MOTHER'S NUMBER

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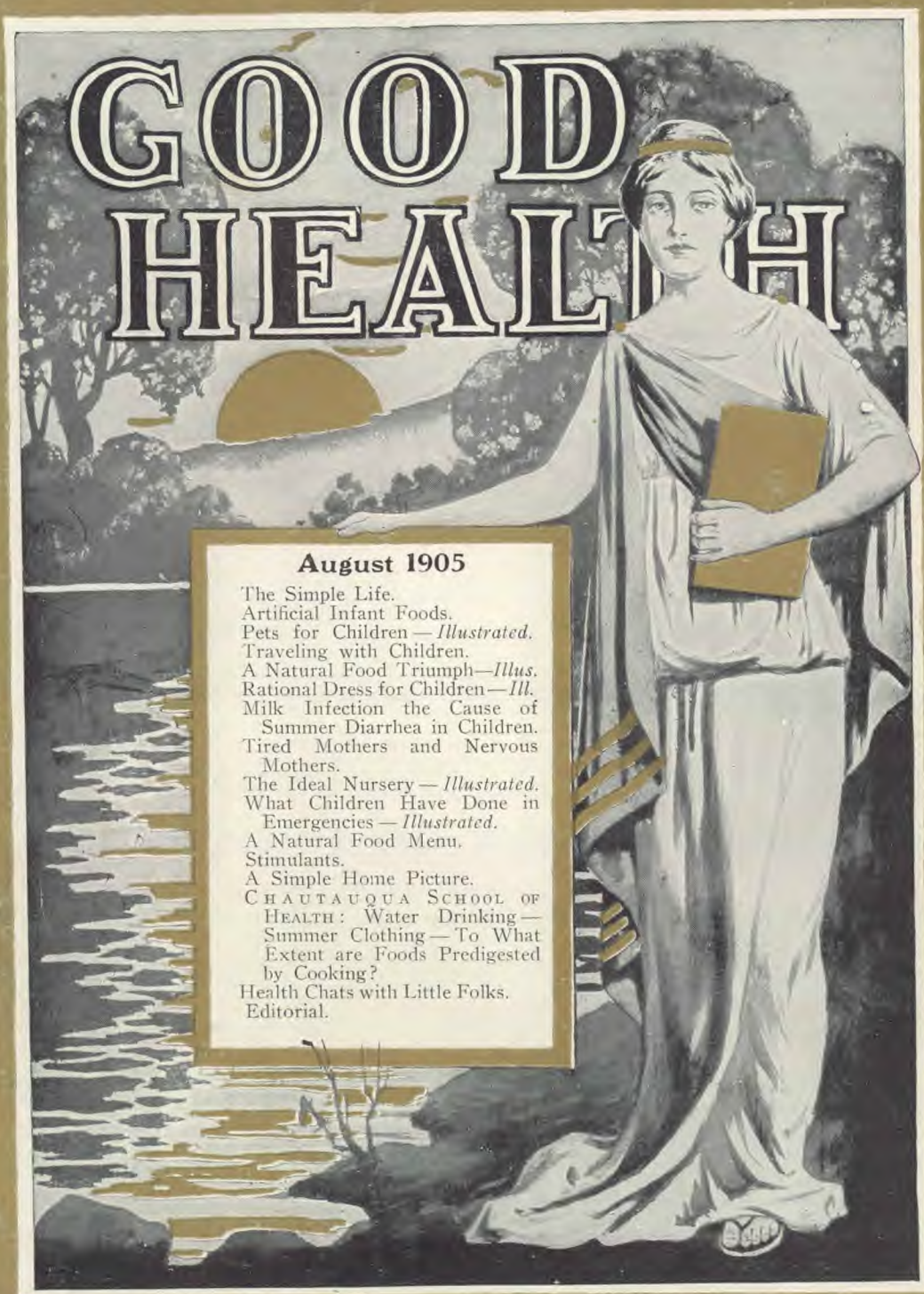
GOOD HEALTH



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GOOD HEALTH

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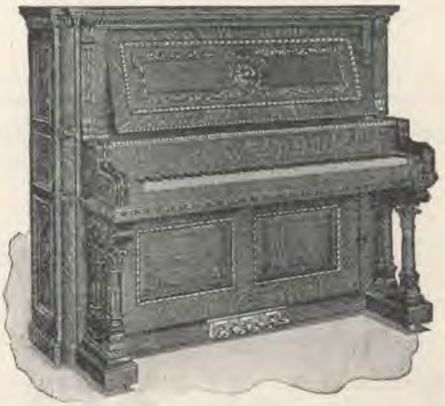

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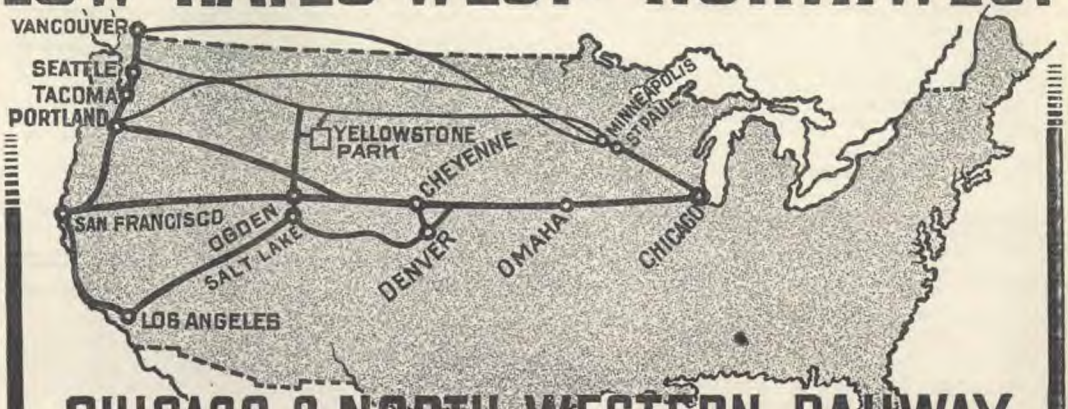

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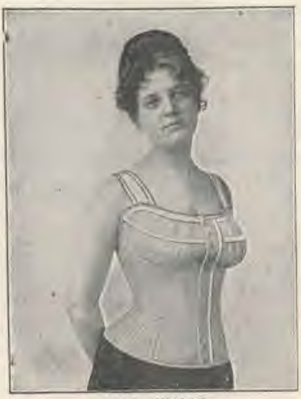

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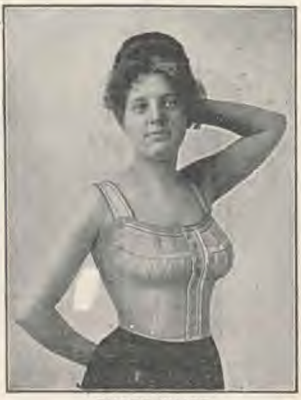

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apt to be forgetful, and must be oftentimes reminded of their charge. A duty to both the child and the pet devolves upon the parents,— that of seeing that the creature in question is faithfully tended by its owner. To relieve the child of its care is to deprive him of the real sense of responsibility, and the opportunity for spiritual and intellectual growth which comes to the child through the protection and nurture of dependent creatures. Many lessons in self-restraint and self-denial are unconsciously learned through attention to their four-footed friends.

In the selection of suitable pets it is generally wisest to choose some creature which can be properly housed and cared for outside the dwelling, since, while it is a frequent custom for human beings and certain kinds of animals to dwell together under the same roof, it is by no means the most hygienic practise, and is often a source of danger to health. Bacteria find a particularly inviting lodging-place in the hair of dogs and the fur of cats; and many cases of diphtheria, scarlet fever, and other contagious diseases have been recognized as conveyed to the children through the medium of such indoor pets. On the other hand, the pet whose natural habits require an outdoor regimen, becomes a help to the child in keeping his own health, in that it allures him out of doors through its demands for fresh air and regular exercise. The joy of its companionship being thus a constant incentive to the child to spend much time in the air and life-giving sunshine, may become a thing of real hygienic value.

DIVINE GOODNESS

LIKE a cradle, rocking, rocking,
Silent, peaceful, to and fro,
Like a mother's sweet looks dropping
On the little face below,
Hangs the great earth, swinging, turning
Backward, forward, to and fro,
Shines the light of God's face bending
Down, and watching us below.

And as little babes that suffer,
Toss and cry, and will not rest,
Are the ones the tender mother
Holds the closest, loves the best,
So when we are weak and weary,
By our sins weighed down, distressed,
Then it is that God's own goodness
Holds us closest, loves us best.

— *Helen Hunt Jackson.*

TRAVELING WITH CHILDREN

BY MARY WOOD-ALLEN, M. D.

WHEN home is a safe and comfortable place for a child, it is by all odds the safest and most comfortable place that can be found, because in it the child can have more freedom than anywhere else. It is recognized that he belongs in the home and has certain rights there, whereas anywhere else he may be only tolerated, and his rights considered as privileges, to be withheld or granted, at the pleasure of others. However, it sometimes becomes a necessity to travel with children, and in this case the wise mother will make the journey as comfortable for them as possible.

Three things are to be considered and provided for,— the health, comfort, and occupation of the children; for children must be occupied if they are to be happy.

If the trip is to be a short one, the problem is not great; but if it is to extend over many hours, or for days, the mother's patience, ingenuity, and wisdom will be sorely tried.

The dress of the little traveler should be plain in style, strong in texture, and preferably of wash material, in colors. A neat, plain gingham or linen will be far more comfortable for both mother and child than a fanciful white or other delicate material. It should be adorned with the simplest and strongest of trimming, so that it will endure the mishaps of travel. A "spick and span" white dress, elaborately made and profusely decorated with embroidery and ribbons, may look very fine at the outset of a journey; but soiled and torn, with the trimming hanging in tatters, may be the condition in which it reaches the journey's end.

For the smaller children a neat, long-sleeved apron may be put into the mother's satchel, with which to protect the dress *en route*.

This same satchel will need to be a roomy one in order to carry all the articles needed for the various emergencies of the trip; but its inconvenience of size and weight will be amply compensated for by the added comfort given. Among other things it may hold slippers to rest the tiny feet, especially if the shoes be new and stiff; for scarcely anything will try the temper more than suffering feet.

In selecting seats in the car it would be a wise precaution to see that it is not adjoining the smoker; for in a vestibule train the doors are usually left open, and the car adjoining becomes practically a smoking car, so thoroughly is it impregnated with the smoke, which diffuses itself with great rapidity.

For added comfort it is well to have two seats facing each other, and in most instances a brakeman will turn a seat to accommodate the party. The hats and wraps of the children should be removed, and preparations made for a comfortable day. This, of course, is much more easily accomplished in a Pullman than in a day coach. But if the mother is wise, she can secure much of comfort in an ordinary car.

If there are but two children, each can be given a seat by the window, and thus many hours of amusement secured to them. It is well, however, not to have the windows open, because of danger to the eyes from cinders; also because of the extra anxiety entailed on the mother in keeping the little heads inside and out of danger. Where there are more than two children, a system of rotation can be arranged, so that each will have his turn at the window, or the older chil-

dren can be allowed to sit in a seat near by.

This in itself is a privilege much appreciated. It gives such a "grown-up" feeling, and, consequently, conduces to grown-up conduct. The lust of authority sometimes seems to have such a strong hold on parents that they are not able to allow a little innocent freedom to their children.

I once saw a man come on a train with his ten-year-old daughter. A group of children were on the platform to see them off. Naturally the child wanted to sit where she could see her little friends from the window, but the father gruffly bade her sit on the other side of the car, where she could neither see nor be seen.

"Papa," she said earnestly, as the train began to move, "can't I go over there in that empty seat till we get past our home? I know mama will be watching to see us."

I could not imagine a father's refusing so natural a longing.

"Sit where you are," gruffly responded the father from behind his newspaper.

"O, papa, please." The little hands were clasped in pleading, and the blue eyes were filled with tears.

"Sit still, I tell you."

The child sat still, but the tears would not keep back. At last the father grew annoyed at the weeping, and said ungraciously: "Well, go over there, if you will make such a fuss about it."

The little girl went, but we were now out of the town, and the opportunity of seeing mama was past. I wondered if she, too, were disappointed at not catching sight of her little daughter waving her hand at the car window.

One great cause of ultimate discomfort when traveling with children is the irregularity in eating which is so generally allowed. To keep them happy and well, even more than ordinary care is needed in securing regular supplies of good food during the trip. For this purpose nothing is so satisfactory as the basket of home eatables, from which should be eliminated all rich, indigestible, highly seasoned, or very sweet articles.

The staple supplies may be sandwiches, each wrapped neatly in oiled paper, and with various surprise fillings, such as jellies, chopped nuts, peanut butter, nuttolene, raisins, figs, dates, etc. A small supply of sandwiches made with fresh fruit-gelatins, such as strawberries or other small fruits, or peaches, pears, tomatoes, etc., could be supplied for the first day, but would not keep well for later meals, which can be helped out by fruits purchased from the train boy.

No piecing between meals should be allowed, as this is one of the surest ways of disturbing digestion and creating consequent trouble and anxiety. Children not allowed to piece at home will find it no hardship to be held to regular meals while traveling; and even those who have been allowed irregular eating should be held to regular habits while on a journey.

Perhaps the greatest problem will be how to assuage the thirst of the little people. The sight of the water tank, and seeing other people visiting it, add to the normal thirst, and the children are continually pleading for a drink. The safest way is to carry a supply of boiled water. If this is not practicable, a little orange juice may be given, and then the child's mind diverted into some other channel. It is not safe to allow constant drinking from the tank; not only because the water may not be pure, but also because frequent drafts of ice-water only provoke thirst instead of assuaging it. Washing the face and hands will often answer in place of a drink.

If an infant is of the party, the question of food and drink becomes even more serious, unless he is so fortunate as to be nourished from the mother's breast. The milk carried for his food should be sterilized and bottled before leaving home, and will then keep sweet for two or three days.

If the milk must be purchased *en route,* a little alcohol lamp should be carried among the supplies. This will enable the mother to sterilize the milk by heating. Or if this is impracticable, condensed milk may be employed. Hot water can usually be obtained at eating stations and from the buffet car.

The presence of the infant makes other precautions necessary; among which may be mentioned a rubber bag for holding soiled napkins, a soft sponge for cleanliness, a supply of soft towels and wash cloths, a bottle of boiled water, a little package of sugar of milk to sweeten his food.

Pieces of soft, old muslin, or cheesecloth, may be laid inside the napkin each time this is changed. These can be thrown away, and the satchel thus relieved of an accumulation of soiled linen which would taint everything around it.

The great desideratum with the infant is to keep it as quiet and serene as may be. Let it lie still and unnoticed as long as possible.

How to secure the peaceful, happy occupation of older children will often severely tax the mother's ingenuity. She will not be able to give herself up to leisurely enjoyment, though by a judicious foresight she may secure for herself many moments of freedom and rest.

The ever-convenient satchel should be supplied with such materials as can easily be used in occupying the children's attention, but these should be withheld until the novelty of travel has worn off and the little ones are beginning to ask for entertainment.

For many hours they may be kept interested in what is going on about them, especially in the changing landscape seen from the windows.

I have known children to find much enjoyment in searching for familiar objects as they flashed past houses and villages. A very interesting game can be thus played by assigning values to such objects, the first making 100 being winner. Thus a hen may count one, a dog two, a cat three, etc.; a white horse being assigned the highest value.

When all these external interests begin to lose their charm, a pair of blunt scissors and some paper will be received with pleasure. If the children have been used to freehand cutting, a newspaper will give them ample opportunity.

A few advertising pages from a magazine can be made to yield material to furnish a doll's house.

If the car will supply a table between the seats, that will be most convenient. If not, a folding checker-board can be made to serve the purpose.

When tired of cutting, a bottle of gum tragacanth paste and a few sheets of manila paper will give a new amusement in pasting. Or a box of colored crayons and an illustrated magazine will give scope to artistic genius. A small box of colored beads, a coarse needle, and a stout thread will employ the little hands, under mother's supervision, in making necklaces or bracelets, which will be greatly admired by the children. Older children can employ themselves in sewing.

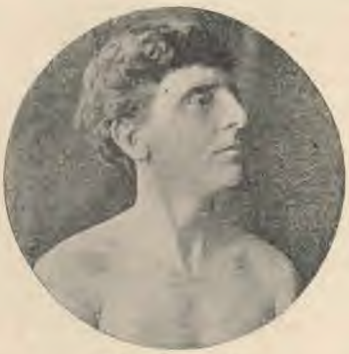
By this time the little people will probably be weary enough to be quiet, and then comes a good opportunity for the mother to employ her story-telling ability.

Passengers often make the care of children more burdensome through their

well-meant, but ill-advised gifts of eatables, candies, etc., until it becomes quite a question whether to allow them to talk to strangers. One thing is sure: they should not be allowed to annoy other passengers by romping through the aisles, or thrusting themselves on the notice of their elders. On the other hand, if they are well-trained children, they may give as well as receive pleasure by being allowed to make short visits among the passengers.

A NATURAL FOOD TRIUMPH

FEATS of endurance by vegetarians are now becoming quite common. Karl Mann and his fellow vegetarian competitors in the German walking race; G. A. Olley, holder of amateur cycling records; Eustace Miles, of Cambridge, amateur tennis and racquet champion of England, and others have forced the world to recognize that vegetarians are at least equal to meat eaters in physical stamina.



