 1819 helping his father build, partly on the site of his birthplace, the house shown in our illustration.

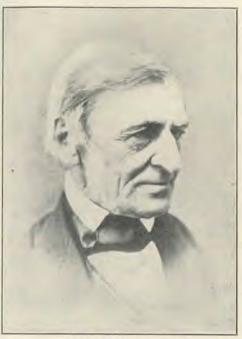
For about five years Bronson Alcott spent the cooler months in Virginia and the Carolinas with his cousin William or other relatives, as merchants afooto. His suave manners opened to him the houses and the libraries of the rich and hospitable planters, and he spent many stormy days and not a few fair ones over the treasures of literature and philosophy, and also made abundant sales. He was prepared by inherited nature and his mother's influence to catch most readily the elegant manners of the "first families," and they became

characteristic of the man. An English gentleman, having met Bronson Alcott in 1854 and learned of his early life, could scarcely believe it true. "Why," said he to F. B. Sanborn, "your friend has the most distinguished manners—the manners of a very great peer,"—an Englishman's highest compliment. Let instructors of the young remember that courtesy is one of the leading elements of success.

Young Alcott made these years of travel, ended by southern malaria, a real university education. Now followed his school teaching. Late in the fall of 1823 he became a pedagogue, serving in the vicinity of Wolcott three months at ten dollars a month and board. This was the lowest for a man, but soon he commanded the highest positions in the region. In 1828 he began a private school in Boston. After three years there, he taught two in Germantown, Philadelphia, then in Boston again from 1834 to 1839, when his school work mainly ceased. The last five years were given to the famous Masonic Temple School, out of which came two books: "Conversations with Children on the Gospels," and "Record of a School," both compiled by Miss Elizabeth Peabody, his assistant. This lady, with another assistant, Miss Margaret Fuller, became very eminent in the realms of education and letters.

Pedagogy owes a great debt to my father and Bronson Alcott. Space does not permit me to show how meager, unwise, and repellant was the common school instruction of a century ago, even in Connecticut, which boasted of superiority. Following in the line of Pestalozzi, these young men, as practical teachers and then leaders, revolutionized educational ideas. They introduced most of our modern methods.

These new ways gave offense to many. It will be observed that Bronson Alcott's schools were of short duration; even the last was a success little more than two years. Besides the changes in methods, he had developed unpopular philosophical and religious views. Worse still! he had become a vegetarian about 1835, and invited Graham to lecture in Boston and even before his



Ralph Waldo Emerson

school. He tolerated a black pupil and let her come till only she and his own daughters were left. Persecution had now become quite acute. His expenses had been heavy. The costly furniture, library, and apparatus of this last school were sold at auction. He was left broken in health and bankrupt in purse, with a wife and three girls. Emerson and a brother-in-law befriended him, and he entered on his career as a philosopher at the age of forty.

In 1839 Mr. Alcott had married a gifted and singularly devoted lady of



Old North Bridge and River, Concord, Mass.

an eminent Unitarian family. For an account of their children and homes see the sketch of Louisa Alcott in March Good Health, and Mrs. Cheney's life of that authoress. The fullest account of Bronson Alcott's career is in Sanborn and Harris' Memoir.

When about sixteen, the two cousins, of whom I have spoken, were confirmed in the small Episcopal church to which their mothers belonged. The boys alternated in reading service, and Bronson meditated "holy orders." But as life went on he drifted from his early faith until he wrote: "I am dissatisfied with the general preaching of every sect and with the individuals of any sect." Yet he died a nominal member of his mother's church, and there seems always to have been in his heart an optimistic faith in God. Apparently his master passion

was to do good. Even when very poor the family entertained every vagabond who asked help, sharing scanty meals, and on one occasion taking the smallpox as compensation. On one snowy Saturday evening they divided their meager stock of wood with poor neighbors. The father said: "Give half our stock and trust in Providence; the weather will moderate or wood will come." The mother with a babe in her arms laughed and answered in her cheery way, "Well, their need is greater than ours, and if our half gives out, we can go to bed and tell stories." A little later, most remarkably, a new supply of fuel came. Thus the older girls felt that their father was surely a seer.

Gradually Bronson Alcott surrendered his heart to every scheme that promised help to poor humanity. He became an advocate of all reforms, however unpopular. Interested in the communities at Brook Farm and Hopedale, he did not join them because in diet and other lines they were not sufficiently radical. For two or three years, with the aid of generous friends and by labor of brain and muscle, even with spade, hoe, scythe, and ax, he kept his family together. Then, through legacies and other providences, he was able to fulfil the dream of years and make his one visit to England.

Several English thinkers had seen his educational views in the books already mentioned and opened correspondence. One of them erected Alcott House near Richmond as a Pestalozzian school. A few such friends gave him a cordial welcome in May, 1842. Carlyle treated him with scant courtesy, as reported, and, walking with him among the fine houses of London, rudely said: "Do you see this, man? This has stood for a thousand years, and will stand when you and your dom'd Potato Gospel have gone to the dogs."

Having spent nearly six months with his English friends, Alcott brought back to Concord Chas. Lane and his son, also H. C. Wright, hoping with their help to found in the spring a social paradise for the world's redemption. Meanwhile the tax collector called and Alcott refused to pay his bill, because he would not support a government so false to the law of love. Finally he was lodged in jail, but a friend paid his tax before night. Sheriff Staples, when asked about it, said, "I vum, I believe it was nothing but principle, for I never heared a man talk honester."

Henceforth Bronson Alcott's life is identified with Concord, Mass., a quiet old village, amid varied scenery. In several different houses he dwelt till at last he found a resting-place amid his loved ones in Sleepy Hollow. Walden Pond, Concord River, as pleasant and winding as Shakespeare's Avon, the Virginia Meadows and Cæsar's Woods, the Cliffs and the Battle Bridge, Revolutionary memorials and philosophic "Newness," Emerson as a neighbor of neighbors, Thoreau, Hawthorne, G. W. Curtis, Sanborn, last but hardly least, farmer Bull, who originated the Concord grape, a fair soil to cultivate, inexpensive old houses, nestled at the foot of wooded hills, to beautify and surround with fruit trees and arbors, shrubbery and flowers,- all this was waiting for him. Here in "plain living and high thinking," in bosom fellowship with Emerson, we leave him for the present.

(To be concluded.)



Concord Meadows

THE SACREDNESS OF SLEEP

The Importance of Nature's Great Restorative Agency to Physical Health and Well-Being—a Few Common-Sense Rules

BY ROSE WOODALLEN CHAPMAN

THE commonest blessing bestowed upon mankind, and the one most despised, is that of sleep. We begrudge the hours spent in unconscious slumber. We rejoice over the time that we can steal from the period which should be spent in sleep. We speak admiringly of Cæsar and of Napoleon, because they had cut down to a minimum the time devoted to sleep. Every ambitious business man endeavors to emulate their example. If he reaches the point where he apparently can get along with six hours of sleep, he prides himself on his achievement, and exerts himself still harder to reach the traditional four.

Having given over the hours of daylight to strenuous endeavor, we require the hours of darkness to furnish us with opportunities for amusement. The mother does her reading at night; the young college student gets his lessons by the traditional candle, sometimes sitting up all night to prepare for his examinations, and boasting about it as a great achievement.

Like many other blessings in life, the value of sleep is comprehended only when we are deprived of it. Let a man suffer from insomnia for a few nights, and how earnestly he longs for the blessing of sleep. No effort is too great for him if it will result in the return of that which he formerly despised; and if his efforts are unavailing, what revilings does he not cast upon the Fate which has thus deprived him of what he now feels to be his rightful inheritance?

Yet, in all probability, he has only him-

self to blame for the condition in which he now finds himself. For years he has rejected Nature's offering of this sweet restorative. He has refused to listen to her warnings that in time his transgression of her laws must result in punishment. It may be he has witnessed the uncomfortable experience of some other reckless fellow-being, but has with audacious confidence continued his lawless course of life. Now that sleep is denied him, however, he comes to a realization of what it means to man. He is willing to lay aside his pleasure, his business, his fondest ambitions, if he only can win once more the nightly experience of restful sleep. Now sleep becomes sacred in his eyes. The greatest crime that can be committed against him now is to disturb his slumbers. The whole household learns to respect his time of sleep, and he, in turn, exercises a new consideration toward the sleep of those around him.

It should not be necessary for us to be deprived of a blessing in order to comprehend its value. We have been endowed with reasoning powers, which should enable us to understand for ourselves, after a little thoughtful consideration, the reason and the value of this period of unconsciousness.

"I can not afford to take a map in the daytime," said her visitor in reply to the young mother's apology for her delayed appearance.

"I can not afford to do without one," was the quiet reply. "I feel that I owe it to my husband and my children to be as serene in spirit as possible, and to remain young in my feelings just as long as I can. I know of no surer prescription for this than a daily nap."

"But I have so much to do," her visitor protested.

"Yes, I know it is hard to drop the work and go to bed each day; but I have discovered that it pays me better to follow this plan than to wear myself down to nervous irritability by continued work."

This mother was quite right in her attitude. Every family would be better off if the housewife would eliminate the unnecessary tucks and ruffles, and give herself a little time each day to bodily and spiritual recuperation. How many women are there, I wonder, who really know what it is to take a complete rest? I have seen so many whose idea of resting was to work on some taxing bit of dainty embroidery that I am beginning to think women do not know the meaning of the verb "to rest."

Women care a great deal about their looks, and rightly so. They will purchase fancy cosmetics; follow all sorts of ridiculous rules for preserving youthfulness of face and figure; put themselves into the hands of so-called experts, whose purses must at the same time be well filled; and persistently neglect the one safest, surest, and easiest preventive of old age. What causes wrinkles? Simply having the face in certain expressions so continuously that the circulation is interfered with along certain lines, which, in time, become evident to the eye. A complete relaxing of all the muscles of the face for a short time each day, relieves this constant pressure, and puts off to a far distant day the time when these marks of age shall become apparent. What causes loss of color? Lack of vitality and imperfect circulation of the blood. A nap each day affords additional opportunity for worn-out tissue to be replaced, for the vital tone to be restored, and for the blood to circulate freely and rapidly.

It seems a loss of time at present; but in the years to come, when her contemporaries are being obliged to forego the customary activities of life, because of failing strength and vigor, the mother who has found time for a daily nap will discover that she has in reality been storing up time and strength for the future. She has not used up each day all the energy her system could command, but has put by a little for the future, and now, having reached the years of advancing maturity, finds that she has a well-filled bank account upon which she can draw.

Business men, too, ought to know the efficacy of a few moments' complete oblivion each day. A man of apparently wonderful acumen and endurance was asked by his friends for the secret of his success. To their surprise he replied, "Learning the value of sleep."

In response to their looks of inquiry, he continued: "As a young man, I was very ambitious, very high-strung, and determined to get to the top of my profession in the shortest possible time. I worked early and late, priding myself on giving the minimum amount of time to sleep. As the months went by, however, I discovered that my judgment was not so good as it had been. I could not keep my thoughts concentrated for a long enough time to think out matters of importance as carefully and as thoroughly as they required. I was getting irritable, and the success of my business demanded from me unfailing courtesy to all whom I met. I had always been a light sleeper, and I was finding it more and more difficult to lose myself in slumber.

"I thought the matter over very carefully, and decided that it was essential to the fulfilment of my ambition that I should cultivate the ability to sleep. So I set myself to work. I gave myself as long a night's rest as I possibly could; but as my business often necessarily broke in upon that, I trained myself to take naps under any and all circumstances. At first, it was impossible for me to drop off when in a sitting posture; but in time I learned to sleep on a train, to sleep when sitting at my desk, and I have often known myself to take a short nap standing up.

"The result was so apparent that I have continued the custom ever since. I generally secure one or two short naps on my way to and from business, while those around me are reading the newspaper or discussing politics; and I find that it is very frequently in the moments when I am just waking from such a refreshing season that I arrive at the most important decisions concerning my business. To my mind, a sufficient amount of sleep is an essential to a successful business."

This lack of appreciation of the value of sleep has resulted in a complete failure to recognize its sacredness. We find evidences of this on all sides. Those who pass down the corridors of a hotel after the hours of sleep, show no appreciation in voice or manner of the fact that all about them are individually seeking for the comfort that comes from unconsciousness. Loud talking and laughter is the rule, not the exception; and should any one feel impelled to play on the piano at the hour of midnight, none of his companions would deem his actions out of place. At summer resorts the same spirit is apparent, the feeling seeming to be that as long as one is enjoving himself, no one else need ask for any consideration.

I have often seen the same spirit manifested in private homes. I remember on one occasion visiting in a family where the mother had been for some months a semiinvalid. She retired. under the doctor's orders, at nine o'clock. At eleven o'clock her daughters returned from some frolic with a party of friends, whom they urged to enter the home with them. At once the house was filled with gay voices and laughter, and in a few moments one of the daughters went to the piano and struck up a popular air. At once all joined in, singing at the top of their voices with youthful enjoyment. For half an hour the singing and laughter continued. Then the guests left, well content with themselves and commenting upon their hostesses as most delightful and entertaining girls. But I could not help thinking of that mother in her up-stairs room, awakened, it may be, from the first sound sleep of the night, to toss for the remaining hours in a vain search for a return of slum-

The girls were thoughtless, you say. True; and who had allowed them to grow up in this thoughtlessness? The mother was, in reality, suffering from the result of her own neglect. In earlier years she had been so well and strong that she had not felt the need of extra sleep, nor had she seen the value of teaching her children to regard it as sacred. Yet, to my mind, this is one of the important lessons that should be inculcated in the minds of the young. From very earliest years, the children should be made to understand that sleep is so essential to the welfare of every individual, that it should be broken in upon only for the most important reasons. The knowledge that some member of the family is trying to secure a few moments of sleep should be sufficient to render his room sacred from approach and the house free from all unnecessary noises.