MR. GEORGE ALLEN

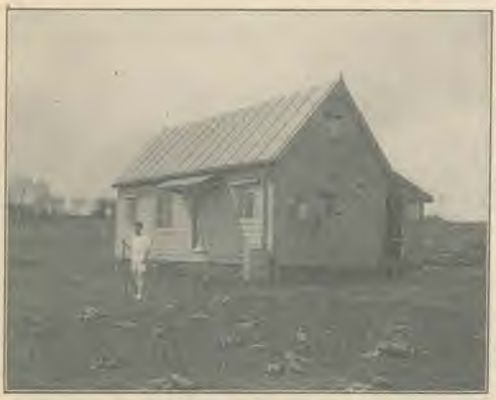
The cause of vegetarianism in England last year received a distinct impetus owing to the remarkable record-breaking feat of Mr. George Allen. This already celebrated pedestrian walked from Land's End, the southernmost point of England, to John o' Groats, the northernmost point of Scotland, a distance of 909¾ miles, in 16 days, 21 hours, 33 minutes, which beats any previous record by 7¼ days. The average for the last week of the walk was 63 miles per day, the last day's walk being 72½ miles.

Mr. Allen is a life-long total abstainer and non-smoker, and a seven-years' vegetarian. He has not attained to his present perfect physical condition without a severe struggle. In early life he was extremely delicate, and from the age of eight years was a victim of epilepsy, which in his case was hereditary. The seizures increased in frequency until at the age of sixteen he had more than thirty in one day, and his case was considered hopeless. Describing himself at this period, Mr. Allen says, "I was an ill-shaped boy, weighing less than seventy pounds, about four feet ten inches in height, with short legs, and a head that required a 6¾ hat to fit it." He was a physical wreck, and so miserable that many times he was on the verge of suicide.

But at this darkest hour the dawn appeared. The unhappy boy interested himself in the study of physiology, found out the causes of his disease, and became possessed of an invincible determination to overcome it. He adopted a vigorous system of exercise, diet, and cold baths, and literally ran away from his hereditary complaint. "Well do I remember," he says, "what a feeling of light-heartedness a run of a mile or so used to give me, but never in those bygone days did I dream that I should ever possess such a strong physique as I do at this time."

Such was the result of his systematic exercise and well-regulated life that at the age of thirty he had won upward of one hundred prizes as an athlete. He then decided to compete no more.

During all this time the occupation of the young athlete had been that of a journeyman shoemaker, which necessitated his working ten hours a day in an



THE COTTAGE ON THE COTSWOLD HILLS

unhealthful factory. His spare time only was devoted to his athletic sports, and as this was in "his unregenerate days when he ate meat," his training was a serious matter.

Seven years ago, Mr. Allen, from conscientious scruples, adopted a non-flesh dietary, but not with any hope of a physical gain thereby. "My reason for adopting vegetarianism was," he says, "a purely humane one. I had felt for some time that it was not intended by nature that man should live by depriving other animals of life." The reward of his humanity was that he soon found that he had adopted a diet that yields far better results than does a meat diet. "My state of health at the time I became a vegetarian was good," he says, "but has improved greatly since that time. Especially have I become extremely vigorous, as a comparison of my athletic performances will prove."

As Mr. Allen frequently made such statements as this in his lectures on healthful diet, he was asked why he did not prove it in some practical way. Consequently he decided to demonstrate the truth of his statements by putting on record a feat of strength that should excel anything he had previously accomplished, hoping thereby to induce others to adopt a purer and higher life.

The first great walking feat undertaken with this in view was the breaking of the Leicester-to-London record. On this occasion he walked nearly one hundred miles (97¾) in 20 hours, 22 minutes, and 25 seconds without a single stoppage.

His food during the walk was two melons, one banana, 1½ lbs. pears, ½ lb. grapes, two bromose tablets, ¼ lb. protose, ¼ lb. whole-meal biscuit, one breakfast cup cocoa, 1½ pts. cold water, taken in sips. Compare with this the alarming amount of food usually taken by flesh-eating athletes during a contest of this description.

Although Mr. Allen walked at the rate of almost five miles an hour, night and day, he was as fresh at the close of the walk as at the beginning. After a bath and five hours' sleep, he went out again for a walk for pleasure. This is another point of most favorable comparison with flesh-eating athletes. The latter usually collapse more or less at the close of a long-distance race, in some cases even becoming delirious, their systems being poisoned by the large amount of uric acid in the blood, which is a necessary consequence of a flesh diet.

Before this walk Mr. Allen had left his unhealthful factory life for ever, and endeavored to solve another of the problems of life by getting "back to the land." His trip to Germany, where he went to compete for the race won by Karl Mann, opened his eyes to the inestimable value of the open-air life day and night. So at Whiteway, in the heart of the Cotswold hills, eight hundred feet above the sea level, he built himself a little cottage, and began the experiment of living close to nature.

All useless clothing was dispensed with, the object being to maintain the heat of the body from within, instead of paralyzing the natural energies by employing artificial means. The picture shows him in what he calls his "Adamic costume," in which he works as farmer and gardener. "A bedroom," he says, "I scorn. To my mind, open-air sleeping is an important phase of the health question." Under this simple and delightful régime his face and whole body assumed a ruddy color, and his health became marvelous.

Not content with the Leicester-to-London record, Mr. Allen planned a thousand-mile walk to be accomplished in twenty days, but after two unsuccessful attempts, he decided to retire from active participation in athletic feats. Necessity, however, in the form of a record established by a meat eater, forced him again to enter the lists. Dr. Deighton, a well-known athlete, walked from Land's End to John o' Groat's in 24 days and 4 hours, his chief sustenance *en route* being a much-advertised meat juice. The credit of this performance was largely claimed by the company which ran the affair financially.

"To prove that flesh foods generally, and meat juices in particular, are utterly unnecessary for such a feat of endurance," says Mr. Allen, "now seemed to be a task it was my duty to perform." His record walk, in which he covered the distance gone over by Dr. Deighton *in 7¼ days less time*, was the result.

Mr. Allen's meals during this walk were obtained at the different stopping-places *en route*, and were of such simple vegetarian fare as can be easily obtained by any one under almost any circumstances. At the close of each day's walk a warm bath was taken, with the exception of two nights, when the bath was not obtainable. On the days following the omission of the bath he suffered from terribly aching feet, caused, he says, by the presence of uric acid in the blood. "This," he thinks, "is something for people with rheumatic tendencies to reflect upon." He lost no weight during the walk, and after a few days was as fresh as at the beginning. For those few days he ate and slept rather more than usual.

The life and work of this noble man are a testimony to the value of right principles heroically followed. He does not believe in the permanency of any evil thing, but is assured that all disease, even though, as in his own case, "hereditary," and "incurable," may be overcome by the exercise of the will power, and the faithful following of nature's unchangeable laws of health. "We must determine," he says, "if we are at present weak, to become strong, and be willing to sacrifice everything that hinders us in our quest for health." The event in his own case has thoroughly proved the soundness of his theory. His splendid courage and indomitable perseverance have enabled him to demonstrate to the world the superiority of pure foods obtained from natural sources — the fields and orchards — over the effete products of the slaughter-house. E. E. A.

[In our October issue Mr. Allen will tell why he is a vegetarian, and how he became strong.]

O! WHAT would the world be to us
If the children were no more?
We should dread the desert behind us
Worse than the dark before.

— *Longfellow.*

RATIONAL DRESS FOR CHILDREN

BY ABBIE M. WINEGAR-SIMPSON, M. D.

IT should be the aim of every mother so to clothe her child as to encourage the development of its highest physical, mental, and moral nature. The young child is as the tender twig, which can be bent in almost any direction, and unless the training of the whole body is in the right direction, there will be defects in the child's physical development, which will to a greater or less extent influence the character of the entire life.

Childhood is the time to establish the foundation of future health and strength of body as well as mind. The principle holds true that the farther back we begin, the more momentum we gain. The body is a soft, pliable, yielding mass of tissue, which may be compressed from without, distended from within, bent forward or to either side.

The same principle holds true in clothing the child as in clothing the adult. There must be perfect freedom of every muscle and organ of the body. I think I am safe in saying that far more importance should be attached to the proper adjusting of the clothing of the child than of the grown person, because it is not only necessary to allow freedom of motion, but consideration must be taken of the fact that the child is growing, and that there is a constant demand for more space for expansion. This makes it imperative to study the subject carefully, that this demand may be met.

When the child enters life, so far as external influences are concerned, its troubles begin with the first dressing. The first garment that is usually placed upon it is one which an older person, who is able to assert his rights, would never wear,— a tight band, which at once begins the compression and deformity which are so well developed in later life, especially in women. The child can speak the anguish it feels only in the one language common to infants, and crying, sad to say, has to the mother but one interpretation — hunger; so the suffering little one is given all the food it will accept, thus adding to its suffering by distending the body from within. This method of treatment continues through the first months of the child's life.

The tight band is only one of the garments of torture which the baby is often compelled to wear. To this are added several skirt bands, to which are attached skirts, a yard or more in length; then comes the long dress, which, with the skirts, hinders the free action of the limbs. These garments often lead to such deformities as bow-legs, round shoulders, curvature of the spine.

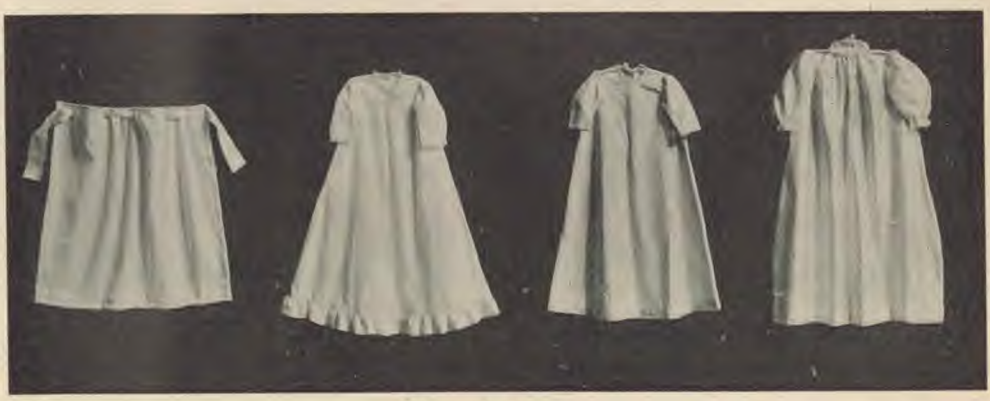
It is gratifying, however, to know that at the present time there is an effort to break away from this bondage, and mothers are beginning to study how best to clothe their children. Every muscle must have opportunity for free and unrestrained action, and every organ must be able to maintain its proper position, and perform its specific functions. This requirement may first be met by having the clothing of as light material as is consistent with the climate and season. It should always be such as to keep the body uniformly warm. The number of garments should be few, and so adjusted and supported as not to interfere with comfort, growth, or development. For

the infant, if a band is used, it should be one made of stockinet or some yielding material, to be slipped on and off as desired, and requiring no pins; but two little straps to go over the shoulders and button in front. This is sufficient to support the usual dressing, and also allows the necessary expansion and contraction. The other garments should be short, and made without waists, that there may be no compression.

Few garments are required to dress the infant. Five or six are all that are necessary: the bandage, the diaper, a vest if desired, one or two skirts, and the outer slip. The clothing of the feet is an important matter. If the foot is compressed at an early period, painful deformities may result. When buying or making footwear for the child, care should be taken to get one size larger than the foot actually measures; the shoes should be soft and pliable, and the buttons such as will not press into the tender flesh. It is important, also, to remember that from month to month changes must be made in the clothing to meet the demands of rapid growth.

As the child advances in years, the garments which are suitable for the infant will need to be replaced by others adapted to the different ages and conditions, but the same principles hold true with the older child as with the infant. There must be the same freedom from compression and stricture, and a like opportunity for growth, exercise, and development. The first garment should be a union undersuit, such as can now be purchased at any clothing or dry-goods store, or made at home.

The next garment should be a waist that fits the form, but sufficiently large to allow for growth. This should be made from material firm enough so that it will not stretch and pull in such a manner as to counteract its purpose. The skirt should be attached to this, either sewed or buttoned to it. The hose supporters should be attached to the bottom of the waist on either side. The outer dress should be made loose, and the entire garment preferably in one piece. Bands or corset waists are not at all necessary, and are the beginning of an evil which is so wide-spread as to need no comment here.



INFANT'S OUTFIT

Designed by Carolyn Geisel, M. D.

The Pinning Blanket without Band.— Up-and-down buttonholes about an inch in length and worked in the upper edge of the blanket, and so arranged that they come in perfect apposition with similar buttonholes worked in the silk and flannel slips, at a point just above the baby's hips. A soft silk tape run through these unites all three garments.

Silk Princess Slip.— To be worn next the body, instead of a vest (over the band for the few days that is needed). It is made of wash silk or silk muslin.

Flannel Princess Slip.— To be worn over the silk slip.

Princess Dress.— Made of any desirable fabric.

REST HOURS FOR CHILDREN

"WE are fast becoming a people who do not know how to rest," says Dr. Hastings in *Home Science Magazine*, and the result is seen in "the wide-spread diffusion of those complaints of a nervous character so peculiarly our own as to be all classed under the head 'Americanitis.'" Since the victims of these nervous maladies rarely come to the physician until most of the mischief to themselves and others is done, Dr. Hastings makes some suggestions to mothers, that they may protect their children from any such harm.

"How many of you," he says, "can lie down and fully relax all your muscles? Try it. See how almost invariably some one or more groups of muscles will contract in spite of your best efforts. Nor can most people any better give the mind a rest. Without any volition, perhaps, it at once seizes that first opportunity for planning, scheming, or dreaming."

The child's education begins almost before he can talk. He must learn something of sciences, languages, history, art, music, etc., and of late much has been added in the way of gymnastic training. But when is the child taught to rest?

Children's nerve centers are much more rapidly exhausted than those of adults, and are replenished with corresponding rapidity. The increase of energy from stopping the machinery absolutely for only a few minutes is so marked that the training of children to certain rest periods would be greatly to their advantage. Dr. Hastings would have these periods arranged as follows: —

"First, at night. Prepare the bedroom for the purpose of rest, not merely of sleep. Have it quiet, dark, and full of fresh air, free from anything which might stimulate their weary little minds. The bed covering should be suited to the weather, not too warm and certainly not too heavy. And then prepare the child. If possible let him have some light, happy diversion from the cares and studies of the day. Do not carry this too far, however. Too much excitement is worse than no attempt at all. Let there be nothing to worry or fret the little one as he closes his eyes for sleep. Be sure not to disturb or arouse him later.

"Secondly, have another rest period as near as may be to the middle of the day. Continue the two naps, morning and afternoon, as long as practicable. Then persist in the afternoon nap. When this, too, must be abandoned, still be sure that the child has some chance to rest soon after noon. The period need not be long, but let it be as regular and as complete as possible. Have the child lie down, even if he does not sleep. Teach him to relax all his muscles. You will be surprised to note how often he will fall asleep, and gratified at the manifest refreshment.

"Finally, look out for the child's vacations. Let them be what the name indicates. Plan them out in advance, and be sure the life is quite unlike the every-day school life. If possible, place the child amid new surroundings, with new duties and pleasures. Moreover, let there be real rest days, days without any definite purpose but rest. Such a custom will help them when grown to take such days occasionally, and save them from the nervous breakdowns now so common."

If, with all these rules and plans, the child gets the idea of rest firmly fixed in his mind, he will gradually come to appreciate its value, and meanwhile habits will be formed which will be invaluable in future years.

MILK INFECTION THE CAUSE OF SUMMER DIARRHEA IN CHILDREN

THOUSANDS of children die from milk poisoning every year, the disorder being especially fatal among bottle-fed children. Milk is a very good medium for germs to grow in, and it is very easily infected. When the germs have once invaded the alimentary canal of the infant, it is very unsafe to give milk as long as they are present, for it will ferment under the action of the germs and produce poisons capable of causing the death of the child as quickly as a dose of arsenic. When the vomiting and purging, which are usually the first symptoms of this disease, begin, the stomach should, if possible, be washed out, and two teaspoonfuls of castor-oil given to move the bowels and free them from irritating poisons.

Enemas of hot water should be given every two or three hours, followed by an injection of a teacupful of thin, boiled and strained starch water. All food should be withheld for from twelve to twenty-four hours, and even then milk should be avoided. Use in its place well-cooked barley or wheat-meal gruel strained. These gruels should be boiled in a double boiler four or five hours. This diet, with fomentations to the bowels every three hours, has saved many a little one's life. Even when the worst symptoms are relieved, caution should be observed about returning to milk diet. The beaten white of an egg, mixed with boiled water, may be added to the gruels.

The nurse should be careful to wash and disinfect her hands after changing the child, especially before preparing its food. Disease germs are often present in the discharges from the bowels, and by carelessness may infect the food and drink of not only the baby, but the other children of the family. K. L.

TIRED MOTHERS AND NERVOUS MOTHERS

BY ROSE WOOD-ALLEN CHAPMAN

TIRED mothers and nervous mothers are often classified under one head; viz., cross mothers.