How may this lesson be taught? In the first place, by respecting the sleep of the child. The little baby, to whose development sleep is so essential, ought never to be wakened to minister to the pleasure of friends or the pride of parents. That the baby is asleep should be enough to quiet all requests for its appearance. If friends are inclined to be hurt by a refusal to show them the charms of the infant, better by far to let them remain piqued than to disturb the slumbers of the helpless little one.

When the child grows old enough to understand what is said to him, he may have a thorough explanation of the reasons why we sleep, and of its value to us. Sometimes a child of four or five objects to a daytime nap. To understand why this is asked of him will help him to take it cheerfully; and if he sees that mother takes her nap as well, he will be still more ready to follow her example.

In another way may her nap also be made a means of impressing upon him the sacredness of sleep. One little boy of four, when he saw his mother lie down for a nap, would tiptoe to her side, place over her the usual covering, and then softly steal away to his quiet play, holding up a finger of warning if any one ventured to enter the room.

It is especially important that our children should be taught the value of sleep, for during their years of growth and development it is most essential that they should give nature the maximum amount of time for the necessary building and repairing of tissue. It is sad to consider how universal are becoming children's evening parties. It seems to be thought necessary for children to ape their elders, and, because the young people clamor for it, the parents unwisely give way.

If the children are kept to early bedtime hours during their early school years, when they enter the high school, the parents are apt to become more lax in this respect. They are supposed to need more time to study, and, feeling themselves "young ladies and gentlemen" now, they clamor for late dancing parties. Yet this is the period when loss of sleep is most disastrous. The tremendous physical changes which are taking place in the organism of the boy and the girl, make a strain upon their physical and nervous vigor which may be too much if there is not plenty of opportunity for rest and recuperation. Moreover, the mental demands are now increased, and the boy and girl are expected to study as never before. There are many who hold the theory that recuperation from mental work may be gained by physical exercise. Such, however, is not the case. It is a fact that physical exercises use up brain power, so that the followers of this theory are adding to their brain-fatigue rather than subtracting from it. To be sure, physical effort does not break down as much brain material, nor the same kind, as does mental work. It is also true that a proper amount of physical exercise is essential to the well-being of the individual. But this exercise must not be taken after the point of exhaustion has been reached as the result of severe brain work. The proper proportion must be maintained between mind and body, and allowance made for the fact that the use of both makes a demand upon the brain.

It is a question that parents would do well carefully to consider, whether or not their growing boy and girl are securing enough sleep. It may be necessary to exercise some parental authority to prevent the consuming of valuable vital forces in the dissipation of evening amusements. For the sake of the child's future welfare, however, the parent must in this matter remain firm.

It is not alone that sleep affords an opportunity for physical repair, that it should be regarded as sacred. With the exigencies of each day, there comes a certain nervous strain, a nervous tension which must be relieved. This relief can be brought about only by a complete relaxation. For this reason, if it

is not possible to lose oneself in sleep, it is yet advisable to take time each day for a few moments' complete relaxation, and the one who can find unconsciousness by so doing, opens her being to the influx of divine powers. She puts herself into communication with the universal spirit, and receives from it more than we can realize. For this reason it seems to me we should regard as sacred—

"Tired Nature's sweet restorer, balmy sleep!"

Beneath the full midsummer heat
Are stores of golden, garnered wheat;
Are billows of unripe oats, gray green;
Are armies of corn blades, trenchant, keen.
The killdeer flutes his mournful cries;
The hawk in charmed circle flies.
Berries ripen beneath the leaves,
And warm and still are the musky eves.
The moon shines bright in the cloudless sky,
The crickets sing and the soft winds sigh.

-Sara Andrew Shafer.

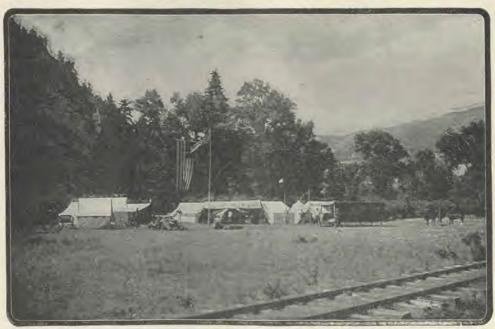
MAIN REQUISITES FOR CAMP LIFE

Some Very Valuable Suggestions as to Equipments, etc., for Those Who will Live in Tents a Part of this Summer

ONE of the most pleasurable and at the same time beneficial ways to spend a summer vacation, is in camp life among the mountains, on the shore of some lake or river, or amid the charms of wood and field.

A season in a crowded hotel at some fashionable resort is incomparable with blessings of life. There has always been a close association between health and a natural life. The world-a-weary needing respite from the toil and turmoil of this strenuous age, can find it no more surely than in the simple life of the tent-dweller.

Such life need not prove an expensive



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A Mountain Camp

the restfulness, the invigoration, and pure enjoyment to be obtained by living thus near to nature. Man began his career a dweller in the open air. A booth of green boughs amply provided for any need for shelter, and Nature awarded him in full returns for his labor, providing him the best of foods and an abundance of health to enjoy the

outing. It demands no elaborate wardrobe. There need be no weary days of shopping and sewing in preparation beforehand.

An idea of the general requisites needed, one may gain from the following lists, which we quote from a booklet*—"Camping in the Rocky Mountains": "Outfit for Four Campers: Two wall tents, 12x14 with flies; four cots; eight blankets; four puffs; four pillows with cases; four camp chairs; one camp table; one four-hole camp stove and three lengths of pipe. A teakettle, saucepan, dishpan, water bucket, one-

and about two and a half feet apart; then two short pieces are laid across the head and foot. This makes the frame of the bed. A layer of branches on the ground serves as springs, and on this, balsam tips, laid shingle-wise, complete the bed."

Courtesy of Denver & Rio Grande Ruitroad Co.

Outdoor Living on the Home Grounds

half dozen each of teaspoons, tablespoons, knives, and forks, the same of plates, cups, and saucers; two salts; one sugar bowl, one cream pitcher, one baking dish. Two candlesticks, one lantern, one wash basin, one ax, one bread knife, one vegetable knife, one can opener."

Many would prefer to make their beds of balsam boughs. A camper of experience tells how this is done: "Two slender logs, cut from fallen trees, are placed lengthwise in the tent, Tables and seats may be constructed of materials found on the ground. A fireplace, four big flat stones, one at each corner, across which two five-foot logs are laid parallel to support the cooking utensils, may dispense with the need of a stove. Packing boxes are useful as cupboards, and one sunk in the earth in some moist place serves an excellent purpose as a refrigerator.

As to what to wear, an authority says, "First, last, and all the time wear your old clothes."

Suggestive of what articles are most generally needed, the appended list may aid in right selection, although much will depend upon the probable climate conditions of the camp selected:

"Ladies: A complete golf or bicycle suit. An extra skirt, dark and heavy, walking or bicycle length. Two pair stout, heavy-soled shoes. One pair canvas leggings. Medium-weight underwear. A jacket, golf cape, or wrap. A common shawl or blanket for shawl use. A soft felt hat. A wide-brimmed straw hat. A heavy veil. One pair extra heavy gloves. Two or three pair of gloves. Several outing flannel shirt-waists. One leather belt. Handkerchiefs, hosiery, neckwear, etc., etc.

"Also a stick of camphor ice in case of chapped lips; and on account of the bright sun a pair of blue, smoked, or colored spectacles often adds to one's comfort.

"Gentlemen: One or two business suits of strong texture and medium weight. Or one business suit, and a golf or bicycle suit. Two suits of medium-weight underwear. Two light-weight, light-colored flannel shirts. One heavy blue flannel shirt. One sweater. Plenty of socks, the kind you always wear. A medium-weight overcoat. Two pair stout shoes. One pair hip rubber boots. Couple of old soft hats.

One stout leather belt. One pair of canvas or leather leggings. Plenty of handkerchiefs. One bandana handkerchief for the neck. Mackintosh or waterproof coat (not absolutely necessary, but convenient). One pair of heavy gloves. Two dozen large, strong safety pins."

It adds, of course, to the enjoyment of one's vacation to camp in some locality amid new scenes, away from home, but this is not an absolute essential; for one may derive all the benefits of fresh air by living in the same simple manner in a tent under a tree in the backyard.



Courtesy of Denver & Rio Grande Railroad Co.

Primitive Tent Life

Better Than Civilization

Before the Spaniards discovered the Ladrone Islands, in 1620, their inhabitants believed themselves to be the only people on earth. They were deprived of almost everything that would seem necessary to the average civilized man. There were no animals on the islands except a few species of birds, which were wholly unmolested. The people had never seen fire, and at first they could hardly imagine its effects and use.

Fruits, nuts, and vegetables, just as Nature furnished them, were their only means of subsistence. They were exceedingly well built, vigorous, and could easily carry a weight of five hundred pounds on their shoulders. Disease was unknown to them, and they all lived to a ripe old age. Many among them had crossed the century mark and had never had the slightest sickness.—
The Clinic.

HEALTH AND THE PUBLIC SCHOOL

I.

The System

BY CARRIE L. GROUT

IF there is one institution above an-I other of which Americans are proud, it is the public school. They do sometimes grumble at the taxes, but, on the whole, willingly provide that the school buildings shall be imposing structures, and that the average run of teachers shall receive wages equal to those of ditch diggers. They send their children gladly, sometimes to have them safely out of the way for a good part of the day, but mostly expecting them to learn something which will be useful to them in after life, content if Johnnie and Mary are promoted as often as their schoolmates. It is usually considered a bore to visit school, and Johnnie, at least, would prefer to have his parents stay away, because parental visits commonly mean trouble of some sort.

The public school is doubtless open to criticism, but it is by no means a dead or dying institution. Its methods are changing bit by bit, so that the program of to-day is quite different from that of a generation ago, and it is probably as good altogether as a consensus of opinion among the educators can make it, backed up by the money they are able to coax out of the tax-payers.

A noted doctor reminded us many years ago that the whole boy goes to school, but parents rarely expect the teachers to concern themselves with any part of him except the brain, and as the parents themselves are too often ignorant of the first principles of wholesome living, the boy gets top heavy, or fails as a student, runs away, or gets expelled and goes at something else, which

so often proves to be annoying or even dangerous to the community at large.

There is something of so-called physical culture to be occasionally found in the schoolroom, but it is too often halfhearted and inadequate. Athletic ambition is sifting down from the university to the kindergarten, but it is unsystematized and uninstructed, often brutal and dangerous. There is also a wide-spread effort at industrial training, domestic science; i. e., sewing and cooking for the girls and wood work for the There is drawing and music quite generally, which we may call the training of the eye and ear, but all these things are as yet without coordination or correlation with the book work, and the parents who got this training out of school, or not at all, do not consider these things as essential to education, and it is most difficult to get the means for their support. The physical training formerly received in and about the home is now rendered impossible by lack of space. Sawing wood is unnecessary by reason of the use of coal and gas as fuel. Errands are now done by telephone instead of the boy. Sewing and cooking are done in a wholesale way and sent to the house by delivery wagons, and if the normal activities of the child are not directed and encouraged by the school, they will either dwindle and die or become perilously misdirected.

The majority of teachers are not yet trained for this service, and the majority of tax-payers do not begin to realize that schools are cheaper at any cost than prisons and hospitals. Parents who complain that their children do not get on to suit them, seldom stop to ask themselves if they have furnished good material for the school to work upon, or whether they are helping or hindering the work of the school. If Johnnie and Mary are dull and languid and backward, it is commonly attributed to overwork, with a convenient but culpable blindness to the candy store so often next door to the schoolhouse, or the deadly cigarette consumed in the alley on the way to and from school. The evening parties or the unnatural stimulant of the cheap theater are enough to render ineffective the best effort of any school. One boy of eleven told me with evident pride that he had seen "The Count of Monte Christo" four times. needless to add that he and the school did not agree at all.

A mother told me in a boastful way how much reading her little daughter of twelve did. I asked what sort of reading; the mother did not know, but said the school had an excellent library. I saw the little girl's teacher and was told that she had taken several positively indecent books from the child.

Evidently education will never be an all-round, effective, useful process until we understand it better and cooperate as parents and teachers to carry it on.

I have been visiting schools for several years, from Eastern Pennsylvania to California, and should like to tell the readers of Good Health some things I have seen, in the hope of inciting a desire for a true education.

(To be continued.)

Unclean, Unsanitary Refrigerators

BY JOANNA WHITE, M. D., In "Good Housekeeping"

CEVERAL cases of diphtheria developed simultaneously in one family. The source of their infection was obscure, no other cases having been reported to the board of health for several weeks. The house was well built, comparatively new, and in a healthful location. The nurse who was retained, told me on my next visit that it would be impossible for her to remain, as she would be afraid to eat anything kept or prepared in the house. To prove that she was not unreasonable, she asked me to step to the refrigerator. Upon opening it, considerable foul odor escaped, but the condition of the whole interior was simply appalling. It was covered with a half-inch coating of thick slime.

It seems incredible that any housewife, barring the most grossly ignorant or careless, could allow such a condition to arise or exist. This is only one case among many where I believe the specific poison of contagious and infectious diseases has been harbored in unsanitary refrigerators. It is easier to overlook neglect and carelessness in the very poor; though even here there is no real excuse for it. Even the upper class is not exempt from the same sort of neglect. A busy society or club woman, leaving the care of home entirely to servants, need not expect the busy maids to take all the intelligent care which is so very essential.

Generally speaking, it is in the homes

of the middle class, where only one, or possibly no maid is kept, that the most favorable hygienic conditions exist.

There are so many so-called germ diseases, where uncleanliness is the direct cause of infection, that the fight for hygienic conditions should never be abated. The refrigerator alone is the source of much evil; therefore even the busy housewife should pay particular attention to its condition at all times and to the food which goes into it.

If the refrigerator is a movable one, do not place it in the darkest and most out-of-the-way corner. Put it where there will be light and some circulation of air, preferably out-of-doors, on a piazza. For the ordinary house, where there is no special provision for drainage, perhaps the safest way is to use the old-fashioned pan, which should be emptied and scalded twice a day. If the refrigerator is "built in" and a piped drain provided, this pipe should not be connected with the waste or soil pipe, or sewer, or discharged upon the ground, but should be connected with an open and water-supplied sink. The connections should be short and disconnected

from the refrigerator. All drainage pipes should be flushed twice a week, with either a solution of chloride of lime, washing soda, or strong ammonia.

The ice compartment and storage part should be thoroughly cleansed twice a week. All removable parts should be taken out for greater ease in cleansing. All parts should be washed in good soap and hot water, with a clean cloth or brush, then thoroughly scalded, after which it is well to go over the lining with some chloride solution, a caustic cleaning solution, or a strong solution of borax in water.

Watch for the iceman and have ready a good pitcherful of clean water with which to rinse the ice. It will take only a moment and your care in cleansing will not be defeated.

All food should be inspected and prepared for storage. Keep the milk supply in closely covered receptacles, preferably glass. Butter should also be covered, as these two foods are very apt to absorb impurities. Most fruits and vegetables can and should be washed and wiped or drained before storing in a refrigerator.

THAT was a wise and good preacher who said, "Young women, be brave; young men, be pure." The common teaching is that men are dishonored if they are not brave, and women if they are not pure. The good abbot knew that this was so no less the other way. We talk of fallen women; but there is never a fallen woman without a fallen man, and often, indeed, the fall of the man is to a depth far deeper than is hers. The law of purity binds every child of God, be it son or daughter. "The temple of God is holy, which temple ye are," was spoken to men no less than to women. And again, to

men came the burning words: "What, know ye not that your body is the temple of the Holy Ghost, which is in you, which ye have of God, and ye are not your own?" Cruel, cowardly, base is the social law which excludes from kindly fellowship the woman who has fallen once, perhaps deceived, perhaps maddened by starvation, perhaps undone by love, yet receives on an equal footing, in drawing-room and in boudoir, the man who has fallen, in the pure selfishness of lust, and helps to keep women down in the mud, hardened, hopeless, reckless.— Richard A. Armstrong, in "The Light."

Health and Money

THAT good physical health promotes mental and spiritual strength and purity is well known. The Public Ledger Philadelphia, lately said:

"The first wealth is health.' In glancing through the literature of admonition and exhortation one may read the most eloquent of homilies directing people to be cheerful, to be hopeful, to be good-natured, and to avoid peevishness, irascibility, melancholy and despair; but the task of being hopeful is a very difficult one to accomplish when the circulation is sluggish, the digestion bad, the lungs wheezy, the heart weak, and the physical being relaxed and inefficient.

"Nine-tenths of the misery of the world and half of the crime are due to the fact that the bodies of men and women are not in prime health. A majority of the worry in the world is perfectly useless. People borrow trouble by cherishing forebodings of evil to come. When the evils do come, the sufferers are generally surprised to find that they surmount the troubles somehow, and then discover that the most forbidding feature of the affair was the senseless worry in anticipation of the troubles.

"People in good health do not have these useless worries. They do not sap their strength and vitality by permitting the canker of worry to invade their lives. They smile at the world and the world smiles back at them. 'Trifles make up the happiness or the misery of life,' and the man who is healthy in mind and body dismisses the trifles without an effort."

BISHOP FALLOWS ON DIET

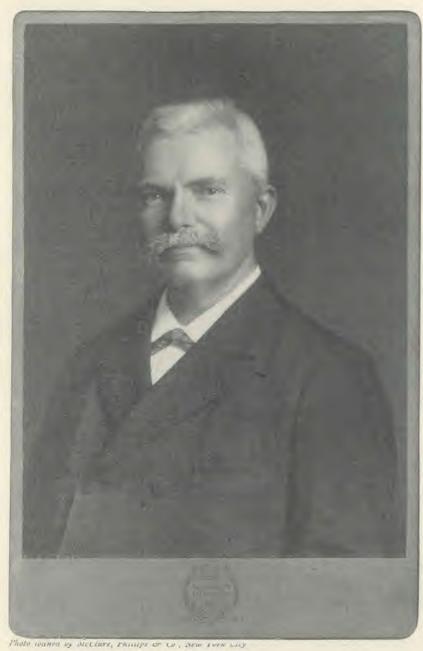
"It all depends on what one eats," says Bishop Fallows of Chicago. "You can make a person good or bad, nervous or steady as a pendulum, honest or dishonest, dull or clever, simply by seeking the right kind of diet.

"If every child were scientifically fed, we would have no moral baseness, no mental depravity, no spiritual ignorance.

"A child that is fed improperly will live improperly. Virtue can be fed into a growing child, and by the same reasoning, vice can be fed into children through their stomachs."



Sunset on the Water



Charles Wagner

SIMPLE LIFE BIOGRAPHIES

Charles Wagner

BY GEORGE WHARTON JAMES

IT is appropriate that the first of my series should be upon the man who coined the phrase, "The Simple Life." For, as is well known, Charles Wagner, the great Protestant and liberal preacher of Paris, France, wrote the book with that title, which, being recommended to the American people by President Roosevelt, soon had a large vogue.

Many preachers are advocates and exponents, but comparatively few really live the truths they advocate and expound. Charles Wagner is not only an advocate and expounder of "the simple life," but he actually lives it. His is, in deed and truth, a simple life.

Born in the home of a humble pastor in Alsace, his earlier years were vexed with the fierce conflict that raged between France and Germany for the possession of Alsace-Lorraine. The severance of these provinces from France led to a conflict of ideas and thoughts no less violent than had been the war. Old standards were attacked; men took hold of the most negative and revolutionary thought. His father and the school to which he belonged, stood for the most exclusive, most conservative, traditional orthodoxy, while on every hand others taught the greatest freedom of thought. As a lad he thus learned to think for himself, and when, eventually, the call came to him to remove to Paris and begin to preach, he came into that center of Roman Catholicism as a selfthinking, liberal-minded Protestant, As I once heard him say: "When the time came for me to speak, I found myself an isolated man. At the beginning of my ministry, I had no place, no pulpit. I was 'a voice crying in the wilderness,' but I remained true to the inner voice,— the voice within myself. When I was tried and sad, I went away alone; then I heard the voice speak plainly: 'Trust thyself,' as your own great Emerson has said. Then, too, came the words of that Greater One than he: 'Fear not, I am thy helper!'

"I continued to speak as I felt; and soon the barrenness about me became fertile and living."

Yes! friends began to gather around The hearts of men and women were stirred by his living, simple, pure message. They flocked to his standard: not in large and overflowing numbers, but slowly, surely, and increasingly. They were earnest souls, and they found in what this simple, earnest man said to them the things they had long hungered and thirsted for. Little by little his power grew, his congregation and influence increased. France was under the depression the war had left her in. She had not yet forgotten the defeat of Sedan, the terrible fratricidal struggles in the streets of Paris, the wild and frantic endeavors of men who were desperate and determined to make great and rapid changes in the political government of the country. Wagner saw that changes must come from within, not without. He preached the doctrine that France must be regenerated, not through new governors or new laws, but by the personal regeneration of Frenchmen. The established religion. even of the new republic, was Roman Catholicism, and for centuries it had been the religion of the people and was

hallowed to them by the countless thousands of sweet memories and devotions, self-sacrifices and heroisms. For it is only the most bigoted and ignorant of sectarians who can deny that men and women of all faiths often rise far higher than their creeds, and live noble and sublime lives,-lives of devotion to God and man. But Wagner and his friends wished to see religion a personal affair of such deep moment that no state help for the churches would be needed or required. And he and others working in the same line soon banded together, first in spirit, then in flexible organization, and became known as "The Young France" movement. From the start Wagner was a leader,-a quiet, but tremendous force, controlling by sheer power of simple, direct thinking. He organized classes for instruction in connection with his church work, had the young men meet to discuss active, living problems, and taught them at the very outset the first principles of proper discussion; viz., "Proclaim fairly and fully your own ideas, but respect the feelings of others."

His friends began to urge him to write his thoughts, so that others might be influenced by them, and at last he wrote an impassioned, living, breathing book entitled, "Justice," which showed that we are dependent one upon another, no matter how diverse our opinions and lives may be, and that, therefore, we must be true and just in our dealings one with another.

Then, in succession, he wrote "Youth" and "Courage," both of them trumpetcalls to the duty of living the highest life that we can see or picture.

One day, in the ordinary course of his duty as a pastor, he married a young couple, a chambermaid and a workman. After he had given the young couple his blessing, he began, as was his wont, to

talk to them about how they should start life together. The maid was in the employ of one of the most noted families of Paris, and the young lady of the household was present at the wedding. Her own wedding was to take place a week later, and, to his intense surprise, Pastor Wagner was asked by this young, rich, fashionable girl to perform the ceremony, and especially urged to repeat the words of advice he had given at the preceding marriage. "What," said Mr. Wagner, "do you expect me to talk to you in that fashion before the two thousand guests whom you have invited to be present at your wedding ceremony? It is impossible." Then the father of the bride interposed, and it finally came to pass as they requested.

At the ceremony the vast audience, brilliant, wealthy, refined, aristocratic, listened with the greatest attenion, and the next morning Mr. Wagner received from one of the leading publishers in Paris a letter asking him if he would write for immediate publication a book upon the lines of his talk. That letter was the immediate cause of the writing of "The Simple Life." When President Roosevelt read it, it made such a profound impression upon him that he openly urged the American nation to read it. Hundreds of thousands of people did so, and then there grew up a large demand to see the man and hear him speak. An invitation was sent over to Mr. Wagner to come and lecture in America. He learned the English language in order to do so, and I had the pleasure on that visit of spending two whole days with him in closest intercourse. In those two days I watched him and studied him from every standpoint, with the result that I was fully assured of the deep sincerity and absolute simpleness of the man's life and character.

One who was present told me of an incident that occurred a day or two after his landing in New York, was dining in the home of one of the wealthy society people who felt called upon to do him honor. The lady of the house was elegantly and expensively gowned in the highest fashion, décolleté, and bedecked with many precious stones; the flowers used on the table would have been a delight to a whole ward of a large city hospital; the silverware and cut glass were valuable enough for a prince's ransom; and behind the chair of each guest stood a flunky in livery whose sole duty was to see that the wants of his particular guest were attended to. During the conversation the hostess turned to Pastor Wagner with the question, "Well, Mr. Wagner, how would you apply the principles of the simple life to a home like mine?" Without a thought of consequences, with a directness that only a simple soul could have vielded to, he said, looking at the liveried servants who stood around the table: "Well, madam, I suppose de first ting I should do would be to consider these men behind our chairs. They are our brothers, yet they can not take part in our conversation or share our food. I should say to them, 'Come, brothers, bring up your chairs and sit down."

Class and position have no place in his mind. Men and women are men and women, brothers and sisters, with God as the Father of all. That is his doctrine, and he lives it as well as preaches it.

Every time he passes a scavenger in the city of Paris, he raises his hat to him, and once each year he invites to his home the men of that class who live in his immediate neighborhood. One day one of his little girls said to him: "Papa, why do you raise your hat to that nasty, dirty man?"

"I do that man honor, my darling," was the reply, "because he is willing to be dirty and do his disagreeable work that we may be clean."

When he asked a blessing as we sat at breakfast at the table of Gustav Stickley, the editor of the *Craftsman*, he said with a joyous reverence: "We thank Thee, O Source of Life, for the lovely gift of bread. It comes from Thy sunshine and man's labor. May we eat it in love and thus possess Thy sunshine within our souls! Amen."

His soul is simple as that of a little child; hence all children are attracted to him and love him. I have seen him go into a strange house and in fifteen minutes have the little ones on his lap telling them stories of rabbits or birds or other children. He lives a spontaneous, natural life, healthy, happy, frank, and free. He is outspoken to a degree that is offensive to some people, but there is nothing hidden behind his words but good-will. And he is never offended at people's speaking of and to him as freely as he speaks to them. The doing of a thing himself is proof that others have the right to do the same or similar things. It is in this simple directness that his power lies. He is pure and good, hence he dare let all the thoughts and feelings of his inner heart find fullest expression.

The world is cursed with complexity, artificiality, pretense, and sham. It will never be blessed until we live simply, naturally, honestly, frankly, spontaneously. This is what Charles Wagner does. Hence his act, as much as his writing, is a true exposition of "The Simple Life."

My Summer Outing

BY LAURA E. LOCKWOOD

THE last of April I found my plans for the summer had miscarried, and I should be obliged to spend my vacation months at home, instead of in the mountains of New Hampshire as I hoped. I mastered my gloom and set about considering what I might do that would take and keep me out-of-doors a part of each day, that would furnish the interest of novelty, and that might be done here where I had lived for years. To be sure, I could tramp miles each day over the good roads and through the beautiful woods; but I knew the woods and the roads-they were associated with many a meditative walk when things were decided or found too knotty to decide. I wanted something new, something that would absorb me and banish last year's teaching, and give no hint of that which was to come. There was tennis, of course, and I enjoyed tennis, but partner and opponent were planning to flee at the last roll-call. I should love horseback riding, but that I could not afford.