The expressions of the two physical conditions are often nearly identical, and are considered by most people, the mothers generally included, as evidences of an unfortunate temper or a woful lack of Christian grace. How many a devoted mother there is who sheds secret tears over this, her besetting sin, as she calls it; mourns to see the atmosphere of the home and the action of the children reflecting her own shortcomings; prays for deliverance, and promises herself to learn that perfect self-control which has always been her ideal — and feels herself to be a miserable failure because her endeavors toward improvement seem absolutely fruitless!

She looks back, it may be, to the happy, careless days of her girlhood, when her parents called her "Sunshine," her girl friends loved her for her sweet disposition, and she herself never had occasion to question whether or not she could ever be cross. What has brought about this remarkable change?

In the majority of instances, mothers are cross because they are tired. They have worked, day in and day out, whether they felt like it or not, ignoring Nature's

warnings that their supply of physical vigor is being overdrawn, until at last they have lost that buoyancy of disposition which comes from perfect health, and are upset by the slightest occurrence. They are now "working on their nerves," as we say; in other words, each day they are using their nerve-force for their daily tasks, borrowing from that which belongs to the future for the sake of what they deem to be the all-important present, and living so near the margin of absolute bankruptcy that they have nothing left to fall back upon in the slightest emergency.

They are like a delicate, vibrant machine, put together with rubber cushions in all available places, whose rubber has become worn and useless, and who, therefore, respond with disconcerting promptness to every unevenness in the road over which they are traveling.

The Creator meant us to have such a stock of good spirits, resulting from abundance of physical vigor, that the little things of life would not jar us, but would be taken with that cheerful philosophy which is supposed to be the expression of good temper.

It is most unfortunate for a mother to have allowed herself to reach such a state of physical weariness that her spirit seems continually to chafe and fret.

"Come here this minute!"

"Stop that!"

"Here, just let me get at you and I'll teach you to mind me!"

"Oh, go away; I haven't time to bother!"

Such is the language of the tired, and, therefore, cross mother. Before her children came, she would have been shocked had any one told her such would be her manner of speech; but now it is an every-day occurrence. She knows that a request would often bring better results than a sharp command; a gentle reproof be more effective than a shaking; and sympathetic interest in all her child's life has always been her ideal. But the words are out of her mouth almost before she realizes it.

Thus the children grow up in an atmosphere of sharp tones and short words. They may be heard commanding one another with arbitrary abruptness, scolding, slapping; in a word, reproducing with startling fidelity the treatment which they themselves have received. Harsh tones are the rule instead of gentle ones; pleasant requests are seldom heard; there is constant noise and uproar, quarrelings, teasing, recriminations,— all the outgrowth of the poor mother's shortcomings, as she herself often deeply realizes.

What can she do about it? If she has awakened to a realization of the seriousness of the condition, how *can* she change it?

She probably feels that she has tried every remedy in her power, but her continued lack of success points to her failure to try the only efficacious method.

She must get rested. That is the solution of her problem. Good resolutions, strenuous efforts, prayers even, will not avail without the aid of that simple remedy.

Simple? It does not seem simple to the overworked mother. How *can* she rest when there is so much to do?

There will always be more for her to do than she can accomplish; it is no use for her to wait for that Elysian period when she will have "time to rest." She must make up her mind that rest is the essential thing,— and then see that she gets it!

In other words, the mother must realize that the most important thing of all is a home of peace and harmony. The eternal welfare of the inmates of that home is at stake; can anything equal that in importance? Sewing, sweeping,

baking,— all the routine of daily life fades into insignificance before this greater spiritual requirement. Anything can be sacrificed for the sake of the life of the spirit.

If this belief has once taken firm hold of the mother's consciousness, she will be able to find time to rest. The family can live on simpler food; bakings may be omitted from the daily routine, for a time, at any rate; sheets, pillow-cases, towels, stockings, underwear, may be put away without ironing; the children's clothing may be made more simply and of colored goods instead of the easily soiled light-tinted fabrics.

It is gratifying to have a well-kept house; but it is infinitely more enjoyable to have a house of quiet and peace and comfort to come into at the end of a wearying day. So, no doubt, will think the tired husband whose wife has awakened to her condition and its remedy.

There are so many things about housework that may be omitted, if one but realizes the greater value of other things; and when one learns that the only way to overcome an undesirable temper is to acquire physical poise, the true value of these unessentials is appreciated.

The tired mother who has allowed herself to overwork day after day, for weeks and months, until she is "worn to a frazzle," must first of all make up her mind to get rested, no matter how long that process may take. She must resolutely limit each day's work by that day's strength. As soon as she *begins* to feel tired, whether her task is finished or not, she must go and lie down. After a time of complete rest, she will doubtless be able to resume her task and bring it to completion with ease.

But the rest must be complete; it will not do to sit down with a piece of fancy-work, for muscles are still called upon to hold her erect and carry on activity, and that means that nerve-force is being consumed. Her present "run-down" condition indicates a lack of nerve power, and her every effort must be to conserve and build up that power. It will not even do to lie down with a book, for reading calls for brain power, or nerve power. To get the best result in the shortest time, the mother should lie flat upon her back, with all clothing loosened if it is at all snug, with only a small pillow, or, better still, none at all under her head; close her eyes, relax every muscle, and, breathing deeply, just rest. She should not think of the work that is waiting to be done, for that will keep her muscles stiff and tense. Let her, instead, have visions of green meadows, a murmuring stream flowing lazily beneath drooping willows, and contented cattle ruminating in their shade. Fifteen to twenty minutes of such complete relaxation will make her feel like a new individual, ready once more to take up her task with ease and pleasure.

The mother who is in earnest in her "reform" must never let that tyrant, the desire of "finishing," take possession of her. When nerves cry out for rest, and conscience says, "It's time to lie down," then the tempter will whisper, "Just wait until this is finished." But the source of the plea should be recognized, and the temptation resolutely resisted.

The time to go to rest is at the first suggestion of fatigue. To postpone the rest is to repeat the mistake of the past — using reserve power instead of real physical energy. It is consuming the very supply which she is trying to increase.

In addition to these frequent rests, the tired mother must make it a rule to have a nap after the mid-day meal. Even if she can not get to sleep, she should lie down and relax, as already described.

Even when apparently her strong,

buoyant self once more, she should keep up this daily rest. Indeed, if every woman, no matter how well and strong, would follow this rule of a short nap every afternoon, she would find the day of gray hair and wrinkles postponed, and life itself made not only longer, but more worth while.

But how about the nervous mother?

In the majority of cases, the nervousness is a sign of fatigue, and the remarks already made and advice given are equally applicable in both cases. Even where the nervousness is a life-long condition, inherent in the make-up, nothing is so beneficial as plenty of rest.

A nervous person uses up more nerve energy than one of a different temperament in the simplest acts of life. Therefore, she needs more rest and more sleep. Mental poise depends to a great extent upon physical vigor; consequently, one who would overcome so-called nervousness must build up the body in every way possible.

But after that is done, if the nervousness remains, then what?

In the first place, the nervous mother must realize that her nervousness is apt to have a detrimental effect upon her children. They have, in all probability, inherited a tendency in the same direction; any expression of her nervousness, then, will but encourage in them a development of the same condition. She must learn self-control. Apprehensiveness is one of the most common expressions of nervousness.

"Don't climb that fence; I'm afraid you'll fall!"

"Don't do that; you frighten me!"

"O, I'm so afraid to see you there!"

These are the exclamations of the nervously apprehensive mother, creating the same unfortunate condition in the child's mind and preventing that natural activity which is essential to bodily development.

It is hard to see a child doing risky things and keep silence. Yet, unless the risk is really dangerous, it is better to let the child climb and learn from experience than to repress all activity and develop cowardice. The child who climbs, and so gains perfect control of his muscles, is safer than he who never climbs, and so knows neither his powers nor his limitations.

Movements sometimes irritate the nervous mother, and she wants her child to "sit still." Yet, without doubt, these movements are an outlet of nervousness in the child. To repress them and call continual attention to them by prohibitions, is to foster in the child the very thing it is desirable to avoid. Here, too, the nervous mother must learn self-control.

We have believed in the past that we were compelled to suffer from our feelings; we are learning that our feelings can be controlled as surely as can our muscles.

If the child's movements are disturbing, let the mother turn her attention to something else.

There was great philosophy in the child's reply, when his nurse cried out, "O, it makes me nervous to see you do that!"

"Well, don't look, then!" was his reasonable advice.

So with the nervous mother. Let her not look at the restless child. Let her turn her thoughts in some other direction.

Each time she makes the effort thus to control herself, she will find success coming more and more easily; so that in time she will discover that her nervousness is not so great as it used to be.

It will be a help to her, in this effort after mental poise, to choose some comforting thought for the day and carry it with her, recurring to it whenever tempted to nervous unrest:—

"Underneath are the everlasting arms."

"In quietness and in confidence shall be your strength."

"They that wait upon the Lord shall renew their strength."

Such thoughts will quiet the tingling nerves and bring the desired sense of rest and peace.

If the nervous excitement seems beyond control, let her seek her room and follow the advice given the tired mother, lying down to complete relaxation with a picture of rural calm and content before her mental vision.

Under such treatment, both tired mothers and nervous mothers would disappear from off the face of the earth, and we should have, instead, happy, rested mothers, whose mental calm would show forth in the home atmosphere and be recorded in the peaceful, joyous lives of their little ones.

THE IDEAL NURSERY

THE chief requirements for the ideal day nursery are, according to a writer in *Babyhood*, good light, good ventilation, genial warmth, and adequate protection from open fires and drafts.

The walls should not be papered, but painted or varnished in such a way as to permit of frequent and thorough washing. Pictures should be plentifully provided, of a bright, happy nature, chiefly

those dealing with child life. The large illustrations that appear in juvenile publications are often suitable, and excellent little pictures are issued gratis as advertisements. They can be pasted to a mat cut from a sheet of manila paper, and tacked into position upon the wall. In hanging them remember that a child's line of vision is lower than your own.

For heating, a grate fire is preferable to either stove or furnace heat. Whatever kind of stove or fireplace is used, a metal screen entirely surrounding it is a necessary precaution.

The health-giving rays of the sun should have free access to the room. Shades and awnings are desirable during the hot weather, but for the rest of the year let only white lace or muslin sash-curtains intervene between the windows and the room. Woven hangings of all kinds are receptacles for dust and dirt, and the air is filled with irritating particles from them which find their way into the eyes and throats of the children. The Japanese bamboo bead curtain is the ideal window hanging for the day nursery.

The best floor is of hard wood, oiled, not polished. If this is not obtainable, the floor may be stained and coated with shellac. A large woolen rug, which will not wrinkle or slip, forms the best covering.

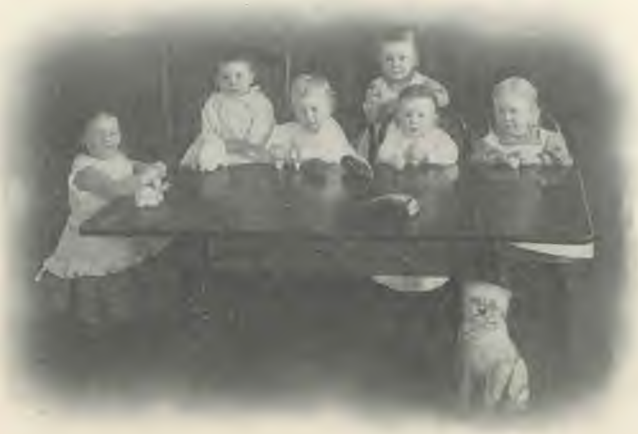
A safe play place for baby may be made from a padded packing box, or a portable fence which folds up when not in use. For his daily nap, a hammock slung across a roomy corner is a comfortable and safe place.

A screen is indispensable, to be used for shutting off any excess of light, heat, or cold. One of home construction may be covered with linen or cretonne and provided with plenty of pockets. This will serve as a holder for small toys, pictures, bits of string, and other articles too precious to be thrown away.

In furnishing, chairs and tables with well-rounded corners should be chosen. Low chairs and hassocks are necessary for the little ones. If a rocker is used, its tips should be wrapped with felt. A low kindergarten table is a source of pleasure to the little ones, as it serves for a doll's dining table, etc. It may be used as a desk during study hours.

A gate hung across the entrance to the stairway is a good safeguard; it should be provided with a spring hinge, which causes it to fall back into place.

Window guards of some sort are a necessity. They should receive frequent inspection to see that the fastenings have not worn loose, as unless perfectly reliable they are more dangerous than none at all.



WHAT CHILDREN HAVE DONE IN EMERGENCIES

BY BELLE V. CHISHOLM

COMPARATIVELY few are blessed with the faculty of being able to do the proper thing at the right moment, especially in emergencies, and yet this self-same gift has been the means of saving many a life. It is not often that we read or hear of children having presence of mind in the face of immediate danger, but the following incidents prove that they can be equal to the occasion, and further emphasize the great value of educating children along these lines. Fathers and mothers, as well as teachers, would do well to give more time and thought to just such instruction, teaching the children what to do and training them to be cool-headed in emergencies.

Not long ago in one of our city schools a lad of thirteen was sent on an errand to the basement. Just as he reached the foot of the stairs a blinding sheet of flame shot out from behind the furnace. He opened his mouth to scream, but the next instant his lips closed tightly, and springing past the blaze, he began to ring the fire-bell, and the pupils, thinking it was the drill-call, dropped into line and filed out, emptying the big four-story building in just three minutes.

"What do you mean by this, sir?" asked the superintendent sternly, meeting the boy on the stairs. "Who told you to ring the bell?"

The boy pointed to the fire, and the man, having his answer, rushed to the front to see that the lines were marched out of danger. The lad had already turned in the still alarm, and the engines, quickly on the ground, were not long in getting the fire under control.

During the cold weather two winters ago, the family of a mechanic, who worked at night, went to bed leaving the gas burning low in the grate. Some time in the night a puff of wind from the open fireplace blew the fire out, and the sleepers would all have been asphyxiated had not the fifteen-year-old daughter awoke, struggling for breath. Failing to arouse her mother and little sister who were sleeping with her, she crawled out of bed, and with much difficulty succeeded in turning off the gas and raising the window. Two little boys sleeping on a low couch, only a few inches from the floor, seemed to be dying, but she had no strength to drag them outside of the door, which was on the other side of the room. She had the presence of mind, however, to lift them to the bed beside her mother, and then, feeling herself sinking, she managed to drop upon her knees, with her head on the bed, before she became unconscious. And here, hours afterward, the father, coming home from work, found her. Summoning medical aid, all his loved ones were finally restored to consciousness. A little dog on the couch was dead, and the doctors agreed that nothing but the sister's forethought had saved the children from a like fate.

Last summer a three-year-old child in a farmhouse drank a quantity of carbolic acid. The mother and sisters in their distraction could do nothing but wring their hands and cry. "Hold the baby and let me give it this," said the little serving maid, and with a teaspoon she began pouring melted lard down the little one's throat. In response to a telephone message a doctor was soon brought, who succeeded in saving the child. "But it would have been too late," he said, "had not this little maid known what to do, and had the presence of mind to put her knowledge into execution."

Last summer while a crowd of boys was blackberrying, one of them was bitten on the leg by a copperhead. Instantly a lad of thirteen, standing near him, jerked off his suspenders and tied one tightly above the wound, and the other a little below it. Then, kneeling by the boy's side, he made an effort to suck the poison from the wound. As the boys were quite a distance from home, it was some time before the wound received medical attention, but so thoroughly had the boy friend understood the remedy he applied that no bad consequence followed.

Shortly after this, the same boy saved the life of a young carpenter who in some way had severed an artery. The boy, who chanced to be present, pulled the workman's bandanna handkerchief out of his pocket, and, tearing a strip from it, wrapped it tightly around the man's arm, above the wound, then inserting a lead pencil in the loop, he twisted it round and round, and so controlled the flow of blood until the arrival of the surgeon.

A few days after this incident, one of the schoolboys in the same village received a cut in the leg that bled profusely. A playmate who had witnessed the treatment given the carpenter, undertook to stop the flow of blood in the same way, but was unsuccessful. "Tie the bandage below the wound," exclaimed the first boy, appearing opportunely on the scene.

"You didn't when the carpenter fell," replied the would-be helper, as he followed directions, with speedy success.

"That was an artery; this is only a vein," was the answer.

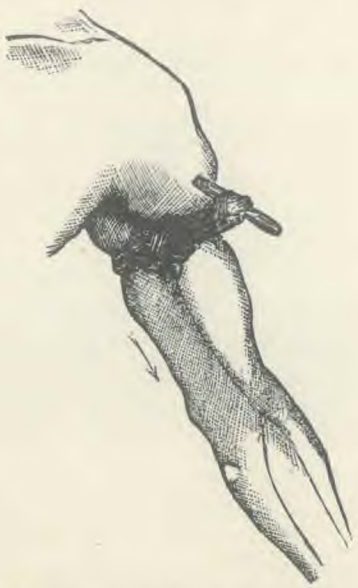
"I don't see how a fellow is to distinguish between the two," argued the other.

"If the flow is from an artery, the blood will be thrown out in jets; but if from a vein, the stream will be smaller and more regular," explained the boy, who had studied his physiology with a view to making its lessons practical.