As I meditated on the inconvenience of economy, my ear caught the sound of a hoe. I went to the window to see what old Mrs. Maybury was doing now. Hoeing as usual, and this time getting ready for her second planting of peas. How she works! and how bright are her eyes as she nods her greeting! Straight the inspiration came. I would garden for my summer outing. I would at least discover what my neighbor found so enthralling; it would be new and out-of-doors and cheap.

The thought at once came that I possessed no land, which fact might prove a difficulty. I would rent; that was what a man would promptly do.

Perhaps I could rent a part of the vacant lot across the street. To decide was to act, and by the morning post I sent a letter to the judge in the distant city who owned the vacant lot. In a brief time came the reply from the courteous judge; he did not care to rent, but he would be delighted to lend his vacant lot for a garden, and he wished me success. This kindly beginning augured well, and, besides, I was developing a healthy interest in my project.

Then came difficulties. Provident Mrs. Maybury said it was too late to begin a garden, especially in soil that had not been tilled for years. I had to walk miles in search of a spading man. I had to ask (and I learned humility in asking) the sixth before I found one who was not employed on somebody's already begun garden. When my man at last appeared, the first of May had arrived. He cut through the long grass with much difficulty, and laboriously turned over the heavy sod. At the end of half an hour he struck for a lighter job. "No man can't spade that; you'll have to have it plowed." After all my plucky search and waste of time! My courage was up, and two days later I had a man and horse and plow. combination in the course of an hour and a half turned the tall grass under and lifted up the dark, rich earth. The ground looked formidable, but I would have no more men in my garden; it took too much time and humiliation of spirits to induce them to come. I bought a hoe, cut off an old dress to eight inches from the ground, and set my alarm clock. I was hoeing away by six o'clock in the morning-a few awkward strokes at a time, for I was making the acquaintance of my tool, and then a long breath of the delicious morning air, and a look all about at the lovely green growing things. I had never before known this time in the morning was so full of character and charm. was a bit stiff, and somewhat sleepy in my class-room those first days of early rising, but I was alert and interested in every clod in my garden. The garden was now the talk of the neighborhood. The click of my hoe would call the six-thirty risers to the windows, whence they pelted me with remonstrance, derision, and advice. I took this as part of the fun, for I was growing to enjoy my early rising, and the muscles of my back were gaining a strange feeling of life and pleasure.

The planting was a great excitement. As I walked home from the morning's teaching, instead of puzzling over questions of character or pedagogy, I meditated what to plant and how. Should I plant the rows longways or crossways? What should go in first? How were particular things planted, in hills or in trenches? My mother and aunt were mildly tolerant, but consistently unhelpful. I went to Mrs. Maybury, whose respect I had won by my acquired skill in hoeing, and confessed my ignorance. She most generously opened to me her store of knowledge gained from years of growing gardens. I learned where to buy seeds and what kinds; what to plant first; to mix the earth with fertilizer; to soak the seeds overnight and sprinkle them with sulphur for the destruction of bugs; to plant the small things on the east side: to plant a few beans or hills of corn this week and a few next. I did not aspire to potatoes until she said no garden could claim respectability that had not potatoes. As the result of many consultations my

garden went in in this way-longways, because it would be pleasant to see the rows from my opposite window: a row of lettuce, a half row of spinach and the other half of carrots, a row of dwarf peas and then one of bush beans, two rows of potatoes, one of tall tomatoes, and lastly two rows of corn. That was the main plan, but there were trimmings and extras: a short row of onions between the corn and tomatoes because they were soon grown, pulled up, and out of the way; a large aspiration in two hills of melons and two of squashes among the corn; and finally a few lentils, just to see how they grow. Across the front I planted a row of dwarf nasturtiums to give color, and to repeat the note, a row of sunflowers across the back.

How did I find time for all this hoeing and planting while college work was still in progress? That was easy enough—just cut out the unpleasant or unnecessary things, receptions and the like, and do what interests and delights. Any one of us can so order our days if the motive is sufficiently strong.

After the planting came the weeding and the watching for the first shoots, later the noting of the day's growth. Then there was the triumph of bearing my first onions and peas and beans to the kitchen, of presenting my scornful friends with plates of crisp lettuce and savory spinach. I have now pulled up my pea vines to plant more spinach and a few turnips. I am watching eagerly the graceful corn change itself into blossom and fruit. I am waiting for my fine tall tomatoes to turn their great clusters from green to white and then to red-I never knew before that tomatoes succeeded from color to color. Some one asks about potato bugs. Yes, I have coped with that problem by the aid of a little Paris green and much killing of large and small. My vines are big and strong and fresh, and I have not objected to the bugging. Drudgery is only a way of looking at things; interest transforms the once-called unpleasant.

My nasturtiums are a golden glory and my sunflowers getting ready. The morning song of the birds has changed in fulness and character; the air is not quite so crisp, but it is laden with the rich scents and sounds of deep summer.

But perhaps the best result of all is that I know more of Nature and her ways; I feel more closely akin to her; I have purer blood, finer muscles, and a stouter heart. I do not regret my enforced stay at home, for a garden is as fascinating to learn and conquer as a new mountain.

LET not thy table exceed the fourth part of thy income. See that thy food be unadulterated and of good quality, fuller of substance than thou art. Be wisely frugal in thy preparation and freely cheerful in thy entertainment. Too much is vanity; enough, a feast.— Sel.

"Oh for a seat in some poetic nook, Just hid with trees and sparkling with a brook!"



How to Keep Young

BY ALICE PARKER

FROM the title, one might think this article is intended especially for women, but the recipes given herein will prove quite as valuable also to men.

To begin with, we are born, each of us, with just so much vitality. The amount of this vitality nobody can fore-tell. A variety of prenatal circumstances, dating from generations back, determines its state, great or small. It is exactly as if Nature, at the birth of each individual,—man, beast, or bird,—had placed a certain sum, not drawing interest to our credit, on which we must draw all our lives for our life. When the last of this sum is used up, then we die, and we live only as long as this stock of vitality holds out.

Immediate prenatal culture of the most hygienic kind is a great factor in determining the amount of vitality the newborn babe shall be endowed with, and helps to offset to a great extent any deleterious inheritance from generations past.

Now, after we are once born, and can not possibly increase this bank account of Nature's, the best and only thing to do is to make it last just as long as possible. Thus by holding off old age do we keep young, as old age is simply the sign of a lessening of the amount to our credit in Nature's bank. Some of us are older at twenty-five than others at forty. Some of us have seemed to grow old far too quickly, and then by a careful economy we are kept from failure.

There is so much in life that demands our strength and energy, so much of ourselves that we must give, though knowing that our resources are being taxed, still we must give out, of our sympathy, of whatever we are called upon to give, that it seems almost absurd to talk of husbanding our vitality. "It might be easy enough," I hear some one say, "if we always lived secluded, easy lives, with no cares or worries, with everything provided for us, and for every one else for that matter." That is just the point: how to remain young, how to delay the growing-old stage until the last possible moment, and yet live unselfishly in the midst of life.

There is much that we can do. We can save a great, great deal of our involuntary energy which at the present time most of us waste to a frightful extent.

Involuntary energy, according to George Propheter, the celebrated writer and lecturer on natural hygiene, is the energy that goes to the digestion of food, to excreting effete matter, ridding the blood of toxins; in a word, our internal processes, over which, relatively speaking, we have no control.

The amount of involuntary energy that goes to the digestion of a meal in order that the tissues of the body may be replaced, and also in ridding the body of unclean matter that we may keep our machinery going, is appalling. And the disregard of the value of fresh air to our lungs, its value as a cleansing agent for the blood, thereby saving the other excretory organs so much extra labor, and, therefore, saving so much energy, life, vitality, is positively sinful.

Perhaps it seems extreme for me to write as if fresh air were not appreciated at the present time, with all our freshair sanitariums, cold-air cures, and the like. It is appreciated as a cure, but it is as a preventive that we should look at it.

And here it is that our faulty economy comes in. The woman who goes out to drive every day for an hour or two with a corset on or clothing so tight that she breathes only with the upper part of her lungs, and who could not, even if she would, take full, deep breaths, gets just half as much benefit, or less than half, from her airing as if she took deep, full breaths all the time, thus taking in as much air as she possibly can.

People who are employed indoors all day long, say it is almost impossible to get much, if any, fresh air, but the truth is they don't get half that they might under the circumstances. There is hardly any one who is not able to be out-ofdoors at least a small part of every day, going to and from work or in the evening after work hours. Now then, as soon as you step out-of-doors, make up your mind to pack your lungs with just exactly as much air as they can possibly hold. Be as greedy as you want to be on the subject of air, you won't be depriving any one. Never mind if it has to be night air; it is immeasurably better than stale day air. Open your windows wide at night, beginning gradually if you are not accustomed to it. Go to the expense of extra bedding, but do not starve your lungs any more than you would starve your children.

If people who are obliged to be much indoors will give the matter careful thought, they will be sure to discover that they can give themselves a great deal more fresh air than customary by simply taking in all they can get whenever they have a chance, but this can never be done if a corset or clothing of any sort that restrains the movement of the diaphragm is worn. By giving the lungs more work you will let up on the other excretory organs, thereby saving involuntary energy.

And now comes the question of sa-

ving involuntary energy in our digestive processes. If we could only reverse matters and overbreathe and undereat, just as we overeat and underbreathe, what a change there would be! What a beneficial change, with absolutely no element of danger in it, as we could not possibly overbreathe and would not be likely to undereat.

There is one great means, which has been until recently almost totally unappreciated, by which we can help wonderfully in preventing too great a draft upon our bank account of health: that is, thorough mastication. Any intelligent person will readily see what a tremendous saving of labor for the stomach and intestines it must be to have the food chewed to a liquid and to have the saliva, that important digestive fluid, so thoroughly mixed with it that really half the work is done before the food reaches the stomach, "The hard labor of digestion," Dr. Dewey calls it, and really it is about the hardest physical work that we do, especially in these days of quick lunches, though there are still many people who eat deliberately and yet who do not know the first thing about thorough mastication.

If in three or four hours after a meal you feel "faint," you can be sure that only a very small part of that meal has been digested, either because the food was impure or through imperfect mastication or through having eaten when the body was not in need of nourishment. A tremendous drain will be made upon your vitality through the excretory organs in getting rid of this surplus matter which could not be made into pure blood.

To facilitate the thorough digestion of a meal, eat only when really hungry, eat only those foods that are pure and that agree with you, and chew everything to a finish! If you have not exercised sufficiently to be hungry when mealtime comes, don't eat. Wait until you have an appetite; don't be afraid, you will not be likely to starve.

Those who can not exercise as they would like to, must eat less—that is all there is to it, but don't forget that deep breathing is one of the grandest exercises known. You can lie flat on your back and do the finest kind of exercising with the diaphragm, the benefit of which will be felt by every organ in your body.

I have not space to dwell upon the value of a serene mental attitude, but don't forget about it while practicing the other things. And the benefit derived from fasting or from skipping a meal occasionally is immense.

If we would all practice the simple rules given above, not only would life be prolonged, but we would enjoy it now and every day a thousandfold more. Our complexions would remain fresh, our figures slim, our eyes bright, our heads clear, and our hearts light, much, much longer than is usually the case.

If we laughed more, we should all be happier and healthier.

True, we are a busy and a very practical people, and most of us probably find more in this life to bring the frown than the smile, but at the same time it

is a pity that we do not laugh more that we do not bring ourselves to the laugh, if need be.

Physicians have said that no other feeling works so much good to the entire human body as that of merriment.

As a digestive it is excellent; as a means of expanding the lungs, there is nothing better.

It keeps the heart and face young. It is the best of all tonics to the spir-

It is, too, the most enjoyable of all sensations.—Sel.



Cherries are Ripe

The Unsanitary Kitchen Sink

BECAUSE the kitchen sink is a common receptacle for things good, bad, and indifferent, and because it does not receive the thorough cleaning which it should, it may easily become a menace to the health of the household. In small houses and the city apartment its use extends from being a place in which to prepare food, to being the most convenient receptacle for all kinds of waste. A case of diphtheria was directly traced not long ago to a kitchen sink where the brush used to swab the pati it's throat had been taken to be cleansed and antiseptics had not Leen properly used. A year had elapsed between two cases, the first occurring in an apartment above, the kitchens being directly one above the other and the waste pipes connecting. In what mysterious way the bacteria of disease had been carried through the pipes and up out to the trap of the other it may not be difficult to conjecture.. A careful investigation proved without question that it was through the medium of the grease-laden sink to its trap that the offending mites reached the sensitive throat of the second case. The pipes which led to the sink were found to be perforated by corrosion, and a thick scum lined every part of the plumbing. Parts of the pipes had become so thin that the finger easily depressed the lead. The woodwork around the sink was saturated with grease, and the odor was so foul that the plumber covered his mouth with a bandage while tearing it away. This condition may seem to be extreme, but the plumber assured the writer that it was a common one with old plumbing and that even in a modern plumbed house he often found sinks and traps lined with hardened grease.

An epidemic of sore throat recently went through a family of three adults and two children, which upon investigation was traced to a perforated sink waste pipe. A bit of the greasy substance which adhered to the sides of the sink, upon being placed under the microscope, revealed a seething mass of unfriendly organisms, some of which had reached the throats of the victims and set up an irritation.

Ignerant of the laws of sanitation, careless maids look upon the kitchen sink as a "happy stream" to carry away every known and unknown quantity which may come their way to be disposed of, and its waste pipe is a neverfailing means of getting rid of much troublesome refuse. Periodical cleansing may be indulged in, but as for keeping it as clean as other parts of the kitchen equipment every day of the week and every hour of the day, that is never considered for a moment.