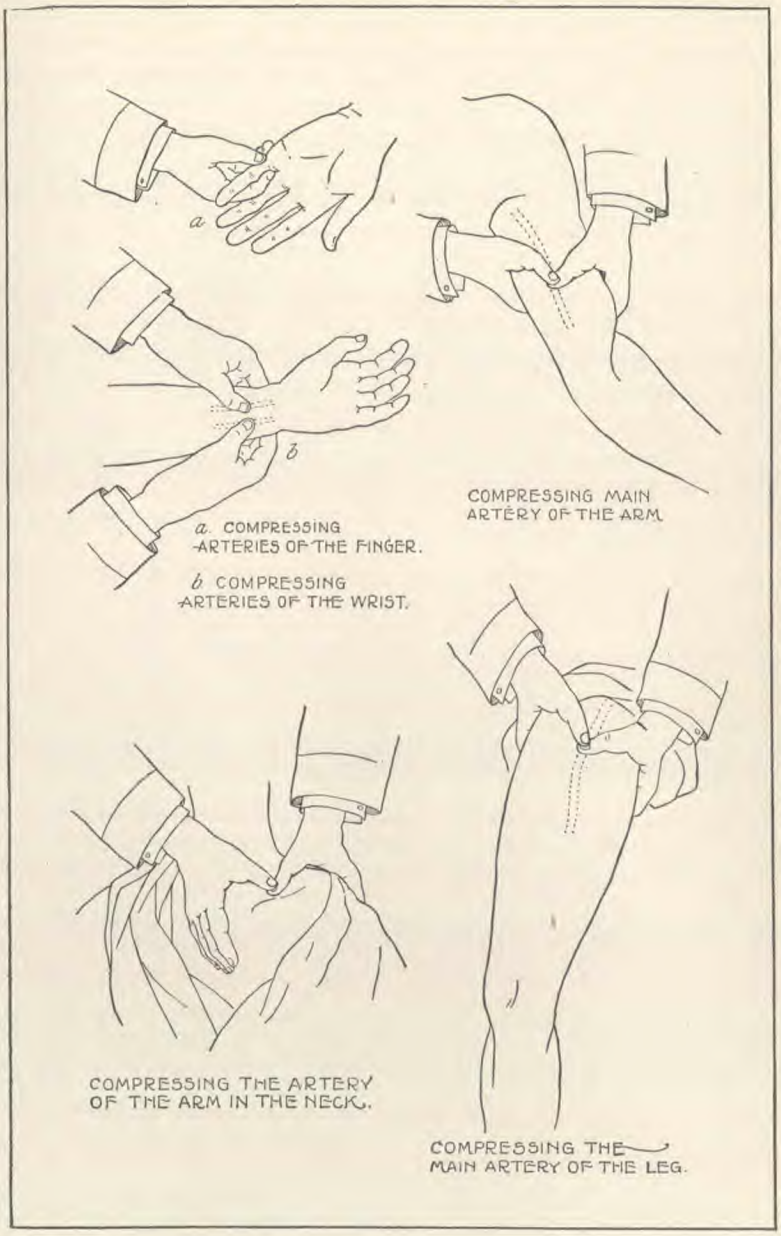
During a terrific electrical storm a year ago, a schoolhouse a short distance out of town was struck by lightning, and a number of the pupils were severely shocked. Two of them were thought to be dead, and in the excitement the teacher was as helpless as any of her charges. Fortunately, one boy, a slim, delicate lad, noted for his timidity, kept his head. "Let us lay them out in the rain," he said. The teacher objected, but with the help of another boy, the two thought to be past help were carried out and laid upon the ground with the rain beating on their faces, and by the time doctors arrived, signs of life were visible in both of them.

"Best thing that could have been done, and without doubt saved both lives," said the old doctor, and the younger practitioners nodded approval.

A young girl fainted in her class at school, and the next moment she was laid on a bench with shawls and cloaks piled under her head for a pillow. "O, I



COMPRESSION OF ARTERY OF THE ARM



believe she is dead," cried the young teacher, hysterically.

"It is only a faint," said a thirteen-year-old girl, stepping forward and taking the "pillow" from under the girl's head. "Raise the windows, please," she said quietly, "and all of you stand back, to give her air. Put a book under the foot of the bench, John," she added as she loosened the girl's clothes and bared her neck. Presently the color began to come back into her face, and there was a heaving of the chest that brought a sigh of relief to the frightened watchers.

"Why did you lower her head?" asked one of the older girls, who had helped "pillow" her up. I am sure that the doctor raised brother Louis's head as high as he could get it when he had sunstroke last summer."

"Of course," admitted the younger girl. "Sunstroke is caused by an overflow of blood to the brain, but fainting is caused by a lack of blood in the same organ."

"How can you tell them apart?" asked the first speaker. "I would not know when to raise or to lower the head."

"You see how pale Anna is, and —"

"Louis's face was fiery red," interrupted the questioner. "It is all plain enough now."

Some years ago, in a prairie home, far from doctors and drug-stores, a little child drank a quantity of lye. No one, from grandmother down, knew what to do in the emergency, until a little German neighbor remembered that mother gave Johan "winegar" when he swallowed lye, and that it cured him. It cured the prairie baby, too, so that hours later, when the doctor came, there was nothing for him to do but to recommend a little of that same vinegar for the eye of the boy that was smarting with whitewash.

"Observing little girl," said the doctor. "She is the same child who saved her brother's life when he drank an ounce of laudanum. I had left it for the mother, and when Gretchen saw what the child had done, she got out her list of antidotes, and finding strong coffee the proper remedy for opium poison, she began dosing him with it, and fighting against the sleep that seemed determined to claim him. And she had the battle to fight alone, poor child, for I did not get there till the next day, after all the danger was over. The girl had not slept a wink during the night. She looked pale, and there were dark circles under her eyes, showing exhaustion, but there was not a word of complaint, and she smiled when she said, 'Please don't tell de mudder, doctor; she be so scared if she know about Willie.'"

A little chap accustomed to making a pincushion of his mouth, swallowed a small fish-hook. It was five miles to the nearest doctor, and the mother, terribly frightened, was going to give him an emetic. A young niece from the city, not yet out of short dresses, protested against this remedy. "Give him a bowl of oatmeal, without milk, instead, and then let him have all the bread and butter he can eat on top of that," she said, and for once Jack had more tempting food offered him than he was able to dispose of. The hook gave him no trouble whatever, and the doctor's regard for city girls rose several degrees after hearing how this girl had saved his patient from the dangerous experiment to which his mother was about to subject him.

"Common sense ought to teach people to fight shy of emetics, cathartics, or a too liberal supply of fluids for twenty-four hours after anything sharp, ragged, or pointed is swallowed," he said. "The great trouble is, they lose their heads in emergencies, at the very time they most need them. And things will never be any better until children are trained from their babyhood to act, instead of scream, in times of unexpected danger."

MOLDING THE CLAY

"Within their tiny hands my children hold
A ball of yielding clay,
And, as they try some dainty form to mold,
I hear them softly say,
'What shall we make? an apple, or a vase?
Some marbles, or a fan?'
One little boy, a smile upon his face,
Says, 'I shall make a man.'

"To-day, within my hands my children lie;
I shape them as I will,
And seek for aid from Him that is on high,
That he may with his skill
Teach my weak, willing hands to rightly mold
The clay that I have sought,
That in true forms of beauty may unfold
The Maker's highest thought."

A DIET OF WORMS

WHEN Luther was about to face the memorable Diet of Worms, an old and valiant soldier remarked that more courage was required for that ordeal than he or any other captain needed in his bloodiest battles. To the uninitiated, a modern "diet of worms," at the table of a rich London epicure, where, according to *Pearson's Weekly*, a typical insect menu was recently served, would, we think, prove almost as great an ordeal. Such a menu would call forth as vigorous a protest as that of Peter when told to slay and eat all manner of creeping things. Yet we see no reason why "caterpillar soup," for instance, is any more objectionable than turtle soup, which it is said to resemble in flavor; or why "deviled wireworms" are not as good as anchovies treated in similar fashion. The following menu, with comments as to the merits of the various dishes, we reprint from a contemporary:—

"Green Caterpillar Soup
Fried Locusts with Wood-Louse Sauce
Curried Cockchafers
Wasp Grubs Baked in the Comb
Stag Beetle Larvæ on Toast
Moths Baked in Batter
Deviled Wireworms
Grasshoppers *au Gratin*

"The green caterpillars that compose the soup feed entirely upon vegetables, and mostly upon particular vegetables most relished by man, such as cabbage and lettuce.

"In appearance the soup itself is not unlike clear turtle, while its flavor is delicious.

"The locusts, which constitute the second course, have, as every one is aware, been esteemed by gormands the world over and from the remotest antiquity. 'Eat ye the locust after his kind,' is the Biblical injunction, and we know that John the Baptist is recorded as having lived for some considerable time upon 'locusts and wild honey.'

"There are, of course, many ways of preparing them. They can be fried after their legs and wings have been plucked off, which was, as a matter of fact, the process adopted in this particular instance, or they may be powdered and baked into cakes, or curried or boiled, turning red, like lobsters, in the process.

"The wood-louse sauce, if properly made with fresh butter, flour, milk, pepper and salt, will be found fully equal to shrimp, which it much resembles in taste. Indeed, the wood-louse, although he lives on land, is first cousin to that much-relished crustacean.

"Cockchafers, curried or otherwise, are delicious if selected of a serviceable size and plumpness. So, too, are their grubs when full grown. They should then be at least two inches in length and fat in proportion, and may be eaten uncooked, like oysters, or stewed in milk.

"Perhaps, however, the most toothsome of all insect delicacies is that which comes forth on our 'menu of the day,' wasp grubs, baked in the comb. These grubs have been fed by their parents on a saccharin fluid composed of fruit and vegetable juices, and are simply tiny balls of sugary fat possessing a flavor as exquisite as it is unique. No one who has once tasted them will ever again be surprised at the preference shown by fish for this particular grub when used as a bait.

"The stag beetle larva is, of course, identical with the cossus, which the old Roman epicures used to fatten for their table upon flour and wine. The sixth course should be served steaming hot, since there is no more appetizing odor

than that emanating from a baked moth.

"Deviled wireworms are eaten in the form of paste, spread upon sippets of toast, and taste not unlike anchovies."

THE WONDROUS GIFT

Ah, what a wondrous gift of God
Our human bodies are;
Still serving us from day to day,
Both in our work and in our play,
Without a break or jar!

Dear Mother, when you see your babe
Play with his tiny hands,
As though just learning they were his,
Remember, here a lesson is
For one who understands.

O, help him as his body grows,
To feel it is God-given;
So that in all earth's happy ways,
Through peaceful nights and busy days,
His life may forecast Heaven!

—*Transcription from Froebel.*

Infantile Convulsions.

This is one of the most alarming of the diseases of infancy, but is not often fatal. The treatment should be prompt and energetic. Plunge the child as quickly as possible into a hot bath, pouring cool water upon the head and chest. When the convulsion is the result of indigestion, the child should be made to vomit, if possible, by drinking warm water, or half a glass of water into which a teaspoonful of mustard or powdered alum has been stirred. When constipation and flatulence are the cause, give an enema of soap-suds. When the fontanel is prominent or bulging, the cold applications to the head should be very vigorous; ice may be used. When there is considerable fever, cool sponging of the body should be employed, together with cold injections into the bowels. When the fontanel is depressed, showing lack of blood in the brain, the convulsion may sometimes be relieved by inverting the child; that is, turning its head downward. This is often recommended indiscriminately for convulsions, which is a grave error, as it might produce a fatal result in convulsions brought on by congestion. The application of fomentations to the head is also useful in these cases.

How Children Become Infected with Tuberculosis.

In a recent breach-of-promise case, the defendant claimed exemption from damages on the ground that after the promise was made, the plaintiff was found to be afflicted with tuberculosis. The court held that if tuberculosis is infectious and transmissible to offspring, it is against public policy that one suffering from it should be married. The State must be cruel to the individual in order to protect the majority.

With regard to the transmissibility of tuberculosis to offspring, Dr. Knopf, the great authority on tuberculosis, considers that the popular notion is absolutely erroneous, and that the child is infected by its consumptive parent *after birth*. The most common modes of infection during early childhood are the following: The consumptive mother kisses the child on the mouth; she prepares the food, tasting it with the same spoon or through the same rubber nipple the

child uses; or when the child begins to play on the floor, he is liable to inhale the bacilli floating in the dust, the full development of which may take place only in later years. As the child touches everything around it, the fingers become thoroughly infected; they are put into the mouth, and the child acquires tuberculosis by ingestion, which gradually develops into consumption of the bowels. Tuberculosis of the skin may result from the scratch of an infected finger-nail.

Although consumption is not hereditary, a predisposition may be, and such a condition should be overcome by judicious training, proper food, plenty of outdoor exercise, and the avoidance of all excesses.

Teach the Children to Love Nature.

Dr. M. L. Holbrook gives the following excellent advice as to the education of children: "So far as possible, a love of Nature should be early and continually inculcated. Nature is, in a physical sense, the father and mother of us all, and a child that grows up to maturity with a genuine love of rocks and trees, flowers and insects, animals and plants, storms and sunshine, cold and heat, fresh air or the ocean wave, of every varying landscape and mood of Nature and all the activities around us, stands not only a better chance of possessing a healthy nervous system, but of maintaining it during life, than if the opposite has been the case. I am not at all in sympathy with any system of education which takes children far away from Nature. Nature is a book, a great library of books, whose authorship is the Infinite. Our little works, our libraries, vast and valuable as they are, can not be compared with it. They are poor transcripts at best of the thoughts of half-developed human beings."

Care of the Ears.

Few ailments are more common among children than earache. The foundation of chronic deafness is often laid in early childhood. Most mothers are unconscious of the fact that they themselves are responsible for causing much suffering to their children from attacks of this painful malady. In her anxiety that her children's ears shall be perfectly clean, the mother endeavors to remove every particle of ear-wax from the inner portion of the ear by boring it out with a hairpin, with some other sharp instrument covered with a towel, or with the corner of the towel twisted to a point, when really this portion of the ear requires no attention. Nature takes care of it in the most admirable manner. The membrane lining the canal of the ear contains a great number of little glands, which secrete a waxy substance having an intensely bitter taste. The purpose of this is to prevent the entrance of insects and to keep the ear clean. The layer of wax dries in scales, which rapidly fall away, thus removing with them every particle of dust or other foreign matters which may have found entrance into the ear. Nothing more irritating than a few drops of olive-oil, warmed to a temperature a little above blood heat, should be placed in the ear.

Teething.

During this troublesome period, children require special care, as the digestive organs are more liable to become disordered than at any other time. The child is often fretful and restless; and if it escapes being treated for worms half a dozen times, although innocent of harboring any such vermin, it is unusually fortunate. Teething is generally held responsible for every disease which occurs during the period of cutting the

teeth. It is probable, however, that the process of teething is really responsible for but a small part of what is charged to it. Lancing the gums is seldom required; the tissue covering the teeth is not sufficiently tense to require cutting in order to allow them to protrude. In fact, they do not tear their way out, but the tissue covering is gradually absorbed. About the only occasion for lancing the gums is the occurrence of infantile convulsions. Rubbing the teeth with various substances is also a questionable measure. All the rubbing required will generally be performed by the child itself with the finger or thumb.

Teething is facilitated by allowing the child to chew dry food, as thin slices of bread well browned in the oven, so as to be crisp throughout the entire slice, or granose flakes. This may be given after the eighth month. A nurse should never try to rub the teeth through with the finger-nail or thumb, as the result will be inflammation of the gums. Early decay of the teeth, or the non-appearance of the teeth before the twelfth month, indicates the probable existence of rickets. In some cases of this disease, after the shedding of the temporary teeth, some of the second teeth fail to appear.

A WELL-BALANCED WOMAN

THE real woman is the ideal woman," said Mrs. Barber, of Boston, at the National Congress of Mothers held at Washington. Her idea of this ideal, real woman is "she whose exterior is in harmony with the beautiful things of earth; her countenance is open and serene; her eyes clear; her voice firm and sweet; her step and movements free and light; her dress and appointments, however simple, decorative, and befitting her station and work; she radiates health and vigor, and is good to look upon.

"The real woman's mind is furnished with calm judgment, discretion, decision, imagination, and her soul with love, faith, hope, and a clear consciousness of God. She moves along the earth carrying help and healing in the sympathy and tenderness which she pours out in unstinted measure; she increases the joy of humankind by her own joy in living; her clear courage puts strength into the discouraged soul. She is a light illumining the ways of her going.

"She meets adversity with courage and cheerfulness, and adjusts herself to it; she thinks each responsibility a privilege, and does not call it a 'burden.' Scandal finds no carrier in her tongue; there is no place in her heart or mind for the unkind thought or word that so easily halts another soul on its way; she has no room for that ugly brood — jealousy, envy, malice, suspicion, distrust; she has dignity tempered with graciousness; courage softened by gentleness; her poised soul rests in God's will, and her thought, speech, hands, and feet do that will."

After such a description, which might lead us to doubt whether "the real woman" actually exists on earth, it is a comfort to learn that "every woman has the real woman within, and in her individual way may realize this ideal."