Yet here we find fruits and vegetables prepared, and food left standing to cool while waiting to be served. The daintiest preparations come in contact with the effluvia which must, of necessity, be continually arising from the grease-laden sides and pipes of the sink. When laundry work is done in the kitchen, the dust of body emanations is added from the soiled linen to what is already in the sink. Laundry pipes generally connect with sink pipes and the waste water from both join forces, the grease from the sink forming an adhesive surface to which much floating matter clings.

The sink need not be a menace if properly cleaned. Nothing short of scrubbing down after every dishwashing should be considered sufficient. A ready-at-hand, long-handled scrubbing brush, dipped in a solution of soda water and applied in and around the surface of the sink is but the work of a moment and will keep the oldest sink clean if it does not make it shine. It will keep soil pipes and trap free of grease as far as the cesspool, or waterway, neither of which would ever become clogged but for the accumulation of grease. A strong caustic alkali proves very effective. Eternal vigilance is the only safe course.

Wooden sinks should be removed and replaced with a porcelain or iron sink, back and sides. Modern plumbing uses iron instead of lead pipes almost entirely, and yet, by care, the old lead ones may continue to serve. Frequent flushing of the sink is an absolute necessity for perfect freedom from danger. It should be done with very hot water, but followed by a little cold water, lest the heat cause a vacuum and draw the water off the trap, leaving it open for gases to escape through the outlet of the sink. This treatment should be applied to every fixture in a house after the cleansing process.—M. V. Shaler, in Good Housekeeping.

"When the heat like a mist veil floats,
And poppies flame in the rye,
And the silver note in the streamlet's throat
Has softened almost to a sigh,
It is July.

"When each finger-post by the way
Says that slumbertown is nigh;
When the grass is tall and the roses fall
And nobody wonders why,
It is July."



A Summer Cottage on-the Lake

The Cat a Dangerous Pet

△ S Mr. W. B. Thornton well says in a late number of Golod Housekeeping, the cat is an untamed beast. Dogs can be taught gentle and reliable manners; not so the cat. However affectionate and gentle the pet feline may be indoors, the treacherous, sneaking, blood-thirsty disposition that she brought



from the forest takes possession of her, and no birds' nest with nestlings within her reach is safe.

The U.S. Department of Agriculture declares that cats kill on an average fifty birds a year where birds are accessible to them.

But the house cat is open to a still more serious charge. Dr. Caroline A. Osborne, of Clark University, has been making a careful study of the cat and

its habits, and found out a lot of things which will be most unpleasant news for the owners of feline pets.

Dr. Hodge deduces some most important and practical facts from Dr. Osborne's interesting observations. says:

"A child comes down with diphtheria or scarlet fever. 'Where could be have caught it? He has not been out of the house.' He has played with the cat that has been mixed up generally with other cats, rats, and mice, and spent its nights going into all the filthy places within ten blocks. The cat may have diphtheria and no one even think to look at it.

"Many contagious diseases are common to both man and the cat. often makes a sick cat as dangerous a source of contagion as a sick person; even more so, in fact, on account of the way children handle their pets, and because the presence of disease is not likely to be known and recognized as quickly as in the case of a person. Diphtheria, whooping-cough, grip, eczema, ring-worm, are some of the diseases in which the contagion has been definitely proved to have come from the cat and caused the disease in man.

"Even if the animal does not contract the disease, her manner of life, contact with rats and mice, habits of snooping about in all manner of filthy places, even the licking of the fur, by which any infectious matter eaten or clawed over, is likely to be smeared over the whole animal, renders the cat one of the most common and likely means of spreading infectious matter. Boards of health recognize this, and are often obliged to order the killing of cats to prevent the spread of epidemics.

"Practically every cat that comes into the laboratory is diseased. Almost all are mangy, all of any age have catarrh of the nasal passages, the sinuses being filled with pus. Tubercular lungs are not uncommon, and all cats are more or less infested with fleas. The discovery of Dr. Carraquillo, recently announced,

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of the germ of leprosy in the flea, is pointed out as a possible explanation of the alarming epidemics of leprosy in flea-infected localities, and again brings the cat under suspicion as being one of the main factors in dealing with this problem.

"A great many people, especially in the West, are being well instructed in modern bacteriology and in reasonable and intelligent cleanliness. One of these goes into a grocery store and sees a cat lying on the counter, turns around and goes out and never enters that store again; goes into a meat shop and finds a cat about, possibly on the cutting block, goes out never to enter that store again; goes into a boarding-house, sees a cat, looks further; goes into a drygoods store, finds a cat on the softest sofa, smells cat, or sees cat hairs about, moves on.

"Cats are, practically all of them, alive with fleas. Dr. Howard, of Washington, speaks of scraping fleas' eggs from the dress of a lady who had held a cat on her lap. Decent people do not wish to carry home fleas' eggs with their goods. Most cats have mange, and we want none of their scabs about. Most New England cats have catarrh and are constantly sneezing."

The above facts ought to be sufficient to condemn the cat as a safe companion of a family of little ones. The cat might be eliminated from human society without loss to the world. It is an element of danger which can not be ignored. The cat is monstrously out of place in a hospital or any other institution for sick folks, and should be ruled out of the home.



The Shack

The Walking Club



A GREAT GEOLOGIST

How John Muir, the World-Famous Scientist, Lives the Simple Life, and His Own Idea Regarding It

MONG the world-famous scientists of the present time the name of John Muir stands with the highest as a geologist and naturalist. Mr. Muir has studied the earth and its inhabitants, big and little, animal and vegetable, as few living men have done, and his studies have led him to recognize the great truths underlying the "return-to-nature" movement which at the present time is interesting so many intelligent men and women. In a recent conversation with a representative of The World's Work, Mr. Muir related some interesting experiences which teach several very practical lessons, as will be readily discovered in

the following paragraphs, quoted from the November number of the excellent magazine named:

"Home is the most dangerous place I ever go to," remarked Mr. John Muir, the famous geologist and naturalist. He was on the train returning from Arizona to his home in Martinez, Cal., after the earthquake. "As long as I camp out in the mountains, without tent or blankets, I get along very well; but the minute I get into a house and have a warm bed and begin to live on fine food, I get into a draft and the first thing I am coughing and sneezing and threatened with pneumonia, and altogether miserable. Outdoors is the natural place for a man."

The train was passing through the

San Francisco Mountains in north-Arizona. The conversation western was left to Mr. Muir, in acknowledgment of his superior powers of entertainment and instruction. It drifted naturally on to mountain tramping, and Mr. Muir told of a walk he took around Mt. Shasta several years ago. "I was stopping at Sisson's," he said, "and one morning I thought I'd take a walk, so I put on my hat and started. As I went down the path to the gate, Mrs. Sisson called after me to ask how long it would be before I would be back. 'O, I don't know,' I said, 'not very long, I guess.' 'Will you be back to luncheon?' she asked. 'I expect so,' I said, and went on. After I had got along a bit I concluded to walk up to the timber-line and back again. So I started off up the mountain side. I soon found that I could not go up direct, as I had expected, as there were long gulches full of snow ahead, around which I had to make détours before I could proceed. I kept repeating this performance, in-

tent on getting up, until it was growing dusk before I realized what time it was. But I was used to being caught out, so I simply got on the lee side of a big log, made a fire, and went to sleep on a pile of leaves.

In the morning I soon reached the timber-line. Then I noticed some new snow formations near the summit, and I concluded to go on up. I made the ascent and got back to the timber-line again by about nightfall of the second day. It was snowing, so I made a bigger fire and lay up close to

my log shelter. When I awoke in the morning I was covered with snow, but I wasn't uncomfortably cold. But I concluded I would work down to a little lower level and continue on around the mountain. By this time I began to feel a little 'gone' from lack of food.

I've often spent two days without anything to eat and even felt better for it; but the third day is getting toward the point of being too much. As I tramped along I thought I saw smoke. I stopped and watched it for a long time to make sure it wasn't a ribbon of cloud. When I was sure it was smoke, I worked toward it, and in about an hour I came on a Mexican sheep-herders' camp. After a lot of signaling and gesticulating, I made them understand that I was very hungry, and at last they got me up a meal. I spent the night with them, and the next day continued my march around the mountain, taking some bread and coffee from the camp. For three days I went on without seeing anybody. On the seventh day I completed the circuit of the mountain, and about noon I sauntered up the walk to Sisson's, as if I had just come in from a half-hour's stroll. Mrs. Sisson saw me and called out, 'Well, Mr. Muir, do you call this a short walk? Where have you been? I've had a guide out search-

Courtesy Home Magazine, Indianapolis.
"Seeing only what is fair. Sipping only what is sweet."

ing for you.' 'O I just took a little walk: I went around the base of the mountain. But I got back in time for lunch, didn't I?' I had been gone seven days and had walked a hundred and twenty miles.

"But that is the way to enjoy the mountains. Walk where you please, when you like, and take your time. The mountains won't hurt you, nor the exposure. Why, I can live out for fifty dollars a year."



Reduction of Temperature in Fevers

BY J. H. KELLOGG, M. D.

E LEVATION of temperature is the most striking characteristic of fever; hence the treatment for the reduction of temperature is a matter of primary importance. It should be known, however, that fever is not necessarily destructive in its influence. It is only when the febrile process rises to an extreme degree that it becomes in itself harmful. Careful investigations have shown that fever is a part

of the curative process, aiding in the development of neutralizing substances which destroy the germ poisons,—really the chief source of danger.

It is practically impossible to reduce the temperature of the fever patient to the normal without the use of measures so extreme as to endanger the patient. The reason of this is, that in the state of fever a new standard of temperature is established which is considerably



The Wet-Sheet Pack-First Step

A blanket is placed on one side of the bed, over which the cold wet sheet is laid, partly spread open, ready for the patient to be rolled onto.



The Wet-Sheet Pack-Second Step

The patient raises his arms when one side of the wet sheet is brought over the body under the arms and around one leg. The arms of the patient are then lowered to the sides, and the other half of the sheet snugly wrapped around the body over the arms and around the others leg. A cold compress is placed around the head.

higher than the normal standard. The normal fever temperature has been determined to be from 101° to 102° F., or about three degrees higher than the temperature of health. As long as the temperature does not rise above this point, the curative process may be considered as proceeding in a natural way toward recovery. When, however, as is generally the case in fever, the temperature rises higher, it is an indication that the disease process is progressing with dangerous intensity, and effective measures should be applied at once, and continued until the temperature is brought within the normal fever limit.

The Wet-Sheet Pack.—Without doubt the wet-sheet pack is the most generally serviceable and efficient measure which can be used for the reduction of temperature. Sheets and water at ordinary air temperature are always available. What is known as the cooling pack should be applied. The patient is wrapped in the wet sheet and covered with a single blanket. As soon as the sheet is warmed, it is replaced by a freshly cooled sheet, and this again by another as soon as it approaches the temperature of the skin. This process is continued until the sheet is no longer quickly warmed, or until the temperature of the blood has been lowered, as indicated by shivering.

In obstinate cases it may be necessary to continue these cooling packs for two or three hours, or even longer. Generally, however, five or six changes will be sufficient to lower the temperature one or two degrees, or below 102° F.

In employing the wet-sheet pack, it is important to remember that the pack should be carefully covered by at least a single flannel blanket. No attempt should be made to increase the cooling by allowing evaporation from the surface of the sheet. This produces slow chilling of the surface and contraction of the blood-vessels, the opposite of which is desired. The sheet should be covered so that reaction will take place. With the reaction, the surface vessels are dilated, and the blood is thus brought

the third, perhaps, fifteen minutes; the fourth, twenty minutes; the fifth may require a still longer time, which will indicate that the effect desired has been obtained.

If the warming of the sheet does not occur quite promptly, reaction may be encouraged by rubbing the surface of the sheet with the hands placed beneath the blanket, but the sheet should never



The Wet-Sheet Pack-Third Step

The patient is carefully wrapped in the blanket. The temperature of the sheet is ascertained from time to time by slipping the hand under the blanket. The cold compress to the head should be changed occasionally. If the pack is replaced, the opposite side of the bed can be made ready, as shown on p. 376.

to the surface where it may be cooled by contact with the cool sheet. It is also injurious to leave the sheet in contact with the skin after the body temperature has been raised, as superheating may thus occur, so that the fever may be actually increased. As soon as the sheet is warm, it should be replaced by another. The first sheet may be warmed in six or eight minutes. The second sheet will probably require a longer time,—ten or twelve minutes;

be left uncovered even for a moment, and changes should be made as quickly as possible.

By the systematic employment of this valuable cooling measure from the commencement, the duration of most fevers may be very materially shortened, and the mortality enormously lessened, while the suffering and inconvenience may be diminished to an almost incalculable degree. If, however, the cooling measure is not resorted to until after the patient

has been sick for several days, it may be found quite difficult to control the fever, and the best results may not be obtained.

In such neglected cases, it is only by the most persistent efforts that the intensity of the disease process may be controlled and the fever rendered manageable. Failure to obtain immediate success should not, however, lead to discouragement and abandonment of the method as useless or inefficient; experience in a vast number of cases has shown that the cooling wet-sheet pack is capable of lowering the temperature in every single case, if properly and persistently employed.

The Cold Bath .- A bath for fifteen minutes at 74° F, is the method generally employed in Germany for reducing temperature in fevers. The patient sits in a bath of from four to six inches of water. Two attendants rub his back and legs, pouring colder water upon his head and spine at intervals of three or four minutes. At intervals of a few minutes the patient lies down in the tub for a few seconds. The rubbing is vigorous and continuous, the purpose being to keep the blood in the skin so that it may be rapidly cooled. When the patient begins to shiver, he is taken out and put to bed. The temperature usually falls in the bath or immediately afterward. As soon as the temperature exceeds 102°, the bath is repeated. eral baths are given daily, if need be.