Among the essentials to this realization, health of mind and health of body are given a prominent place; for "the health of each is dependent upon the other, and the clear vision of the soul upon the health of both. An understanding and appreciation of this interdependence of soul, mind, and body makes a firm foundation for the evolving of the highest human ideals.

"Who stops to think what he owes his body? And yet there is no thought or feeling of which one may become conscious without it. Unto the least expression of self upon earth are we dependent upon it, and yet we abuse, distort, and degrade this soul-house; its rights we are indifferent to; its laws we disobey; its rebellions we quell with drugs that stunt and weaken. If nature did not always make for truth and perfection, we should long ago have become a mentally irresponsible and physically misshapen people. But at each new birth she struggles back to her own ideal, thus constantly righting the wrongs we as persistently commit, and saving us from ourselves.

"If women would give their bodies a little loving care and attention,— not simply in the matter of eating and clothing (that is already overdone), but in the observance of natural laws; seek to understand and develop them as their structure shows was the intent,— the response in health and happiness would be incalculable. Lack of time is usually pleaded for inattention to the care of the body. We have, however, time for everything else — while the instrument through which we do all these other things 'goes a begging.'

"An unhealthy body gives unhealthy mind pictures, however superior the spiritual and intellectual development may be; and an unhealthy, morbid, or irritable mental state will produce unhealthy physical conditions. A pain in one small nerve will often make one's mental outlook lugubrious and cheerless; a hurt to one's self-love, or a disappointment, will so disturb the nervous system as to cause bodily pain. Fear or anger will stop the processes of digestion, just as surely as food at an unseasonable hour, or an imperfect circulation from any physical cause."

The cause of much of the dissipation of woman's nerve force, Mrs. Barber thinks to be "the living in the three tenses — past, present, and future. If she could realize that from the past she gathered what there was for her as she went through, and that the future will be determined by her present thought and action, *now* would be her watchword."

Child study is stated to be an important part of every woman's education, whether she be a mother in the specific sense or not. "Such study will enable her better to understand herself; will help her to adjust her relations to others; will give her a wider horizon, deeper sympathies, more gentleness and toleration; in short, will be a potent factor in developing the real woman,— which is the mother."

Stomach Capacity of the Infant.

It is proverbial that a hand-fed baby always has a large abdomen, which means that some organ is overstretched, either by too large meals or by foul gases generated from spoiled food in the alimentary canal.

This leads us to consider how large a baby's stomach is. By actual measurement it has been found that at birth the human stomach will hold from six to eight teaspoonfuls. The capacity depends somewhat upon the size of the child; small, premature children needing less than six teaspoonfuls at a meal. If only the exact amount is put in the bottle for each feeding, there can be no danger of overfeeding; for when the food is all gone, the bottle can be removed. The baby should never be allowed to suck the empty bottle or anything else after a meal.

ONE who has proved it by experience says: "The bedclothes can be kept upon a very restless child by sewing tapes to the first blanket and tying them to convenient parts of the crib."

A NATURAL FOOD MENU

BY LUCY M. WINEGAR

Cream Tomato Soup — Bread Crisps

Roast Protose — Bechamel Sauce

Potato Cones — Spinach in Croustades

Creamed Asparagus

Strawberry Salad — Marguerites

Bread — Almond Butter

Emerald Pudding — Whipped Cream

Health Cocoa

Cream Tomato Soup.—This is wholesome and nutritious. One quart of strained tomato, one and a half pints cocoanut cream. Strain the tomato into a double boiler, and heat; bring the cream to the boiling point, and mix with the tomato; add one-half teaspoonful of salt. Cocoanut cream is preferable to dairy cream, because it will not curdle.

Roast Protose.—Take one pound of protose just from the can, cut through the center, lay the flat sides down in a baking dish, and spread the top with cocoanut butter. Grate a little onion over it, and sprinkle lightly with salt. Cover with a quart of boiling water. Bake for one hour, slice, and serve with sauce.

Bechamel Sauce.— One-third cupful butter, one tablespoonful flour. Mix, and brown. Add one pint protose broth, let thicken, and serve. Cocoanut butter may be used.

Potato Cones.— Mold one quart of well-seasoned mashed potatoes in teacups; turn out, and sprinkle with crumbs and a little cream. Brown in the oven from twenty-five to thirty minutes.

Spinach in Croustades.—Wash thoroughly one peck of spinach. Cook in as little water as possible for twenty minutes, remove from the fire, drain, salt, and add one tablespoonful of olive or nut oil, four hard-boiled eggs, and three tablespoonfuls of lemon juice. Chop fine, and serve in toast prepared as follows: Select nice slices of white bread, and cut out the center; dry thoroughly, and toast, and serve spinach in the center.

Strawberry Salad.—Select firm berries and pile on crisp lettuce leaves. Thin mayonnaise dressing with whipped cream and pour over the berries. Serve ice cold.

Marguerites.— One cupful flour, one-half teaspoonful of salt, one cupful cocoanut butter. Mix well together, add half of an egg (after beating), and mix well. Roll out very thin and cut into strips one and a half inches wide and four inches long. Perforate with a fork, and bake slowly a nice brown. When cold cover with the following: To the whites of two eggs well beaten add three-fourths cupful powdered sugar and two tablespoonfuls of chopped nuts. Spread on the wafers and brown lightly.

Emerald Pudding.— Take one-half ounce vegetable gelatin, and after soaking in hot water for twenty minutes, boil it for five minutes and strain through cheese-cloth. Then add four cupfuls of pineapple or lemon juice, two cupfuls of sugar, and one teaspoonful of crushed spinach (or fresh spinach tied in a thick cloth and allowed to stand in the juice for a while), to give it a green color. Pour into cups wet in cold water, and when it begins to cool add pecan meats.

STIMULANTS

BY A. J. HOENES, M. D.,

Friedensau Sanitarium, Germany.

THE word "stimulant" has long been applied to such articles as alcohol, tobacco, tea and coffee, flesh meats, spices, and the like. Enthusiastic reformers have written much against the use of stimulants, until many people have come to believe that stimulants are always harmful, and in every case to be avoided.

If we give this word a wider application, we can classify stimulants into harmful, and wholesome or beneficial ones. Stimulants are as necessary to the human body as food itself, and natural, wholesome stimulants will do as much good as artificial stimulants may do harm.

It is sometimes difficult to draw the line between these two classes. Some hold that onions, horseradish, cinnamon, nutmeg, lemon peel, even sage, celery, and table salt, should not be used, on account of their stimulating effects. Others go so far as to allow a little pepper, cloves, mustard, ginger, even some tea and coffee, etc. One person prefers this, and another that, flavor in food; and, as a rule, that food which is pleasant to the smell and taste is also the most desirable for us. Pawlow, the Russian physiologist, has shown that the food which has an agreeable taste and smell stimulates the flow of gastric juice, as well as the saliva, and is rapidly digested; while tasteless food, no matter how nutritious, does not stimulate the gastric mucous membrane, and is digested very slowly.

Yet the flavors which we like are not always healthful. The fact that a stimulant agrees with us at the time, is not always a sure test of its usefulness. A young man may enjoy his cigar after meals; he may believe that it aids his digestion, and for a long time he may feel no evil effects from it. But after many years he may be compelled to hear the physician's verdict: "You have a tobacco heart. You are suffering from chronic nicotin poisoning." The elderly gentleman may drink his grog daily, believing it a necessary stimulant, but in the end "it biteth like a serpent and stingeth like an adder." So also with the use of tea and coffee, cocoa, vinegar, pepper, peppersauce, and the continued use of large quantities of meat. They may seem to agree well for a long time, but by overstimulating the digestive mucous membrane and the reflex nervous mechanism, they will gradually weaken their action, and cause congestion, irritation, and inflammation.

All natural foods contain certain stimulating or seasoning elements. Fruits contain their characteristic acids,— malic, citric, tartaric, oxalic, benzoic, and gallic, and salts,— besides certain aromatic, volatile flavors which must be looked upon as stimulants, or force regulators, rather than foods or force producers. Grains, nuts, and vegetables contain certain inorganic salts and essential oils which give them their characteristic taste and smell, stimulating the appetite, and the flow of the digestive juices in the mouth and also in the stomach. Foods should be eaten raw, or prepared in such a way as to retain their natural flavors as much as possible, and then, if desirable, a little of some harmless seasoning may be added. I believe, as Professor Schweninger has shown, that the same stimulant should not be used day after day continually; for in time the nerves

become less sensitive to it; they fail to react; and larger quantities must be used to secure the desired effect, and this larger quantity may be harmful. This is the danger even with salt. Sheep and cattle are salted once a month with benefit, but the daily administration of salt in food would probably result in injury.

It is particularly the external stimulants — air, water, sunlight, heat, exercise, mechanical stimulation of the surface of the body — of which civilized man is deprived. Recognizing the want of stimulation, and not knowing how to supply it, he resorts to artificial stimulants, which give him temporary relief. A better nerve tonic than a cup of the best breakfast coffee is a cool rub in the morning. Its effect is more lasting, and devoid of the evil after-results of the former. A brisk walk after leaving the office in the evening, or after sewing or studying all day, is worth more than the customary cup of tea, for it will not produce insomnia, nor leave you with a shattered nervous system after a number of years. It is sunlight which makes plants grow; and it is as reasonable to expect to obtain the same result by sprinkling them with tobacco juice as to use this substitute for sunlight in your own case. The artificial life lived by most people at the present day deprives the body of the very valuable stimulant of a natural life. This must sometimes be artificially applied by massage, muscle beating, and manual and mechanical Swedish movements. The irritation of the soles of the feet by walking barefoot is not accidental, but essential. The impulse is conducted up the limbs, by the centripetal nerves, to the lower spine, which is usually a weak spot in the human body, thence to the pelvis, bowels, and stomach, and acts as a tonic to the relaxed and torpid tissues.

The writer often advises running and jumping on a straw mat in the room when walking barefoot out of doors is impracticable.

It is a well-known fact that the savage tribes in our colonies are not, as a rule, accustomed to use artificial stimulants to excess. They find stimulation enough in their natural life. It is not until the civilized traders introduce these pernicious substances to the natives, and they adopt the customs of the foreign invaders, that they gradually yield to the excessive use of unnatural stimulants.

The best way to banish the evil and unnatural things in our lives is to introduce the good, the health-giving, the invigorating, and return to nature.

Open-Air Exercise for Children.

Nothing is more important for a young child than an opportunity for daily exercise in the open air. After the first two weeks, the young infant should be taken out of doors for several hours daily, during the summer season, and for an hour or two even in the winter season, except in the very coldest weather. It should, of course, be properly protected, to avoid chilling or too great exposure to cold. The tonic effect of cold air is as healthful to an infant as to a grown person, but it is easily possible for a young child to be exposed in such a manner as to produce congestion of the lungs, and serious, perhaps fatal, injury from bronchitis or pneumonia, as the result of injudicious exposure. Daily open-air exercise is the best of all means of developing constitutional resistance against catarrh and consumption, and the various maladies which find their beginning in taking cold. Children who enjoy this advantage are seldom subject to colds, as are other children. Their ruddy

cheeks, bright eyes, and red lips are an indication of their superior vigor and vitality; while the pale faces, lusterless eyes, and lifeless manner of the hot-house children who form so large a proportion of the little ones born and reared in cities, indicate the opposite conditions.

Too much coddling and continuous indoor life have killed more children than the opposite course; nevertheless, the so-called "hardening" of children by subjecting them to unreasonable and possibly damaging exposure, is not to be recommended.

Measles and Education.

An English physician, Dr. Mackenzie, has recently brought a strong indictment against the practise of sending children to school before the age of six years. In Switzerland, one of the best educated countries, the lowest school age is seven. Not only does too early pressure stunt their mental and physical development, but their attendance at school exposes them to attacks of measles just at the ages at which this disease proves most fatal. If all children under six were excluded from school, and healthy children kept away from sick households, measles would soon become the least dangerous of infectious diseases, instead of, as now, responsible for the death of as many children as smallpox, diphtheria, and gastric fever put together.

Dr. Mackenzie's statements are in accord with facts just discovered by a German medical school inspector who has studied the statistics of the four largest cities of Germany in order to learn whether infectious diseases are more or less prevalent during the school vacations. He finds that the vacations have no effect on the prevalence of diphtheria or scarlet fever, but that measles drop abruptly as soon as the schools close. This he explains by the fact that diphtheria and scarlet fever are not so contagious during the early stages, but measles is highly contagious from the start. He recommends the closing of the schoolroom at once when measles is prevalent.

Weaning.

Under this head it is important to call attention to the following points: —

1. The proper time for weaning a healthy infant is at about one year of age. Very weakly children sometimes require longer nursing. The custom practised by some women of prolonging the nursing period to two years or more is injurious to both mother and child.

2. As a rule, children should not be weaned in hot weather, for slight changes in diet are often sufficient to produce serious disturbances at this season of the year.

3. Weaning should be avoided when the child is cutting teeth.

A Naturalist's Prescription.

A writer in the *Outlook,* who gives his personal impressions of John Muir, says that "his cure for every ill is to 'go up a cañon,' and perhaps he is right in the larger sense that the country is to be looked to as the only hope for the half-life, the stifling existence, of our crowded cities."

Mr. Muir evidently knows by experience that —

> ". . . health and virtue, gifts
> That can alone make sweet the bitter draft
> That life holds out to all, do most abound
> And least are threatened in the fields and groves."

"Do not apply adult standards of morality to little children."

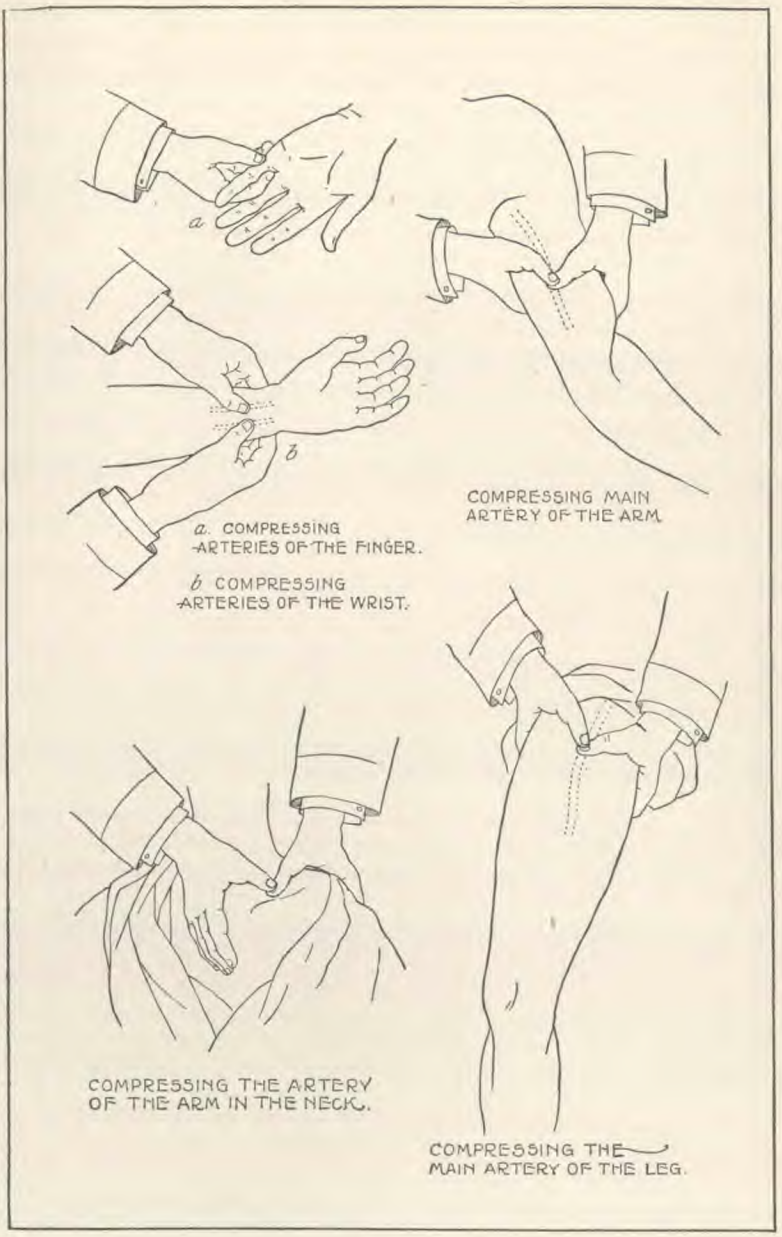
A SIMPLE HOME PICTURE

BY ADA COX

TWO or three summers ago I went to visit an old college friend of my mother's, and the impressions received there were so lasting and inspiring that I have ever since had a desire to tell what I saw and learned during a stay of one night and less than one day at the home of simple-lived, plain, country folks. I should feel that something had been done if it could infuse new courage into a sometimes half-discouraged soul as it did inspiration and incentive to effort in the humblest ways, into mine,— a new determination to foster and stimulate to growth the one talent which God has given nearly every woman,— the ability to make herself and her home attractive.

It was August, and proverbially warm and dusty; and at the end of my little journey I was set down in what seemed, and probably was, the middle of a farm. There was no highway, no farm buildings, only an empty little station-house, and two steel rails, and poles and wires and fields. Before long, a comfortable-looking, clean top buggy, drawn by a big, handsome, well-groomed bay, came down the lane, and the driver was none other than my hostess, a large, pleasant-faced woman well into her sixties, in the spotless, wrinkleless, but unmistakable attire of the farmer's wife. It was quite a drive up and down the hills before we reached her home, on what seemed to me rather a lonely road. We occasionally see large, well-painted barns, beautiful grounds, and fine modern houses as the home and surrounding of the unusually successful farmer, but here there was only one barn of any size, and that unpainted and unpretentious; but the yard about it, the fence and outbuildings, were tidy; there were no old boxes or barrels, or littering of straw; no farming tools out to the weather,— everything was well kept, and good to look upon. The house among the trees was a plain frame one, but was well painted, with glistening windows, neat, substantial chimneys, and roomy porches. We left the carriage at the side entrance, and walked over a well-kept stretch of lawn, and entered at a side door opening into the dining-room.

I wish I could make you see this dining-room as it looked to me after a tiresome, dusty ride. It was a long room with windows and a glass door opening on to porches at either side; it was so large that thirty or more persons could have been seated at table and served most comfortably. A large pantry opened off it, and the open door nearly obscured the shelving, and showed only one end and a part of one side, which was entirely enclosed in glass, and as potted ferns stood on a low shelf running around beneath the sashes, the place had the effect of a little conservatory. The appointments and arrangement were simple and good, but it was the little touches that gave the charm. The table in the center was daintily laid for three, with what seemed the snowiest and smoothest linen in the land. In just the right position on the sideboard was a small, thrifty umbrella plant, and just far enough from that was one of those pretty, old-fashioned china fruit baskets made to imitate willow work, heaped with beautiful green apples with crimson stripes. The carpet had probably been passed on from the parlors, for it was red and green and white in old-fashioned blockwork, always so clean and cheerful looking. The room was so large that there was space for other purposes than that of meal serving, and in a darker corner was a wide lounge with fresh-looking pillows, and near by, at a



believe she is dead," cried the young teacher, hysterically.

"It is only a faint," said a thirteen-year-old girl, stepping forward and taking the "pillow" from under the girl's head. "Raise the windows, please," she said quietly, "and all of you stand back, to give her air. Put a book under the foot of the bench, John," she added as she loosened the girl's clothes and bared her neck. Presently the color began to come back into her face, and there was a heaving of the chest that brought a sigh of relief to the frightened watchers.

"Why did you lower her head?" asked one of the older girls, who had helped "pillow" her up. I am sure that the doctor raised brother Louis's head as high as he could get it when he had sunstroke last summer."

"Of course," admitted the younger girl. "Sunstroke is caused by an overflow of blood to the brain, but fainting is caused by a lack of blood in the same organ."

"How can you tell them apart?" asked the first speaker. "I would not know when to raise or to lower the head."

"You see how pale Anna is, and —"

"Louis's face was fiery red," interrupted the questioner. "It is all plain enough now."

Some years ago, in a prairie home, far from doctors and drug-stores, a little child drank a quantity of lye. No one, from grandmother down, knew what to do in the emergency, until a little German neighbor remembered that mother gave Johan "winegar" when he swallowed lye, and that it cured him. It cured the prairie baby, too, so that hours later, when the doctor came, there was nothing for him to do but to recommend a little of that same vinegar for the eye of the boy that was smarting with whitewash.

"Observing little girl," said the doctor. "She is the same child who saved her brother's life when he drank an ounce of laudanum. I had left it for the mother, and when Gretchen saw what the child had done, she got out her list of antidotes, and finding strong coffee the proper remedy for opium poison, she began dosing him with it, and fighting against the sleep that seemed determined to claim him. And she had the battle to fight alone, poor child, for I did not get there till the next day, after all the danger was over. The girl had not slept a wink during the night. She looked pale, and there were dark circles under her eyes, showing exhaustion, but there was not a word of complaint, and she smiled when she said, 'Please don't tell de mudder, doctor; she be so scared if she know about Willie.'"

A little chap accustomed to making a pincushion of his mouth, swallowed a small fish-hook. It was five miles to the nearest doctor, and the mother, terribly frightened, was going to give him an emetic. A young niece from the city, not yet out of short dresses, protested against this remedy. "Give him a bowl of oatmeal, without milk, instead, and then let him have all the bread and butter he can eat on top of that," she said, and for once Jack had more tempting food offered him than he was able to dispose of. The hook gave him no trouble whatever, and the doctor's regard for city girls rose several degrees after hearing how this girl had saved his patient from the dangerous experiment to which his mother was about to subject him.

"Common sense ought to teach people to fight shy of emetics, cathartics, or a too liberal supply of fluids for twenty-four hours after anything sharp, ragged, or pointed is swallowed," he said. "The great trouble is, they lose their heads in emergencies, at the very time they most need them. And things will never be any better until children are trained from their babyhood to act, instead of scream, in times of unexpected danger."

MOLDING THE CLAY

"Within their tiny hands my children hold
A ball of yielding clay,
And, as they try some dainty form to mold,
I hear them softly say,
'What shall we make? an apple, or a vase?
Some marbles, or a fan?'
One little boy, a smile upon his face,
Says, 'I shall make a man.'

"To-day, within my hands my children lie;
I shape them as I will,
And seek for aid from Him that is on high,
That he may with his skill
Teach my weak, willing hands to rightly mold
The clay that I have sought,
That in true forms of beauty may unfold
The Maker's highest thought."

A DIET OF WORMS

WHEN Luther was about to face the memorable Diet of Worms, an old and valiant soldier remarked that more courage was required for that ordeal than he or any other captain needed in his bloodiest battles. To the uninitiated, a modern "diet of worms," at the table of a rich London epicure, where, according to *Pearson's Weekly*, a typical insect menu was recently served, would, we think, prove almost as great an ordeal. Such a menu would call forth as vigorous a protest as that of Peter when told to slay and eat all manner of creeping things. Yet we see no reason why "caterpillar soup," for instance, is any more objectionable than turtle soup, which it is said to resemble in flavor; or why "deviled wireworms" are not as good as anchovies treated in similar fashion. The following menu, with comments as to the merits of the various dishes, we reprint from a contemporary: —

"Green Caterpillar Soup
Fried Locusts with Wood-Louse Sauce
Curried Cockchafers
Wasp Grubs Baked in the Comb
Stag Beetle Larvæ on Toast
Moths Baked in Batter
Deviled Wireworms
Grasshoppers *au Gratin*

"The green caterpillars that compose the soup feed entirely upon vegetables, and mostly upon particular vegetables most relished by man, such as cabbage and lettuce.

"In appearance the soup itself is not unlike clear turtle, while its flavor is delicious.

"The locusts, which constitute the second course, have, as every one is aware, been esteemed by gormands the world over and from the remotest antiquity. 'Eat ye the locust after his kind,' is the Biblical injunction, and we know that John the Baptist is recorded as having lived for some considerable time upon 'locusts and wild honey.'

"There are, of course, many ways of preparing them. They can be fried after their legs and wings have been plucked off, which was, as a matter of fact, the process adopted in this particular instance, or they may be powdered and baked into cakes, or curried or boiled, turning red, like lobsters, in the process.

"The wood-louse sauce, if properly made with fresh butter, flour, milk, pepper and salt, will be found fully equal to shrimp, which it much resembles in taste. Indeed, the wood-louse, although he lives on land, is first cousin to that much-relished crustacean.

"Cockchafers, curried or otherwise, are delicious if selected of a serviceable size and plumpness. So, too, are their grubs when full grown. They should then be at least two inches in length and fat in proportion, and may be eaten uncooked, like oysters, or stewed in milk.

"Perhaps, however, the most toothsome of all insect delicacies is that which comes forth on our 'menu of the day,' wasp grubs, baked in the comb. These grubs have been fed by their parents on a saccharin fluid composed of fruit and vegetable juices, and are simply tiny balls of sugary fat possessing a flavor as exquisite as it is unique. No one who has once tasted them will ever again be surprised at the preference shown by fish for this particular grub when used as a bait.

"The stag beetle larva is, of course, identical with the cossus, which the old Roman epicures used to fatten for their table upon flour and wine. The sixth course should be served steaming hot, since there is no more appetizing odor

than that emanating from a baked moth.

"Deviled wireworms are eaten in the form of paste, spread upon sippets of toast, and taste not unlike anchovies."

THE WONDROUS GIFT

Ah, what a wondrous gift of God
Our human bodies are;
Still serving us from day to day,
Both in our work and in our play,
Without a break or jar!

Dear Mother, when you see your babe
Play with his tiny hands,
As though just learning they were his,
Remember, here a lesson is
For one who understands.

O, help him as his body grows,
To feel it is God-given;
So that in all earth's happy ways,
Through peaceful nights and busy days,
His life may forecast Heaven!

—*Transcription from Froebel.*

Infantile Convulsions.

This is one of the most alarming of the diseases of infancy, but is not often fatal. The treatment should be prompt and energetic. Plunge the child as quickly as possible into a hot bath, pouring cool water upon the head and chest. When the convulsion is the result of indigestion, the child should be made to vomit, if possible, by drinking warm water, or half a glass of water into which a teaspoonful of mustard or powdered alum has been stirred. When constipation and flatulence are the cause, give an enema of soap-suds. When the fontanel is prominent or bulging, the cold applications to the head should be very vigorous; ice may be used. When there is considerable fever, cool sponging of the body should be employed, together with cold injections into the bowels. When the fontanel is depressed, showing lack of blood in the brain, the convulsion may sometimes be relieved by inverting the child; that is, turning its head downward. This is often recommended indiscriminately for convulsions, which is a grave error, as it might produce a fatal result in convulsions brought on by congestion. The application of fomentations to the head is also useful in these cases.

How Children Become Infected with Tuberculosis.

In a recent breach-of-promise case, the defendant claimed exemption from damages on the ground that after the promise was made, the plaintiff was found to be afflicted with tuberculosis. The court held that if tuberculosis is infectious and transmissible to offspring, it is against public policy that one suffering from it should be married. The State must be cruel to the individual in order to protect the majority.

With regard to the transmissibility of tuberculosis to offspring, Dr. Knopf, the great authority on tuberculosis, considers that the popular notion is absolutely erroneous, and that the child is infected by its consumptive parent *after birth*. The most common modes of infection during early childhood are the following: The consumptive mother kisses the child on the mouth; she prepares the food, tasting it with the same spoon or through the same rubber nipple the

child uses; or when the child begins to play on the floor, he is liable to inhale the bacilli floating in the dust, the full development of which may take place only in later years. As the child touches everything around it, the fingers become thoroughly infected; they are put into the mouth, and the child acquires tuberculosis by ingestion, which gradually develops into consumption of the bowels. Tuberculosis of the skin may result from the scratch of an infected finger-nail.

Although consumption is not hereditary, a predisposition may be, and such a condition should be overcome by judicious training, proper food, plenty of outdoor exercise, and the avoidance of all excesses.

Teach the Children to Love Nature.

Dr. M. L. Holbrook gives the following excellent advice as to the education of children: "So far as possible, a love of Nature should be early and continually inculcated. Nature is, in a physical sense, the father and mother of us all, and a child that grows up to maturity with a genuine love of rocks and trees, flowers and insects, animals and plants, storms and sunshine, cold and heat, fresh air or the ocean wave, of every varying landscape and mood of Nature and all the activities around us, stands not only a better chance of possessing a healthy nervous system, but of maintaining it during life, than if the opposite has been the case. I am not at all in sympathy with any system of education which takes children far away from Nature. Nature is a book, a great library of books, whose authorship is the Infinite. Our little works, our libraries, vast and valuable as they are, can not be compared with it. They are poor transcripts at best of the thoughts of half-developed human beings."

Care of the Ears.

Few ailments are more common among children than earache. The foundation of chronic deafness is often laid in early childhood. Most mothers are unconscious of the fact that they themselves are responsible for causing much suffering to their children from attacks of this painful malady. In her anxiety that her children's ears shall be perfectly clean, the mother endeavors to remove every particle of ear-wax from the inner portion of the ear by boring it out with a hairpin, with some other sharp instrument covered with a towel, or with the corner of the towel twisted to a point, when really this portion of the ear requires no attention. Nature takes care of it in the most admirable manner. The membrane lining the canal of the ear contains a great number of little glands, which secrete a waxy substance having an intensely bitter taste. The purpose of this is to prevent the entrance of insects and to keep the ear clean. The layer of wax dries in scales, which rapidly fall away, thus removing with them every particle of dust or other foreign matters which may have found entrance into the ear. Nothing more irritating than a few drops of olive-oil, warmed to a temperature a little above blood heat, should be placed in the ear.

Teething.

During this troublesome period, children require special care, as the digestive organs are more liable to become disordered than at any other time. The child is often fretful and restless; and if it escapes being treated for worms half a dozen times, although innocent of harboring any such vermin, it is unusually fortunate. Teething is generally held responsible for every disease which occurs during the period of cutting the

teeth. It is probable, however, that the process of teething is really responsible for but a small part of what is charged to it. Lancing the gums is seldom required; the tissue covering the teeth is not sufficiently tense to require cutting in order to allow them to protrude. In fact, they do not tear their way out, but the tissue covering is gradually absorbed. About the only occasion for lancing the gums is the occurrence of infantile convulsions. Rubbing the teeth with various substances is also a questionable measure. All the rubbing required will generally be performed by the child itself with the finger or thumb.

Teething is facilitated by allowing the child to chew dry food, as thin slices of bread well browned in the oven, so as to be crisp throughout the entire slice, or granose flakes. This may be given after the eighth month. A nurse should never try to rub the teeth through with the finger-nail or thumb, as the result will be inflammation of the gums. Early decay of the teeth, or the non-appearance of the teeth before the twelfth month, indicates the probable existence of rickets. In some cases of this disease, after the shedding of the temporary teeth, some of the second teeth fail to appear.

A WELL-BALANCED WOMAN

"THE real woman is the ideal woman," said Mrs. Barber, of Boston, at the National Congress of Mothers held at Washington. Her idea of this ideal, real woman is "she whose exterior is in harmony with the beautiful things of earth; her countenance is open and serene; her eyes clear; her voice firm and sweet; her step and movements free and light; her dress and appointments, however simple, decorative, and befitting her station and work; she radiates health and vigor, and is good to look upon.

"The real woman's mind is furnished with calm judgment, discretion, decision, imagination, and her soul with love, faith, hope, and a clear consciousness of God. She moves along the earth carrying help and healing in the sympathy and tenderness which she pours out in unstinted measure; she increases the joy of humankind by her own joy in living; her clear courage puts strength into the discouraged soul. She is a light illumining the ways of her going.

"She meets adversity with courage and cheerfulness, and adjusts herself to it; she thinks each responsibility a privilege, and does not call it a 'burden.' Scandal finds no carrier in her tongue; there is no place in her heart or mind for the unkind thought or word that so easily halts another soul on its way; she has no room for that ugly brood — jealousy, envy, malice, suspicion, distrust; she has dignity tempered with graciousness; courage softened by gentleness; her poised soul rests in God's will, and her thought, speech, hands, and feet do that will."

After such a description, which might lead us to doubt whether "the real woman" actually exists on earth, it is a comfort to learn that "every woman has the real woman within, and in her individual way may realize this ideal."

Among the essentials to this realization, health of mind and health of body are given a prominent place; for "the health of each is dependent upon the other, and the clear vision of the soul upon the health of both. An understanding and appreciation of this interdependence of soul, mind, and body makes a firm foundation for the evolving of the highest human ideals.

"Who stops to think what he owes his body? And yet there is no thought or feeling of which one may become conscious without it. Unto the least expression of self upon earth are we dependent upon it, and yet we abuse, distort, and degrade this soul-house; its rights we are indifferent to; its laws we disobey; its rebellions we quell with drugs that stunt and weaken. If nature did not always make for truth and perfection, we should long ago have become a mentally irresponsible and physically misshapen people. But at each new birth she struggles back to her own ideal, thus constantly righting the wrongs we as persistently commit, and saving us from ourselves.

"If women would give their bodies a little loving care and attention,— not simply in the matter of eating and clothing (that is already overdone), but in the observance of natural laws; seek to understand and develop them as their structure shows was the intent,— the response in health and happiness would be incalculable. Lack of time is usually pleaded for inattention to the care of the body. We have, however, time for everything else — while the instrument through which we do all these other things 'goes a begging.'

"An unhealthy body gives unhealthy mind pictures, however superior the spiritual and intellectual development may be; and an unhealthy, morbid, or irritable mental state will produce unhealthy physical conditions. A pain in one small nerve will often make one's mental outlook lugubrious and cheerless; a hurt to one's self-love, or a disappointment, will so disturb the nervous system as to cause bodily pain. Fear or anger will stop the processes of digestion, just as surely as food at an unseasonable hour, or an imperfect circulation from any physical cause."

The cause of much of the dissipation of woman's nerve force, Mrs. Barber thinks to be "the living in the three tenses — past, present, and future. If she could realize that from the past she gathered what there was for her as she went through, and that the future will be determined by her present thought and action, *now* would be her watchword."