The Graduated Bath.—Another method which is certainly less disagreeable and is perhaps fully as efficacious, is the graduated bath. The patient is put in a tub of water at about 100° F. The temperature of the water is rapidly lowered to 90° F., and is then lowered at the rate of one degree every two minutes until the temperature of the bath is 75° F. By this time the temperature

will usually have fallen to a safe point; that is, less than 102°. By frequent rubbing, the patient will be easily able to bear the bath without chilling, and there is no severe shock as in the cold bath.

The Cold Evaporating Sheet Pack.—
Occasionally cases are met with in which the patient has a high fever with a very congested and hot, dry skin. In such cases the evaporating sheet can safely and advantageously be applied cold from the start, the circulation being encouraged by continuous but gentle rubbing.

The Cold Shower Sheet Pack.—When the temperature of the patient is persistently high, and does not yield to the above measures, and if the sheet packs warm in spite of the evaporation, it can either be cooled by sprinkling cold water over the sheet, or by rubbing the whole body over the sheet with a piece of ice. In this case the bed must be protected with a large rubber or mackintosh sheet. The advantage of the evaporating or the cold shower sheet pack is that it avoids the inconvenience to the patient occasioned by frequent changing of the sheet.

The Cooling Compress.—A large cool compress covering at least one-fourth the entire surface of the body, is a most effective cooling measure which should be applied during the intervals between more vigorous measures. The compress should be covered with flannel so that it will not be chilled by evaporation. As soon as a compress is decidedly warmed, it must be renewed, so that the body heat may not accumulate.

Either the large compress or a smaller abdominal compress should be applied constantly in typhoid and all other continued fevers, so as to favorably influence the processes taking place in the abdominal cavity, aiding the cells in



The Cooling Compress

A small towel or piece of cheese-cloth is folded and wrung from cold water and placed over the abdomen, to be immediately covered with a piece of dry flannel or a fomentation cloth.

their battle against the germs which are chiefly active in this region.

The Cool Enema .- The cool water enema is an efficient means of reducing temperature, which is useful in connection with other measures, especially when patients have a great repugnance to cold applications to the skin. Two or three pints of water should be used at a temperature of 70° to 80°. A lower temperature is likely to produce tenesmus, and too quick discharge of the water. The water should be injected slowly, and should be retained for ten to fifteen minutes, if possible. When discharged, a like quantity should be introduced, and this procedure should be repeated until the temperature is reduced a degree or two, or until the patient shivers. A hot bag : the pit of the stomach prevents uncomfortable chilling.

In certain cases the fever seems to yield more readily to the cool enema than to any other means, although in general this is a less reliable measure for reducing temperature than the cool pack.

Hot Applications to Reduce Temperature.—In cases in which the surface is blue and cold, the application of a hot blanket pack for five minutes, or hot sponging until the surface is reddened, often reduces the temperature more quickly than a cold application. The hot application may be succeeded by a cold application, such as the rubbing sheet or the cooling pack, with most excellent effect.

Temperature-lowering Drugs.— It is safe to say that these drugs, of which antipyrin is chief, are never needed when the resources of hydrotherapy are available. Drugs lower the temperature only at the expense of the vitality of the patient, weakening the heart, and increasing the danger of kidney and liver complications. All that can be accomplished by alcohol, or that it is expected to do, can be done a great deal better by suitable applications over the heart, which are far better heart tonics than alcohol or any other known drug.

THE LIDREN'S COKING CASS

CONDUCTED BY LENNA FRANCES COOPER

DEAR CHILDREN OF THE GOOD HEALTH FAMILY:

Last month we began the study of a class of foods which we call proteids. Foods of this character are for the building and repairing of the tissues. The first of this class of foods which we studied was eggs. This month we shall take up the study of another one of these foods—milk—which is as universally used as are eggs. Let us first study the composition of milk.

Water

86 per cent

Fat

4 per cent

Nitrogenous matter

4 per cent

Sugar of milk

5 per cent

Mineral matter

1 per cent

Nitrogenous matter is of two kinds: albumen, a substance very similar to that of egg albumen, which coagulates when heated; and casein, which may be coagulated by acids. The fat is in a form which is easy of digestion. It is composed of tiny globules which are supposed to be surrounded by the albumen or casein; at any rate, the globules remain intact instead of floating as a mass of fat upon the top. In other words, the fat is in the form of an emulsion, which means that it will easily mix with water. This you may try by mixing a little cream with water and see how perfectly they mix. The sugar of milk, known scientifically as lactose, is the only carbohydrate. It is not a very sweet sugar, but it forms the most delicious food for the numerous little organisms



Pasteurizing Milk

which infest the milk. These bacteria, or germs, which are so prevalent in milk, are very minute plants, and grow and multiply very rapidly under favorable conditions. The conditions for the growth of these organisms are warmth, moisture, and food. Milk is an ideal substance for these little plants, and when drawn, is the right temperature for them. Since it also contains 86% of water, it has sufficient moisture, and the food which they like best is the sugar found in some proteid foods.

We have in milk 5 per cent of sugar in the presence of 4 per cent of proteids; hence we find again that milk forms an ideal food for these bacteria. While these germs

are very small,—indeed so small that we can not see them except by the aid of a microscope,—yet they are capable of producing very decided effects. When they feed upon the milk sugar or lactose, they change it into an acid known as lactic acid. As this lactic acid forms, it coagulates the casein.

There are two kinds of these bacteria; namely, those which produce disease and those which do not, but which tend to bring about certain changes in the milk. Fortunately, the kind which produce disease are



Floating Island

much fewer in number than those which do not, but where one will grow, the other is likely to also.

Milk, as ordinarily obtained, is a very dirty and unwholesome food. Usually the milking place is very unsanitary indeed. It has been shown that bacteria always accompany dust, and it is a well-known fact that the hay which is thrown down from the mow above scatters germs very widely. The body of the cow is usually dirty and covered with dust, and as frequently the milkman, himself, is garbed in clothing which is quite unsanitary.

If the proper precautions are taken, milk need not contain so many of these bacteria. In some of our larger cities, such as Philadelphia, New York City, etc., there are firms which have what are known as model dairies. At these dairies the milk is carefully cared for from first to last. The milking is done in a room especially for this purpose, where everything is scrupulously clean, and no hay or anything containing dust is permitted within.

The cow is carefully groomed, and the milkman performs a careful toilet and dons clean clothing for the milking. Then the milk is cooled as quickly as possible, since a cold temperature is not favorable to the growth of the germs. The milk is then put into jars which have been boiled or subjected to a high temperature, and sealed, so that no dirt or germs can get into it.

Milk thus cared for keeps much longer and is much more wholesome than ordinary milk. This is shown by statistics kept in our large cities. Of children fed on ordinary milk, 40 per cent die, while of those fed on clean milk, only 6 per cent die. Hence the importance of obtaining clean milk. Clean milk in large cities can be obtained under the name of certified milk, which is much more expensive than ordinary milk because of the extra care which it entails.

If clean milk is not obtainable, then it is best to Pasteurize the other milk. This can be done as follows: Place the milk in bottles, filling to within an inch of the top. Sterilize some cotton by placing it in a moderate oven and baking until of a golden color. Cork the bottle with this cotton. Place in the bottom of the cooking utensil some cotton or something to keep the bottles from coming in contact with the intense heat at the bottom of the utensil. Place over the fire and heat quickly. Keep the water at a temperature of from 165° to 175° F. for fifteen minutes.

The milk may also be Pasteurized by using a double boiler instead of the bottles. In that case the temperature should be kept from 155° to 165° F., which is ten degrees below that of the water surrounding the milk, as the milk does not get so hot as the water in the double boiler. The milk should then be cooled as quickly as possible by gradually displacing the hot water with the cold.

For our practice class this month we shall take up the subject of custards. Below are a few general directions for the making of custards. Heat the milk in the double boiler, beat the eggs lightly, add the sugar, and pour on the hot milk slowly, stirring in the meanwhile. Strain and put into the dishes in which it is to be cooked. If it is a soft custard, cook in a double boiler, stirring until done. If it is to be a set custard, place in the cups in which it is to be served and bake or steam. As soon as the custard is done, it must be removed from the heat. To determine whether it is done or not, the following tests are of service: If a soft custard, the silver spoon used for stirring will be masked so that you can not see the back of it clearly. If a set custard, put the point of a silver knife into the center of the custard. When the knife comes out clear and watery like, it should be removed at once from the fire. The soft custard should be stirred while cooking, but the set custard should not be disturbed. Always serve the custard cold. In warm weather the custard should be served the same day in which it is made, as it does not keep well, and poisonous substances may form in it. Custards should be kept in a cool place.

Floating Island .-

2½ Cups Hot Milk

4 Egg Yolks

4 Tablespoonfuls Sugar

4 Whites

4 Tablespoonfuls Pulverized Sugar

Jelly

Beat the egg yolks slightly, add the sugar to the hot milk, stir meanwhile, and continue stirring while cooking. Strain and cook in a double boiler until the mixture becomes thick. Use the test for being done. Serve in individual glass dishes, or in one large glass dish. When cold, make a meringue on the top by beating the egg whites stiff and add the pulverized sugar. On top of this place small bits of jelly and serve at once. If an especially nice Floating Island is desired, whipped cream should be used instead of the meringue. In that case the jelly should be omitted.

Cocoanut Custard .-

1 Pint Milk

2 Eggs

2 Tablespoonfuls Sugar

6 Tablespoonfuls Shredded Cocoanut

Steep the cocoanut in the milk; when heated, strain; beat eggs lightly, add the sugar, then the heated milk, and strain into the custard cups, or the dishes in which you expect to serve it. Place in the oven in a pan filled half full of hot water and bake until set, or set into a steamer and steam until set. A soft custard may be made by this recipe by adding one-half cup milk and cooking in a double boiler, stirring meanwhile.

EDITORIAL

IS A NON-FLESH DIETARY SATISFYING?

Are Some of the Pleasures of Life Sacrificed in the Giving up of the Flesh Dietary—A Question Fairly Put and Squarely Answered

THE editor of the London Globe, apropos of Professor Fisher's experiments, which show clearly the superior advantages, as regards endurance, of a low-proteid dietary, raises the following interesting question:

"Prof. Irving Fisher says vegetarians have far more endurance than meat eaters. A question even more important, however, is whether they get as much fun out of life while they last."

"A short life and a merry one," seems to be the motto of the London editor rather than, "To live long and well." Nevertheless, there is a certain fairness in the question, put more seriously, whether one who abjures flesh foods, while he is thereby guaranteed greater longevity, really gets out of life as much satisfaction as one who, though living a shorter time, indulges in flesh meats.

If a non-flesh dietary is really the natural dietary for human beings, it ought to afford the most complete and perfect satisfaction of human dietetic requirements. That is, the non-flesh dietary should not only afford the highest degree of strength and endurance, but should likewise afford complete gustatory satisfaction as well.

Of course, those who lay the principal stress in the taking of food upon sense gratification, who have "fun" with their palates, without reference to after consequences, easily find in artificial and cultivated tastes sources of gratification which are unknown to a natural appetite whose requirements are met in a natural way. It may be argued in behalf of intemperance that the drinking man has more "fun" than the abstainer, and the same argument might be offered in behalf of a multitude of natural laws, moral as well as physical, but every man who "enjoys" the pleasures of sin for a season must certainly sooner or later be brought to judgment, and in the end must learn that the wages of sin is death; that for every unearned and illicit felicity there is a retributive pang; and that in the final summing up the balance is altogether on the wrong side,

If this were not true, if it were not really a fact that it actually pays to be good, that a man who obeys law is better off, happier as well as safer, than the man that disobeys, there would be no solid foundation for either physical or moral ethics. The greatest happiness, the greatest pleasure, the most satisfying life, can be found nowhere else than in the path of obedience; that is, conformity to the natural order.

As a matter of fact, those who have all their lives been accustomed to a non-flesh dietary are not deprived of any pleasure, for to such a person the very thought of eating the flesh of an animal is in the highest degree repulsive; while persons who have for a considerable part of their lives been accustomed to the use of flesh foods, but who have for some reason abandoned their use, soon find themselves looking back with positive loathing upon the various meat dishes and preparations of flesh to which they were formerly accustomed. Said a lady who previously had been all her life a meat eater, after a month's trial of the non-flesh dietary, "I shall never taste meat again. I can not stomach it." The appetite for flesh food is unnatural, and is acquired only by practice.

The man who abjures meat is immensely the gainer not only in increased endurance, but in a general increase of bodily vigor, of which greater endurance is only one evidence. He is in every way healthier and happier, and knows more of the joy of living. He is delivered from a long list of maladies which are generated by meat eating, and in the participation of which there is certainly no "fun." Gout, tapeworm, trichinosis, and intestinal tuberculosis are a few choice maladies on which the meat eater has a monopoly. A few months' experience with any or all of these conditions is certainly the unique privilege of the meat eater. The same may be said of a multitude of other disorders which are the indirect result of flesh-eating, including a large share of all chronic maladies from which human beings suffer.

So we may simply say in reply to the London editor's query that the non-flesh eater not only has greater endurance and a chance of living longer, but a better time while he does live, and with more "fun" if the term is used in the only sense in which it could be in any way desirable; that is, in the sense of solid pleasure, satisfaction, and enjoyment such as comes from a thoroughly healthful life.

THE DIET OF THE JAPANESE

Most of the People are Vegetarians, Though a Few are Slowly Adopting Western Carnivorous Habits

THERE has been much discussion recently respecting the diet of the Japanese. All travelers have described them as a nonflesh-eating race. Some recent writers have claimed that fish and other forms of flesh food were very largely used by them. In order to set all uncertainty at rest, the editor recently addressed to one of his Japanese correspondents, Dr. M. Kawase, an intelligent and educated Japanese physician, a letter asking for information on the following points:

- 1. Facts and details with reference to the daily diet of the Japanese people.
- 2. Breakfast, dinner, and supper menus for various classes of Japanese people.