Child study is stated to be an important part of every woman's education, whether she be a mother in the specific sense or not. "Such study will enable her better to understand herself; will help her to adjust her relations to others; will give her a wider horizon, deeper sympathies, more gentleness and toleration; in short, will be a potent factor in developing the real woman,— which is the mother."

Stomach Capacity of the Infant.

It is proverbial that a hand-fed baby always has a large abdomen, which means that some organ is overstretched, either by too large meals or by foul gases generated from spoiled food in the alimentary canal.

This leads us to consider how large a baby's stomach is. By actual measurement it has been found that at birth the human stomach will hold from six to eight teaspoonfuls. The capacity depends somewhat upon the size of the child; small, premature children needing less than six teaspoonfuls at a meal. If only the exact amount is put in the bottle for each feeding, there can be no danger of overfeeding; for when the food is all gone, the bottle can be removed. The baby should never be allowed to suck the empty bottle or anything else after a meal.

ONE who has proved it by experience says: "The bedclothes can be kept upon a very restless child by sewing tapes to the first blanket and tying them to convenient parts of the crib."

A NATURAL FOOD MENU

BY LUCY M. WINEGAR

Cream Tomato Soup — Bread Crisps

Roast Protose — Bechamel Sauce

Potato Cones — Spinach in Croustades

Creamed Asparagus

Strawberry Salad — Marguerites

Bread — Almond Butter

Emerald Pudding — Whipped Cream

Health Cocoa

Cream Tomato Soup.—This is wholesome and nutritious. One quart of strained tomato, one and a half pints cocoanut cream. Strain the tomato into a double boiler, and heat; bring the cream to the boiling point, and mix with the tomato; add one-half teaspoonful of salt. Cocoanut cream is preferable to dairy cream, because it will not curdle.

Roast Protose.—Take one pound of protose just from the can, cut through the center, lay the flat sides down in a baking dish, and spread the top with cocoanut butter. Grate a little onion over it, and sprinkle lightly with salt. Cover with a quart of boiling water. Bake for one hour, slice, and serve with sauce.

Bechamel Sauce.— One-third cupful butter, one tablespoonful flour. Mix, and brown. Add one pint protose broth, let thicken, and serve. Cocoanut butter may be used.

Potato Cones.— Mold one quart of well-seasoned mashed potatoes in teacups; turn out, and sprinkle with crumbs and a little cream. Brown in the oven from twenty-five to thirty minutes.

Spinach in Croustades.—Wash thoroughly one peck of spinach. Cook in as little water as possible for twenty minutes, remove from the fire, drain, salt, and add one tablespoonful of olive or nut oil, four hard-boiled eggs, and three tablespoonfuls of lemon juice. Chop fine, and serve in toast prepared as follows: Select nice slices of white bread, and cut out the center; dry thoroughly, and toast, and serve spinach in the center.

Strawberry Salad.—Select firm berries and pile on crisp lettuce leaves. Thin mayonnaise dressing with whipped cream and pour over the berries. Serve ice cold.

Marguerites.— One cupful flour, one-half teaspoonful of salt, one cupful cocoanut butter. Mix well together, add half of an egg (after beating), and mix well. Roll out very thin and cut into strips one and a half inches wide and four inches long. Perforate with a fork, and bake slowly a nice brown. When cold cover with the following: To the whites of two eggs well beaten add three-fourths cupful powdered sugar and two tablespoonfuls of chopped nuts. Spread on the wafers and brown lightly.

Emerald Pudding.— Take one-half ounce vegetable gelatin, and after soaking in hot water for twenty minutes, boil it for five minutes and strain through cheese-cloth. Then add four cupfuls of pineapple or lemon juice, two cupfuls of sugar, and one teaspoonful of crushed spinach (or fresh spinach tied in a thick cloth and allowed to stand in the juice for a while), to give it a green color. Pour into cups wet in cold water, and when it begins to cool add pecan meats.

STIMULANTS

BY A. J. HOENES, M. D.,

Friedensau Sanitarium, Germany.

THE word "stimulant" has long been applied to such articles as alcohol, tobacco, tea and coffee, flesh meats, spices, and the like. Enthusiastic reformers have written much against the use of stimulants, until many people have come to believe that stimulants are always harmful, and in every case to be avoided.

If we give this word a wider application, we can classify stimulants into harmful, and wholesome or beneficial ones. Stimulants are as necessary to the human body as food itself, and natural, wholesome stimulants will do as much good as artificial stimulants may do harm.

It is sometimes difficult to draw the line between these two classes. Some hold that onions, horseradish, cinnamon, nutmeg, lemon peel, even sage, celery, and table salt, should not be used, on account of their stimulating effects. Others go so far as to allow a little pepper, cloves, mustard, ginger, even some tea and coffee, etc. One person prefers this, and another that, flavor in food; and, as a rule, that food which is pleasant to the smell and taste is also the most desirable for us. Pawlow, the Russian physiologist, has shown that the food which has an agreeable taste and smell stimulates the flow of gastric juice, as well as the saliva, and is rapidly digested; while tasteless food, no matter how nutritious, does not stimulate the gastric mucous membrane, and is digested very slowly.

Yet the flavors which we like are not always healthful. The fact that a stimulant agrees with us at the time, is not always a sure test of its usefulness. A young man may enjoy his cigar after meals; he may believe that it aids his digestion, and for a long time he may feel no evil effects from it. But after many years he may be compelled to hear the physician's verdict: "You have a tobacco heart. You are suffering from chronic nicotin poisoning." The elderly gentleman may drink his grog daily, believing it a necessary stimulant, but in the end "it biteth like a serpent and stingeth like an adder." So also with the use of tea and coffee, cocoa, vinegar, pepper, peppersauce, and the continued use of large quantities of meat. They may seem to agree well for a long time, but by overstimulating the digestive mucous membrane and the reflex nervous mechanism, they will gradually weaken their action, and cause congestion, irritation, and inflammation.

All natural foods contain certain stimulating or seasoning elements. Fruits contain their characteristic acids,— malic, citric, tartaric, oxalic, benzoic, and gallic, and salts,— besides certain aromatic, volatile flavors which must be looked upon as stimulants, or force regulators, rather than foods or force producers. Grains, nuts, and vegetables contain certain inorganic salts and essential oils which give them their characteristic taste and smell, stimulating the appetite, and the flow of the digestive juices in the mouth and also in the stomach. Foods should be eaten raw, or prepared in such a way as to retain their natural flavors as much as possible, and then, if desirable, a little of some harmless seasoning may be added. I believe, as Professor Schweninger has shown, that the same stimulant should not be used day after day continually; for in time the nerves

become less sensitive to it; they fail to react; and larger quantities must be used to secure the desired effect, and this larger quantity may be harmful. This is the danger even with salt. Sheep and cattle are salted once a month with benefit, but the daily administration of salt in food would probably result in injury.

It is particularly the external stimulants — air, water, sunlight, heat, exercise, mechanical stimulation of the surface of the body — of which civilized man is deprived. Recognizing the want of stimulation, and not knowing how to supply it, he resorts to artificial stimulants, which give him temporary relief. A better nerve tonic than a cup of the best breakfast coffee is a cool rub in the morning. Its effect is more lasting, and devoid of the evil after-results of the former. A brisk walk after leaving the office in the evening, or after sewing or studying all day, is worth more than the customary cup of tea, for it will not produce insomnia, nor leave you with a shattered nervous system after a number of years. It is sunlight which makes plants grow; and it is as reasonable to expect to obtain the same result by sprinkling them with tobacco juice as to use this substitute for sunlight in your own case. The artificial life lived by most people at the present day deprives the body of the very valuable stimulant of a natural life. This must sometimes be artificially applied by massage, muscle beating, and manual and mechanical Swedish movements. The irritation of the soles of the feet by walking barefoot is not accidental, but essential. The impulse is conducted up the limbs, by the centripetal nerves, to the lower spine, which is usually a weak spot in the human body, thence to the pelvis, bowels, and stomach, and acts as a tonic to the relaxed and torpid tissues.

The writer often advises running and jumping on a straw mat in the room when walking barefoot out of doors is impracticable.

It is a well-known fact that the savage tribes in our colonies are not, as a rule, accustomed to use artificial stimulants to excess. They find stimulation enough in their natural life. It is not until the civilized traders introduce these pernicious substances to the natives, and they adopt the customs of the foreign invaders, that they gradually yield to the excessive use of unnatural stimulants.

The best way to banish the evil and unnatural things in our lives is to introduce the good, the health-giving, the invigorating, and return to nature.

Open-Air Exercise for Children.

Nothing is more important for a young child than an opportunity for daily exercise in the open air. After the first two weeks, the young infant should be taken out of doors for several hours daily, during the summer season, and for an hour or two even in the winter season, except in the very coldest weather. It should, of course, be properly protected, to avoid chilling or too great exposure to cold. The tonic effect of cold air is as healthful to an infant as to a grown person, but it is easily possible for a young child to be exposed in such a manner as to produce congestion of the lungs, and serious, perhaps fatal, injury from bronchitis or pneumonia, as the result of injudicious exposure. Daily open-air exercise is the best of all means of developing constitutional resistance against catarrh and consumption, and the various maladies which find their beginning in taking cold. Children who enjoy this advantage are seldom subject to colds, as are other children. Their ruddy

cheeks, bright eyes, and red lips are an indication of their superior vigor and vitality; while the pale faces, lusterless eyes, and lifeless manner of the hot-house children who form so large a proportion of the little ones born and reared in cities, indicate the opposite conditions.

Too much coddling and continuous indoor life have killed more children than the opposite course; nevertheless, the so-called "hardening" of children by subjecting them to unreasonable and possibly damaging exposure, is not to be recommended.

Measles and Education.

An English physician, Dr. Mackenzie, has recently brought a strong indictment against the practise of sending children to school before the age of six years. In Switzerland, one of the best educated countries, the lowest school age is seven. Not only does too early pressure stunt their mental and physical development, but their attendance at school exposes them to attacks of measles just at the ages at which this disease proves most fatal. If all children under six were excluded from school, and healthy children kept away from sick households, measles would soon become the least dangerous of infectious diseases, instead of, as now, responsible for the death of as many children as smallpox, diphtheria, and gastric fever put together.

Dr. Mackenzie's statements are in accord with facts just discovered by a German medical school inspector who has studied the statistics of the four largest cities of Germany in order to learn whether infectious diseases are more or less prevalent during the school vacations. He finds that the vacations have no effect on the prevalence of diphtheria or scarlet fever, but that measles drop abruptly as soon as the schools close. This he explains by the fact that diphtheria and scarlet fever are not so contagious during the early stages, but measles is highly contagious from the start. He recommends the closing of the schoolroom at once when measles is prevalent.

Weaning.

Under this head it is important to call attention to the following points: —

1. The proper time for weaning a healthy infant is at about one year of age. Very weakly children sometimes require longer nursing. The custom practised by some women of prolonging the nursing period to two years or more is injurious to both mother and child.

2. As a rule, children should not be weaned in hot weather, for slight changes in diet are often sufficient to produce serious disturbances at this season of the year.

3. Weaning should be avoided when the child is cutting teeth.

A Naturalist's Prescription.

A writer in the *Outlook*, who gives his personal impressions of John Muir, says that "his cure for every ill is to 'go up a cañon,' and perhaps he is right in the larger sense that the country is to be looked to as the only hope for the half-life, the stifling existence, of our crowded cities."

Mr. Muir evidently knows by experience that —

> ". . . health and virtue, gifts
> That can alone make sweet the bitter draft
> That life holds out to all, do most abound
> And least are threatened in the fields and groves."

"Do not apply adult standards of morality to little children."

A SIMPLE HOME PICTURE

BY ADA COX

TWO or three summers ago I went to visit an old college friend of my mother's, and the impressions received there were so lasting and inspiring that I have ever since had a desire to tell what I saw and learned during a stay of one night and less than one day at the home of simple-lived, plain, country folks. I should feel that something had been done if it could infuse new courage into a sometimes half-discouraged soul as it did inspiration and incentive to effort in the humblest ways, into mine,— a new determination to foster and stimulate to growth the one talent which God has given nearly every woman,— the ability to make herself and her home attractive.

It was August, and proverbially warm and dusty; and at the end of my little journey I was set down in what seemed, and probably was, the middle of a farm. There was no highway, no farm buildings, only an empty little station-house, and two steel rails, and poles and wires and fields. Before long, a comfortable-looking, clean top buggy, drawn by a big, handsome, well-groomed bay, came down the lane, and the driver was none other than my hostess, a large, pleasant-faced woman well into her sixties, in the spotless, wrinkleless, but unmistakable attire of the farmer's wife. It was quite a drive up and down the hills before we reached her home, on what seemed to me rather a lonely road. We occasionally see large, well-painted barns, beautiful grounds, and fine modern houses as the home and surrounding of the unusually successful farmer, but here there was only one barn of any size, and that unpainted and unpretentious; but the yard about it, the fence and outbuildings, were tidy; there were no old boxes or barrels, or littering of straw; no farming tools out to the weather,— everything was well kept, and good to look upon. The house among the trees was a plain frame one, but was well painted, with glistening windows, neat, substantial chimneys, and roomy porches. We left the carriage at the side entrance, and walked over a well-kept stretch of lawn, and entered at a side door opening into the dining-room.

I wish I could make you see this dining-room as it looked to me after a tiresome, dusty ride. It was a long room with windows and a glass door opening on to porches at either side; it was so large that thirty or more persons could have been seated at table and served most comfortably. A large pantry opened off it, and the open door nearly obscured the shelving, and showed only one end and a part of one side, which was entirely enclosed in glass, and as potted ferns stood on a low shelf running around beneath the sashes, the place had the effect of a little conservatory. The appointments and arrangement were simple and good, but it was the little touches that gave the charm. The table in the center was daintily laid for three, with what seemed the snowiest and smoothest linen in the land. In just the right position on the sideboard was a small, thrifty umbrella plant, and just far enough from that was one of those pretty, old-fashioned china fruit baskets made to imitate willow work, heaped with beautiful green apples with crimson stripes. The carpet had probably been passed on from the parlors, for it was red and green and white in old-fashioned blockwork, always so clean and cheerful looking. The room was so large that there was space for other purposes than that of meal serving, and in a darker corner was a wide lounge with fresh-looking pillows, and near by, at a

window, was an old arm chair, cretonne-covered, with a towel pinned over the back. This corner bespoke much comfort to both mistress and master of the house.

There was a telephone in the room, the first I had ever seen in a farm home. The rooms in front were plain, but had an air of elegance and charm. The carpets were of velvet, and handsome; the window draperies simple, but daintily fresh; a table or two and a few chairs, plain and substantial, and a large case full of books; few pictures, little or no bric-a-brac.

Supper was soon served, and there I met my host, a man of seventy, whose hair was as white as it ever would be, stooped and bent in figure from much planting and digging potatoes, and hoeing of corn. His hands were stiffened and like horn, and he told me his days of usefulness were over. He was "Will, dear," to his wife, and I am sure her voice was as sweet and as cheery when she called him as it was when she was a bride, forty-five years before. The short summer evening was spent in getting acquainted, and it was not until I was left alone for an hour or two next morning that the desired opportunity came for looking over my hostess's collection of books. There were few novels, but there were histories, philosophy, science, biography, and travel. "I have but little time for reading," she said, "but I must know what is going on in the world."

The grounds around the house were as carefully tended as a city park. There was a bed of geraniums and heliotrope, and several flowering shrubs. My hostess, with a pan under her arm, invited me to go to the garden. It was quite a long way from the house, across a tidy stretch of back-yard, and was inclosed by a high picket fence to keep out the chickens, and there, in the beautifully tended rows of beans and onions and tomatoes, grew and bloomed sweet peas, astors, mignonette, marigolds, and kindred flowers. She had so little time for flower culture, she said, that she planted the seeds there, and when "Will" cultivated the garden, the flowers got their share, and she seldom, if ever, gathered her vegetables for dinner without pulling a few flowers. Back of all this were the fruit trees and vines, all kinds that grew, thrifty and carefully tended. It was evident that Will's days of usefulness were not over.

We went for a drive among the beautiful beech and maple timber, and returned in time to prepare the twelve-o'clock dinner. As Will had not returned from a job of fence making, my hostess came into the parlor, and, seating herself at the piano, sang for me "The Old Musician and His Harp," "The Lost Chord," and some beautiful *new* hymns. Not being versed in musical matters, I knew not they were new until informed, but I knew they were beautiful. As this woman of sixty-five or more sat before me playing her accompaniments and singing, in a clean print gown and kitchen apron, I thought, "This is a red-letter day in my life. You have taught me more in a few hours than many could teach in as many years."

If you were to meet her you would see only an *ordinary* woman, one who was, even in youth, attractive in neither face nor figure. Born and reared on a farm far from any town, married young, and moving on to an adjoining farm, she has never been many miles from her home. She has had no social nor what we consider educational advantages; she has worked hard, borne and reared her family, made rag carpets and bed-quilts, cut and made her own and her children's and much of her husband's clothing, made butter for market, and done her own work. She has only common mental endowments, and no daughters now living to bring fresh ideas and

new life into the home. She told me she had kept up her music by singing in church. She had made and kept herself an attractive woman by having the ambition to live up to her ideals and to cultivate her one talent. She lived "the simple life."