We have recently received the following

reply:

"Received your note. Yes, our people use fish and chicken a great deal, and the consumption of beef and pork is increasing year after year. There are certain numbers of foreign restaurants in cities and towns, and they are all busy and prosperous. I will give you just the general idea of the menu of the middle and upper classes of the people. These classes of the people are more or less acquainted with the foreign ways. In the morning they take rice, vegetable soup, pickles, vegetables, or eggs raw or cooked. Breakfast is very simple. At noon they have two or three dishes of foreign food or chicken, beef or fish cooked in Japanese fashion, with some vegetables and rice. In the evening, a full foreign meal or Japanese meal consisting of rice with two dishes of fish, two dishes of vegetables and soups and pickles. You see these classes of the people are not vegetarian at all.

"The menu of the lower class of people consists mostly of vegetables and cereals, and they use once a day fish or meat. And once in a few days they use more of fish and meat than usual, such as on Sundays or festival days and the like.

"What farmers eat? They live largely on barley, corn, rice and other cereals and vegetables, and perhaps they eat fish a few times a year only. They can not afford to eat fish or meat. Even the rich people living in the country do not use much of animal food, from the point of economy as well as scarcity of the fresh meat or fish.

"The people living on the seacoast, of course, consume a great deal of fish. hear that a Buddhist sect who had been strict vegetarians up to recently, removed this restriction. Japanese and foreign scientists teach the people that we must use animal foods; the more we use, the better we shall be. And then Occidental people use a great deal of animal foods, and their strength and health are due to this fact. On the one hand, the religious influence as to the diet is dying out, and on the other the scientists are teaching the necessity of meat eating. So you see our people, some time in the near future, I believe, shall become the followers of your people in diet as well as in other Yes, some people are blind, and believe that everything and anything coming from America and Europe is good."

From the above it is apparent that the great majority of Japanese people who are farmers rarely taste flesh food in any form. In Japan, as in all other countries, it is the peasant class that constitutes the bone and sinew of the nation. City life is unwholesome. City dwellers are far inferior in vigor to those who live in the country. The Japanese people are certainly making a great mistake in following the carnivorous habits of the Americans. With the increase of flesh diet will come increase of cancer, appendicitis, Bright's disease, and a variety of other disorders due to chronic autointoxication, the outgrowth of the putrefaction of flesh remains in the colon.

THE DELUSION ABOUT SALT

A Number of Popular Errors Regarding this Item and a Few of the Facts

Numerous popular errors are extant in relation to the use of salt. Here are a few:

It is claimed that salt cleanses the mouth and makes the gums healthy. This is an error. Salt is a very feeble antiseptic. A weak solution of salt does not materially hinder the development of bacteria, especially those which are found in the mouth. Another claim for salt is that dyspepsia may be cured by eating a quarter teaspoonful of chloride of sodium with a mouthful of water. The habitual use of salt in this manner must certainly prove highly detrimental.

The claim is made that the application of salt to boils and sores is an excellent means of effecting a cure. This is quite an error. Salt is an irritant. Whenever it is applied to raw surfaces, it creates irritation and gives pain. There is not the slightest evidence that it has any curative effect upon boils or sores of any kind.

Another claim made for salt is that it may be used advantageously in the disinfection of cuts and wounds. Certainly no physician would rely upon chloride of sodium as a disinfectant for wounds. Salt water is a good cleansing agent for wounds, but it is not an antiseptic.

We are told that a little salt taken every morning will sweeten the breath and the stomach. This also is an error. The only thing in the mouth that keeps it from being sweet is germs, and chloride of sodium has no power to destroy these when used in the manner suggested.

Lastly, it is claimed that salt is a good and necessary food substance. Here also is an error. Chloride of sodium is in no sense a food. Its use is quite unnecessary. Of all animals, man is the only one which makes a habitual use of chloride of sodium. Antelope in the wild state sometimes visit salt licks, but this is only at considerable intervals, in the spring, or two or three times a year, at certain seasons. It has never been claimed that wild antelope visit salt springs daily or even very frequently. That chloride of sodium is not necessary to sustain the life of animals, even such antelope as deer, which are supposed to be especially dependent upon it, has been repeatedly proved experimentally.



CORRESPONDENCE SCHOOL OF HEALTH

Correspondents should bear in mind that no questions can be answered in these columns sooner than one month. Questions received in May, for instance, can not be answered sooner than June, and if received late in the month, may have to wait over two issues.

10,524. Itch .- D. E. H., Canada:

1. "What is a sure cure for itch?"

Ans.-Chrysarobin ointment.

2. "What causes a buzzing sensation in various places in the limbs?"

Ans.-Neurasthenia.

3. "Why should one when running feel dizzy, as if he would collapse?"

Ans.—This is sometimes a symptom of irritable solar plexuses and lumbar ganglia. The movements of the diaphragm and the action of the abdominal muscles in increased breathing cause pressure upon the irritable nerves and often bring about this dizzy feeling. It is often mistaken for heart disease by people who suffer from the symptom. The condition is so similar to heart disease that a person suffering from it should consult a good physician to be sure of the diagnosis in his particular case.

4. "From injury to his knee cap by falling on a nail, a man is lame, and now confined to his bed with the injured limb half the size of the other one. He is becoming weaker gradually. Please advise home treatment for him."

Ans.—On account of not using the injured limb, the muscles are undergoing atrophy—are not developing properly or absorbing a sufficient amount of nutrition. The circulation is also probably considerably impaired. The proper thing to do is to apply a hot blanket pack to the whole extent of the leg twice daily, sponging the leg with cold water when taking it out of the pack and rubbing it vigorously with the hands. A case of this kind should be taken to a sanitarium if possible, and have a careful diagnosis and

Sanitarium treatment. Electricity is often excellent in such a case.

10,525. Cows' Milk, Butter, Cheese, Etc.—L. A., Newfoundland:

1. "Are eggs, milk, butter, classed as animal or vegetable foods?"

Ans.—Animal foods, But they are natural foods; that is, foods which are stored up by nature to nourish the young, and in this respect differ from flesh foods, in which the nutrient material is stored up to be expended as energy in the animal itself in which it is stored.

"What are the constituent elements of cows' milk and of the eggs of domesticated hens?"

Ans.—Cows' milk contains to every ounce 3.8 food units of proteid, 11 food units of fat, and 5.8 food units of sugars, or carbohydrates, making a total of 20.6 food units per ounce. Eggs contain 16.3 food units of proteid and 32 food units of fat to every ounce, making a total of 48.3 food units per ounce. The white of the egg contains 14.4 food units of proteid and .5 food units of fat, making a total of 14.9 food units of fat, making a total of 14.9 food units per ounce. The yolk of the egg contains 18.2 food units of proteid, and 88.8 food units of fat, making a total of 107 food units per ounce of egg yolk.

3. "In what way is the law of nature fulfilled in the cow yielding her milk and the hen her eggs?"

Ans.-As described in answer to No. 1.

10,526. Stomach Trouble,—A. O. G., Michigan:

1. "Have had trouble for years with gas and bloating of the stomach and bowels, also

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pain in the heart, poor circulation, and occasional attacks of prostration. Have been raising froth from the stomach. Do you think that nasal catarrh could have been the cause of this trouble? Can a person past the age of twenty-five be cured of this trouble? What home treatments could I follow?"

Ans.-The probabilities are that the nasal catarrh was caused by the same thing that causes the stomach trouble; namely, a constitutionally low resistance and vitality. The majority of such cases that have taken the out-of-door sleeping treatment actually recover from both these conditions. If it is impossible for you to go to a suitable sanitarium to have this condition treated, we would recommend that you try sleeping outof-doors. This is easy to do at this time of the year, as the nights are mild, and by suitable protection, keeping the bedding dry and warm, you will be able to adapt yourself to the condition easily. There is no reason why a person of twenty-five should not entirely recover from this condition.

10,528. Deep Breathing — Flushing of the Colon.—A. C. W., Mississippi: 1. "When deep breathing is practiced with

1. "When deep breathing is practiced with strong muscular effort, is it possible to displace the abdominal organs if the exercise should not be rightly taken?"

Ans.-Yes. A person taking exercise of this kind, with a belt around the waist, or a tight girdle, or standing in an improper position, is apt to do himself as much harm as benefit. The proper way to take the deep breathing exercise is to learn to get the correct poise-placing the weight of the body on the balls of the feet, the hands upon the hips, holding the chin and the abdomen and chest well up. Deep breathing exercise taken under these conditions is of great benefit. Attention should also be given to strengthening the abdominal muscles by leg-raising exercises. Lying flat on the back, raise first one leg and then the other, then both legs in alternation, then both legs together, keeping up the exercise until a reasonable degree of fatigue is reached, and then resting until time for exercise again.

2. "Can you recommend any brief manual of instruction on deep breathing and simple exercises for strengthening the abdominal muscles?"

Ans.—The standard authorities on physical culture are books which include not only the exercises mentioned in the question, but also all-round physical training. A complete scientific and yet brief manual on this branch of physical training is, by the very nature of

things, not practicable. There have appeared in Good Health from time to time articles which cover this phase of exercise. (See page 5 of January, 1907, Good Health.) The desire for deep breathing must be earned by preceding exercises, just the same as an appetite for hearty food. A short run or swim, or deep knee bending or trunk bending exercises are efficient in creating this demand. The abdominal and trunk exercises and breathing movements described in the article mentioned are very satisfactory.

3. "In what cases of abdominal disorders is flushing of the colon advisable?"

Ans.—In all cases where there is a marked infection of the feces, where the number of bacteria present exceeds fifty million per gram of dried material. Also in cases of constipation and in cases of mucous colitis. This should be followed by a short cold enema, to keep up the tone of the bowel.

4. "Please give me brief directions for this treatment, quantity of water, temperature, length of time it should be retained, etc. In a case of intestinal catarrh with constipation, would very vigorous massage of the abdomen be injurious and irritating to the bowels?"

Ans.-The treatment should be given in the following manner: Two quarts of water at the temperature of 99° F. This should be placed in a fountain syringe or enema can and hung about two feet above the body of the patient. The patient should lie on the right side, or take the knee-chest position, to cause the water to permeate throughout the length of the colon. It is not necessary to retain the water more than two or three minutes. Repeat the process until the water returns clear. The amount of water used at one time should be from one to two quarts, depending somewhat upon the size and condition of the patient. The massage to the abdomen should be taken gently, but increased in vigor as the nerves and muscles become accustomed to the treatment.

10,529. To Reduce a Large Abdomen. Mrs. J. R., Indian Territory:

1. "How can I reduce the size of my abdomen? I am five feet, five inches tall and weigh two hundred pounds. Am not fleshy, but measure fifty inches around the abdomen and thirty-five around the waist."

Ans.—This condition is due to interference with the return circulation of the blood from the abdominal muscles and mesenteric vessels. It is important in cases like this to have some kind of abdominal supporter, so as to encourage normal circulation. Syste-

matic efforts should be made to develop the abdominal muscles to form the natural support. This may be done by taking leg-raising exercises,- lying prone on the back, raising the legs to the perpendicular position, first the right leg, then the other, then raising both legs together. Also, without a pillow under the head, raise the head as far as possible without moving the shoulders. These exercises should be begun by taking fifteen or twenty movements, and gradually increased each day until one can take the exercises a hundred times or more without feeling fatigue. Massage of the abdomen and revulsive compresses, hot compress for five minutes and cold compress for thirty seconds, three applications of each given twice daily, will also materially aid in this treatment. If possible, it would be well to visit a good sanitarium where the treatments can be administered and the case cared for in much shorter time than it would take at home.

M. K., Oregon:

"Is dilatation of the stomach curable? Would you advise a fast of about two weeks? Should

only small quantities of water be used in enemas in my case?"

Ans.-Dilatation of the stomach is curable. Exercises to strengthen the abdominal muscles, eating small amounts of concentrated food which will be easily digested, massaging the abdomen, taking the knee-chest position for about ten minutes twice daily, also hot and cold applications in alternation over the stomach, are very excellent measures in reducing this condition. Very extreme cases require surgical procedure. We would not advise a two-weeks' fast except under the direction of a physician. A clear fruit diet for a week is much better than fasting, or a diet of fruit and nuts for two weeks would give all the beneficial results of a fast, without the unpleasant features of it. From one quart to three pints of water would be perfectly proper in the case you describe.

10,532. Tuberculosis of the Hip.—S. A. B., Illinois:

"A woman about forty-five years old, with tuberculosis of the hip, is now bedridden. Her hip has increased in size within the past two years, but has not pained her until recently. As her limb is in a plaster case,

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she can not stand up, and is very weak from confinement in bed. She has been advised to be lifted up and to stand on the well limb a few times a minute or two, so that she Would you may gradually gain strength. advise this in such a case? Please give description of tuberculosis of the bones so that the ordinary reader may better understand this difficulty. Are the chances of recovery better in such cases than when the lungs are the seat of the disease?"

Ans.-Massage to the well limb and to the remainder of the body would be an excellent procedure to keep up the strength of this patient. If she gets up, it should be under the direction of the physician.

Tuberculosis of the bone causes the bone to die, and it has to be either absorbed or suppurate its way out. The absolute rest necessary in these cases oftentimes sets up a wall of resistance which limits the spread of the disease. The disease is caused by a microscopic germ which probably travels through the circulation of the lymph of the tissue and locates in a bone or joint where an injury has occurred. The chances of recovery from this condition under proper treatment are fully as good as in tuberculosis of the lungs, especially if the condition is diagnosed early.

10,534. Loss of Memory—Care of the Hair.—M. C., Missouri:
1. "In the March number of Good Health,

in the article, 'How the Body Resists Dis-ease,' you state that 'macrophags or large white cells devour brain cells, liver cells, etc., and this affords a simple explanation of loss of memory found in old age.' Is not loss of memory due to hardening of the brain cells?"

Ans.-The hardening of the brain cells might be compared to the scar tissue which results after the injury, the macrophags referred to carrying away the active living protoplasm of the cell, and the protoplasm being replaced by an inert harder tissue having no particular nerve activity.

2. "When the lymph glands swell, 'how can one cooperate with these wonderful healing processes '?"

Ans.-When the lymph glands swell, it is because germs already present, or disease taken into the lymph glands from some other part of the body, are setting up a more or less marked inflammation. If these germs happen to be tubercular germs, and sometimes even if they are pus germs, they are held in check by the resisting forces of the body; but if the process seems to be advancing, the use of revulsive compresses affords a very excellent measure for coopera-

ting with these resistance forces of the body; also tonic cold baths and a simple but nourishing diet. If there is any reason to suspect a tubercular enlargement of the glands, and, in fact, any glandular enlargement, it is desirable to spend as much time as possible in the open air. If the patient is not strong enough to exercise out-of-doors, lying on a cot or sitting in a chair, well protected from the cold, has very beneficial results. Outdoor sleeping is also a useful measure. A person suffering from enlarged glands should consult a reliable physician or surgeon, as it may be necessary to remove them if they do not readily yield to rational treatment.

10,535. Solution for Nasal Catarrh .-

C. B., Nebraska:
1. "Please tell me the proportions of the following ingredients to be used as a spray for nasal catarrh:

"Menthol, oil of Eucalyptus, and alcohol. Can this preparation be inhaled? How often should it be used as a spray, and how often as an inhalation?"

Ans.-If it is desired to use the preparation as a spray in an atomizer, the volatile oils, menthol and eucalyptus, would better be dissolved in a fixed oil for a base, such as liquid petroleum or albolin. The following formula containing these ingredients would be a good one: Menthol 10 grains, eucalyptus 30 grains, albolin 4 ounces. The above formula is suitable for a spray. If it is desired to use menthol and eucalyptus with alcohol, it would be better to use a tincture of benzoin as a base, with formula as follows: Menthol 20 grains, eucalyptus 1 dram, tincture of benzoin 4 ounces. The latter formula is not suitable for use in an atomizer as a spray to the nose, but should be nebulized. For this purpose any good nebulizer, such as the Globe Nebulizer or the DeVilbiss Nebulizer, would be suitable. For an acute condition in the nose or throat, either of the above formulas used in the instruments recommended could be employed with advantage every two or three hours.

2. "Is it all right to take a cold sponge bath just before breakfast if one can not take it an hour before?"

Ans.-The effect of the cold sponge bath is to quicken the circulation, deepen respiration, and rouse the skin cells to activity. The great precaution necessary is to be sure that a good reaction to the cold bath is obtained. The more vigorous one's health, the more vigorous the reaction. Other aids to a good reaction are light exercise, vigorous rubbing, and deep breathing. A short cold bath, followed by the proper reaction, is not deleterious a few minutes before meals.

10,536. Nervousness - Large Tonsils-Catarrh.—J. F. S., Arkansas:

1. "What is the remedy for neurasthenia

and wakefulness?"

Ans.-Neurasthenia is usually brought about either by the use of drugs affecting the nervous system, or from unsuitable diet, or from lack of sufficiently frequent periods of relaxation and rest. A person of a highly nervous temperament needs to take more frequent periods of relaxation than the "plodder." If you can readily recognize some one of these simple causes producing the condition, the remedy is simple-remove the cause. In the way of treatment, the following prescription would probably give excellent results: On rising in the morning take a cold sponge bath, drving off quickly. If the conditions are so that you can, take a short period of rest before dinner. It is an excellent plan to procure a spine bag, fill it with hot water, and place the spine bag the length of the spine, lying upon it for fifteen or twenty minutes. If possible, take a short nap, not to exceed fifteen minutes, before dinner. Whether able to sleep or not, lie down in a darkened room and relax. At night take a neutral bath, temperature 98° F., maintained for half an hour. In getting out of this bath be careful not to expose the body to cold, but dry off as quickly as possible and go directly to bed. In the bed should be placed a hot spine bag for the spine and a hot foot bag for the feet. The foot bag should be covered with a towel, and as soon as a drowsy feeling is experienced, push the hot bags away and go to sleep. Persistence in this prescription will usually give very excellent results as home treatment.

2. "What can be done for enlarged tonsils and small red lumps in the throat?

Ans.-The remedy for chronically enlarged tonsils is removal. Very small red elevations on the back of the throat are usually due to chronic follicular pharyngitis. Such chronic conditions in the throat are often due to general causes, such as eating too much and exercising too little. This condition is also sometimes superinduced by some form of catarrhal condition in the nasal passages, especially some form of obstructive catarrh, which necessitates more or less breathing through the mouth at night.



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3. "Advise treatment for catarrh of the throat."

Ans.-If the case is a chronic one, we can hardly expect permanent results from treatment unless the treatment is directed toward the removal of the cause. In acute conditions an application of some antiseptic solution locally may be of some temporary benefit, such as swabbing the throat with twentyfive per cent solution of argyrol.

4. "Where can Sanitarium foods be obtained in Kansas City?"

Ans .- At the Pure Food Café, 403 E. 11th Street.

10,537. Hair-Skin.- A. M. H., New

York:

1. "What volatile oils are fit to use on the hair and also on the face? My hair is very dry, but other oils do not seem to help. What will cure dandruff and falling hair? Is olive oil good to use on the hair?

Ans.-We can not recommend the use of volatile oils for the hair. The effect would not be beneficial. Would recommend, if any oil is used, the use of small amounts of cocoanut oil, which can be obtained at any drug store. This oil melts readily on contact with the skin, and also absorbs as readily as any oil that one can get. Its use is preferable to the use of olive oil for this purpose.

The cure for dandruff and falling hair is best accomplished by the following means: Vigorous rubbing of the scalp with a stiff brush dipped in ice-water, followed by the application of oil, as referred to above, and exposing the head to cold air as much as possible. The rubbing should be applied in the morning. The covering of the head should be of the lightest possible material, and in order to expose the head to cold air for long periods one should sleep out-of-doors or with the head exposed to the outdoor air. This last measure alone is doing more for such cases than almost any other remedy known.

2. "What harmless fattening cream may be used on the face?"

Ans.-A combination of cocoanut butter and cocoanut oil forms an excellent fatty cream for the face. The cream should be thoroughly rubbed into the face, and the individual should pay special attention to tonic cold baths, the use of honey or malt honey in two-tablespoonful doses at the close of every meal, and an abundance of simple but nutritious foods.

10,538. Neuralgia in the Head and Face.—T. S. S., California;
"What foods would you recommend to

be used by one suffering from neuralgia in the head and face? This is not caused by the teeth and hardly by the stomach, but probably by too much sedentary work and insufficient exercise."

Ans .- A person suffering from this condition should use not more than six to eight per cent of proteid in the dietary for at least a month, and after that not more than ten per cent. The proteid foods which are to be largely avoided are white of egg, cheese, and meats. The foods to be recommended are flaked and toasted cereals, zwieback, unleavened crackers or biscuits, cooked and raw fruit of all kinds, greens, yolk of egg, malted nuts, malted milk, cream, honey, malt honey. Raw nuts may be used in moderation, thoroughly masticated. If the act of mastication interferes with taking solid foods, then the liquid foods should be prepared in the most nutritious manner and moved about in the mouth by the tongue so as to thoroughly impregnate them with saliva before swallowing them. A person of sedentary employment should take systematic physical exercise sufficient to balance the day's work and keep up a vigorous circulation in the muscles and extremities.

Diet-Lemons-Cocoanuts.-T. 10,539. S., Cuba:

"What do you think of the following diet for breakfast: Lemon juice, raw tomatoes, honey or bananas, potatoes or rice?"

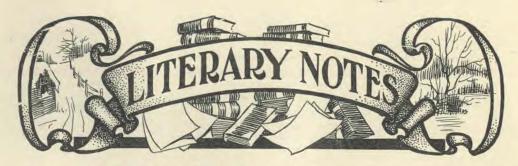
Ans.—The breakfast menu above quoted could be improved by adding to it some raw nuts or some eggs, which would give a better supply of the tissue-building elements needed in the dietary.

2. "The same for dinner?"

Ans .- We do not recommend using the same combination of foods habitually for both breakfast and dinner, as one would soon tire of it, and the digestion and assimilation would thus be impaired. It is better to have some variation at every meal, so that the food is always inviting and taken with a

- 3. "Are lemons bad for the blood?" Ans.-No.
- 4. "Why should the use of oranges increase the amount of urine?"

Ans,-The orange contains a large amount of water, and water itself is one of the best diuretics or stimulants to kidney activity.



The summer numbers of McClure's will contain an array of entertaining reading that is particularly adapted to the season. From an editorial announcement we find that there are to be several new features presented in early numbers.

There could be no more fascinating reading than Walter Wellman's account of his preparation for a voyage to the Pole in a flying machine to be made in July. Wellman's article is to be printed in June and July. It catches the imagination like a dream of the far-distant future. Just conceive it - a vast cigar-shaped balloon, nearly two hundred feet long, whizzing through the air. pended from it by threads that look finer than spun silk, is a long steel car. In it, as it hovers hundreds of feet above the earth, you can see four tiny figures-the crew-pushing this lever and that, dropping the lead, taking observations and shifting ballast, doing the hundred things the complicated machine requires.

"Writing for the Press." By Robert Luce, 68 Devonshire St., Boston, Mass. Published by the author.

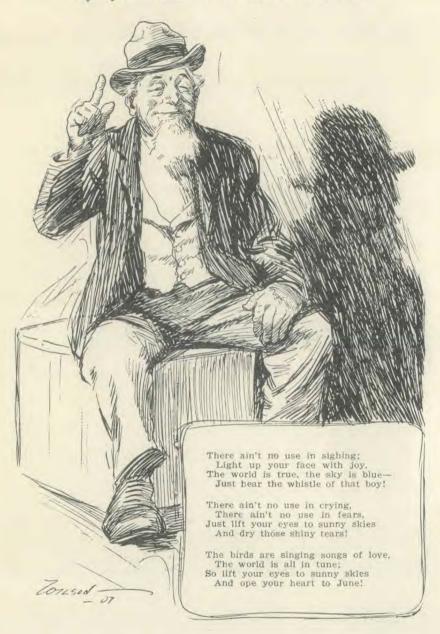
This is a very practical and for that reason extremely valuable work, designed to assist young writers and to lessen the labors of editors. Its chief purpose, evidently, is to present in a simple manner the most essential technical points which must be observed in modern newspaper work, and this is done in a particularly lucid manner. It is, moreover, a very readable book for any one having anything at all to do with the publishing or printing work, and can furnish the average business man with a valuable fund of useful information. Prices in cloth binding, 60c; paper, 30c.

Success' in photography depends, not so much on the high-grade anastigmat lens, as on the correct exposure. This important essential to success being so materially affected by the varying conditions which exist in the time of year, time of day, kind of weather, kind of subject, size of lens aperture, brand of plates, etc., is puzzling enough to the professional, to say nothing of the great mountain of difficulty which it presents to the amateur. Wellcome's Photographic Exposure Record and Diary for 1907 gives in a very pleasing and compact form the correct exposure under any of the above-named conditions. It will no doubt prove itself of great value to both professional and amateur.

Announcements have been issued for the National Purity Congress to convene in Battle Creek, Mich., Oct. 31st to Nov. 6th, 1907. This Congress will be held under the auspices of the National Purity Federation, an association having for its object the cooperation in a national sense of all forces in the United States that are striving to promote purity in the life of the individual and in social relations. Eminent speakers from all sections of our country and some from abroad will address the Congress. A program is being prepared which will cover every phase of the movement, including preventive, educational, rescue, legislative, law enforcement, and sanitary lines of effort; the White Slave Traffic, social diseases, and good health topics. A general invitation is extended to all who are interested to attend this Congress. Purity, temperance and reform societies, churches, missions, and all organizations promoting Purity are urged to unite in the work and send delegates. All delegates will be entertained free of expense at the great Battle Creek Sanitarium. For further information and printed matter address the president of the Federation, B. S. Steadwell, La Crosse, Wis., Dr. Carolyn Geisel, Battle Creek, Mich, or Mrs. Rose Woodallen Chapman, 823 East 18th St., Brooklyn, N. Y.

THE UPLIFT

By Byron Williams in the Western Publisher



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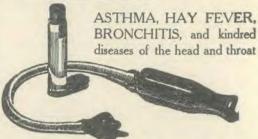
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GERM-PROOF



No.

No. 4

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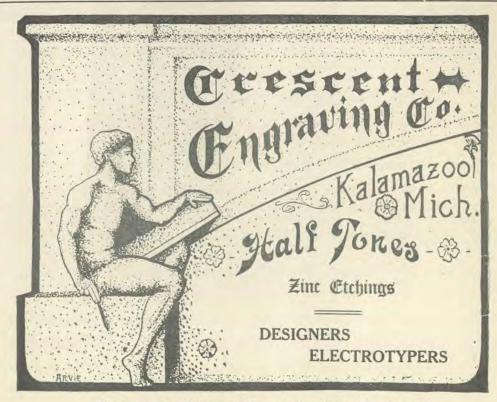
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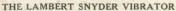
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