There was nothing in or about her home that any moderately well-to-do farmer folk might not have, but by little touches, by absolute cleanliness, and by expressing her personality in her home, she had made it a place that any one might be glad to tarry in.

Our Feverish Haste.

Speaking on the "Ethics of Holidays," Dr. Charles F. Aked, of Liverpool, gives a vivid picture of modern rush and hurry which one can not read without being convicted of the folly of the age in this respect. Of the words of Christ to his disciples, "Come ye apart and rest awhile," he says: —

"There has been no day in the history of the world when such counsel was more needed than to-day. There are no people on the face of the earth who have more need to heed it and to profit by it than we of the strenuous Anglo-Saxon breed. Our cities are too vast and too crowded. Man, like all other animals, was meant for the fresh air and the open fields, for the storms, the snows, and the sunshine. But he claps a stone box down over his head, sits in the midst of a hundred thousand other stone boxes as ugly as his own, shutting out God's air and light, until he is ready to faint on a warm day and freeze on a cold one, and die of pneumonia or of terror if the east wind blows on him. This crowded, rushing, crushing city life gets on our nerves. We live too fast. We live faster than men ever lived before. We live more than twenty-four hours in the day, and more than seven days in the week. We burn the candle at both ends; and then for fear our neighbor should get ahead of us, we light it in the middle too. We are consumed by the fever of living.

"We have no time to think. The great majority of us are just as capable of flying as we are of thinking. Leisure for quiet contemplation of the world in which we live is denied us. There is no grass beneath our feet, no blue sky above our head. The world of trees and flowers and singing birds is not for us. Art and poetry and gentle culture exist only in a world of dreams,— while, if we once gave ourselves pause to meditate upon the deep things of God and the soul, on time and its meaning, life and its mysteries, why,— we might miss the next car. The injunction which insults me every time I travel by the underground is, 'Please hurry on for the lift.' The 'please' is in diamond type, and you need a microscope to see it; the 'hurry' you can read a mile away. Hurry, then, by all means, for we could not live if we did not kill ourselves to get somewhere else."

A SOUND mind in a sound body is a short but full description of a happy state in this world. He that hath these two, hath little more to wish for here, and he that wants either of them, will be but little better for anything else.— *Locke.*

HAPPY he with such a mother!
Faith in womankind beats with his blood,
And trust in all things high
Comes easy to him.

— *Tennyson.*

"HEALTH is the soul that animates all the enjoyments of life."

Chautauqua School of Health

WATER DRINKING

BY J. H. KELLOGG, M. D.

WHILE water drinking at meals is not to be commended, the free use of water as a drink is of the highest importance. The practise of water drinking is quite too largely neglected. Many persons never drink except at meal-time, and many seldom swallow any other beverage than tea, coffee, or some similar adulteration of water. Such persons frequently suffer seriously for lack of fluid with which to cleanse their soiled tissues. The sense of thirst, which to a normal person is a sufficient guide in relation to water drinking, is often inactive as the result of neglect. Water should be taken freely, but never in too large quantities at one time. Half a glassful or a glassful is amply sufficient for a single drinking. When several glasses of water are swallowed in quick succession, the stomach is likely to be overweighted, and becomes distended, and thus more or less permanently injured.

It is particularly pernicious to drink at once a large quantity of cold water. Such a practise is sometimes highly dangerous, especially when a person is in a state of exhaustion from violent exercise. Cold water may be taken if desired, but should be slowly swallowed in small sips, so that opportunity may be given for warming as it passes down the throat, thus preventing injury to the stomach and other possible damage. When a large quantity of water is taken at one time, the blood may be injuriously thinned. This condition will, however, probably give place to the opposite state, in consequence of the rapid action of the kidneys, induced by the sudden absorption of a large quantity of water. This is a reason why it is better to take smaller quantities of water at intervals of an hour or so than to drink copiously at longer intervals, except in cases of dropsy, when the opposite plan is better.

In general, it is best to take water at about the ordinary temperature — 70° F. The practise of drinking large quantities of hot water before meals, or at any other time, is not to be commended, except in cases of chronic gastritis or catarrh of the stomach, when free water drinking serves a useful purpose in cleansing the stomach from accumulated mucus.

Half a glassful of hot water may be advantageously taken half an hour before each meal in cases of hyperpepsia, and the same quantity of cold water may be taken with equal benefit half an hour before eating, in cases of hypopepsia.

In cases of fever, a half glassful to a glassful of water should be taken every hour regularly.

Water should be given freely to infants and children, who are often neglected in this regard. The quantity should be small, and should be given often. Even nursing infants need attention in this respect.

Persons who have a tendency to rheumatism should drink two or three pints of water daily, even though they feel no thirst.

Water may be rendered more acceptable by the addition of fruit juice. Cane-sugar should be avoided.

Fruit juices and the juice of melons may be freely used to great advantage, especially in the summer season; but in eating melons, the pulp should always be rejected. It is quite indigestible, and likely to give rise to sour stomach and other disorders. Overripe melons are exceedingly unwholesome.

Soft water is preferable to hard water. Distilled water is best of all, when it has been properly aerated. But good spring or deep-well water, if free from contamination, is perfectly wholesome, even though a little hard. No injurious effects are likely to follow the use of water containing not more than twenty to thirty grains to the gallon of lime or magnesia salts. Very hard water is injurious.

The greatest care should be taken to secure absolutely clean water; that is, water which is not contaminated with germs, animal organisms, or the excreta of animals. Distilled water is certain to be pure. Water which has been freshly boiled for fifteen or twenty minutes is safe. *Filtered water can not be relied upon*, as the filter easily becomes contaminated, and if not thoroughly cleansed may increase the contamination of the water passing through it. Dug wells or shallow wells are unsafe sources for drinking water. Water from surface wells is always dangerous, because of the great facility with which drainage from cesspools, vaults, barn-yards, and filth deposited upon the surface, even several rods distant, may find its way into the well by percolation through the soil. The writer is acquainted with a case in which a whole family were made very sick by the use of water from a well which was contaminated with barn-yard filth deposited in a hole on the opposite side of the road, fully sixteen rods away.

City water supplies sometimes become contaminated with dangerous germs, exposing hundreds, even thousands of people to infection.

Deep-bored wells, so-called artesian wells, are perhaps the safest sources of natural water supply. The well should be cased, and should penetrate one or more dense layers of rock, so as to reach what is sometimes called the second water, to insure against contamination from the surface.

Typhoid fever, cholera, malarial fever, and many bowel disorders are due to the use of contaminated water, and hence are unnecessary afflictions, as they may be prevented by proper precautions. City water supplies are seldom clean enough for use without sterilization by boiling. It is useful to remember that water may be sterilized by means of acid fruit juice. The juice of a small lemon will in half an hour destroy any disease germs which may be present in a glassful of water.

Ice, as well as water, may be a source of contamination, as ice is often gathered from ponds and rivers which are polluted with sewage. Such water is certain to contain germs, which, not being injured by freezing, become active as soon as the ice is melted.

Carbonated water or water containing the juice of acid fruits is more readily absorbed than plain water. In preparing beverages from fruit juices, however, concentrated mixtures should be avoided, and also the free use of cane-sugar, which is likely to increase the thirst, besides injuring the stomach and overtaxing the liver when taken in considerable quantities.

SUMMER CLOTHING

BY KATE LINDSAY, M. D.

THE warm season has come again, and in many parts of the country the chief effort of life for the time being is to keep cool. When the temperature of the body and the temperature of the atmosphere are the same, or, worse still, when the temperature of the air is above that of the body, and the mercury in the thermometer creeps up to 100° or above, heat elimination is difficult; and cases of heat-stroke and heat exhaustion keep the city ambulances busy during the months when the dog-star reigns, and the air is still and saturated with moisture. The failure of the body to eliminate heat, either by radiation into a cool surrounding air, or to promote heat loss by evaporation,— by escape of water into the atmosphere,— lessens the metabolic changes and impedes body-cell activity, thus interfering with the normal actions of the organs of the body. Toxins which should be cast off by the excretory organs accumulate.

Sunstroke is simply a severe form of autointoxication from deficient heat and waste elimination. The brain is so thoroughly poisoned that it ceases to act, and the temperature of the body rises rapidly because of the retained heat. These are the extreme results of overheating; the ordinary, less marked symptoms of the depressing effects of excessively warm weather being languor, disinclination for exercise, irritability, loss of appetite, sleeplessness, and a feeling of bodily discomfort, lack of nerve energy, and mental depression.

Young children, old persons, and invalids weakened by disease feel heat depression most keenly, and if any acute disease attacks these patients, their chances for recovery are greatly lessened.

It is stated by those who have made observations during the summer that in school children attention decreases in the warm months, and that the brain is indisposed for mental activity, while there is an increased desire for out-of-door muscular activity; that in summer it is more difficult to enforce discipline in school than in winter, and the grade of scholarship declines. The schoolboy longs to wade in the shady brook and to go swimming.

As clothing is one of the chief artificial agents for regulating heat elimination and assisting civilized man to withstand the changes of temperature without damaging disturbance of functional activity, attention should be given to the subject of proper clothing, and such changes made as will prevent too rapid heat loss in the cold season, and in the heated season favor heat elimination.

The mistake of wearing too much clothing is made perhaps more often than that of not clothing the body enough. At best, clothing but retains bodily heat and impedes elimination. Therefore, with a view to coolness, it should be selected carefully, and of such material as will admit of perfect skin aeration, besides favoring rapid water evaporation.

Sunstroke rarely occurs on the plains, where the brisk winds carry off the moisture and heat, and the surface is cooled by rapid-moving currents of air. All have experienced the invigorating effect of a cooling breeze on a hot day.

The texture of hot-weather raiment should be open, and the fabric one that will not retain moisture. The famous linen mesh owes its desirable qualities as hot-weather underwear to the fact that it is open-woven. Linen fabric allows of rapid water evaporation, and is a good heat conductor. Hot-weather clothing should be

loose-fitting and evenly adjusted. The color should be white, especially for underwear, because white or light-colored garments absorb and retain the least heat and reflect the most. When of open texture, they allow the body heat to escape and at the same time protect the skin from excessive outside temperature.

The sweat glands being active, summer undergarments soon become saturated with perspiration, and this foul matter may be reabsorbed, or skin disorders may result from foul underclothing.

The greatest care should be taken to have the clothing clean, evenly adjusted, and properly fitted; and, also, especially in the case of infants and small children, to make sure that it is not irritating the skin by roughness, or compressing some important organ, causing pain and bodily discomfort, besides leading to deformities. Corns, bunions, and ingrowing toe-nails are examples of ill-fitting footwear; contracted waists, with floating kidneys and displaced digestive and pelvic organs, are much in evidence as a result of tight waistbands and corsets.

In hot weather the feet tend to swell, and the whole body relaxes and requires room for expansion. Therefore tight shoes and stiff, tight waists are doubly injurious in summer. The adoption of the loose sweater and discarding the padded vest by men recreating out of doors is an illustration of how much loose, light garments promote life's enjoyment, even for the robust. How much more need for proper hot-weather clothing for tender infants, children, delicate women, and feeble invalids.

It is a tradition that infants must wear wool next to the skin summer and winter to prevent taking cold. The vast number of rashes, heat hives, and other irritating skin disorders due to this blind tradition will never be known. Nor is there any record of the suffering incurred or the damage done the helpless babes' nervous system by want of sleep and deranged bodily functions due to nerve irritation from rough, ill-fitting, air-tight, often badly fitting, inner garments. The writer has ridden miles to see a sleepless infant which had worn out not only itself, but all the family, with continual crying and fretfulness, and just by taking off the offending woolen nether garment and allaying the skin irritation by proper bathing and a loose soft shirt, the child fell asleep before the treatment was over. It became a good baby from that time because it was physically comfortable.

To sum up the matter of suitable clothing, both for adults and children: For undergarments, select material of loose texture, light weight and light color, linen or cotton, open-woven, and distributed evenly, of union-suit form. Knitted cotton gauze inner suits, of fine, soft texture, can be purchased for a few cents, and make very good summer underwear. Change often and keep the skin clean by bathing. Never sleep in a soiled day garment, nor let any child go to bed in a soiled garment. Outside, as well as inside, garments should be soft, porous, and of light weight. The use of starch should be avoided, especially in garments that come in contact with the skin.

In oriental countries, soft, raw silk is much worn. Here, an objection to its common use is its expensiveness. But now there are many pretty, soft-woven cotton goods which do not need stiffening to look well. These should be selected for outside garments for children. Never torture the little ones with starch-stiffened bands and ruffles. For every-day summer wear make the garments few in number, as plain as possible, and change often.

Never sit down to enjoy the cool evening breeze in damp, soiled day garments. It is not the change of atmos-

pheric temperature which causes the stiffness, neuralgia, and rheumatism, but the dirt and dampness of the garments.

In South Africa the writer visited a diamond mine compound where hundreds of colored men worked underground, clad only in knee-length overalls and short-sleeved shirts, and shoes to protect their feet from sharp rocks. The overseer mentioned the fact that previously many contracted pneumonia and died from coming up from the hot air of the mine and sitting around in the cool evening air in wet, soiled garments, but that then they had few cases of the disease, as all were compelled to take a plunge bath and put on dry, clean garments as soon as they emerged above ground. The change for the better was due not to increased amount of clothing, for they donned but their two abbreviated garments, discarding even the shoes when above ground, but the skin and clothing were clean and dry, and the surface circulation good. So, by avoiding mucous lining congestion and skin-chilling, there was no soil for the pneumonia microbe culture, and camp health was the result. It needed strict discipline to enforce this hygienic regulation, but it paid the company in pounds, shillings, and pence. The same rule enforced in every American household would pay in the improved mental, moral, and physical health of the family.

It is not so much the deficient amount of clothing as the improper material and make-up, and want of cleanliness of the clothing, which causes much summer discomfort, and lays the foundation for hot-weather disorders.

TO WHAT EXTENT ARE FOODS PREDIGESTED BY COOKING?

BY W. A. GEORGE, M. D.

IN these days much is said about predigested foods, yet few have a definite idea as to what the term means, and still less as to how a predigested food may be prepared. To be predigested, a food must be in the same form that it would be if digested by the healthy digestive organs and thus made ready to be absorbed by the blood through the walls of the intestines. As there are several food elements, and as each is digested by a different process in different parts of the digestive system, it is evident that no one artificial method can digest all the food elements and thus take the place of all the digestive fluids. It is also clear, from the fact that there are several stages in the process of digestion of some of the food elements, that a food element may be only partly predigested. A food, then, may have one or more of its elements either partly or completely predigested.

The food elements as found in fruits, seeds, and vegetables — albumen, grape-sugar, starch, emulsified fats, mineral salts, and cane-sugar — are either completely undigested or entirely predigested as found raw in their natural condition. Thus albumen, starch, and cane-sugar are undigested, and must be digested before they can be made use of by the blood, while grape-sugar, emulsified fats, and mineral salts are already entirely predigested in their natural raw state. In other words, the three last named food elements are ready to be absorbed into the blood at once without any change whatever in the digestive organs. So in eating fruit and nuts which do not contain starch, we are taking an abundance of these three predigested foods and one

undigested food element, albumen,— and we have a perfect food, for starch and cane-sugar, the remaining food elements, must both be changed to grape-sugar before they can be used in the blood. Albumen is supposed to be just as digestible raw as cooked, if not more so. We have, therefore, in ripe fruits and nuts not containing starch a perfect diet, which may be taken as well or better raw.

So far as we know, albumen is in no way predigested by cooking, and it is doubtful if any artificial method of digesting albumen is ever necessary or of any particular value. Ample provision is made for the digestion of albumen, for if the process is not completed in the stomach, it can be finished in the intestines, if the albumen is taken in moderate quantities. The thorough cooking of albumen may, however, remove its sticky nature, as is the case with the gluten of wheat, which, when raw, is very sticky, but when thoroughly baked, becomes crisp and brittle, so that it is more easily masticated, and thus prepared for a more thorough mixture with the gastric juice. So, although cooking may in no way predigest albumen, it certainly prepares it for easier digestion. This can not be said of poorly cooked albumen, for in that case it may be more sticky and tough, rendering mastication almost impossible, and digestion slower than with raw albumen.

Cane-sugar is not changed at all by ordinary cooking. It is digested in small quantities only by a ferment called invertin, found in the intestinal juice. Taken in large quantities, cane-sugar clogs the system, and may produce serious disease. If it were never used except in the dilute form in which it is found in nature, as in sweet potatoes, the sap of trees, beets, or even sugar-cane, there would be very little danger of eating too much of it, but when used in a concentrated form, as in candy, rich cakes and pies, sweet pickles and preserves, and especially when used freely with milk, it may be very injurious.

Free fat, such as butter and that found in all fat meats, as well as all free vegetable oils, must be digested — emulsified — before it can be taken into the blood, while the fat in milk or cream and in all seeds and vegetables in their natural condition is already emulsified, and requires no digestion. Cooking has no effect upon fat, but when free fat is cooked with other foods, it may most decidedly retard their digestion. Hence the free use of unemulsified fat may prove a decided injury and produce disease.

One food element which is never predigested as found in nature, and which is at the same time almost indigestible unless some artificial means is used to aid digestion, is starch. This, the most abundant of all food elements, deserves our most careful study. In the raw state it is made up of very small, hard granules, too small to be broken up by any mechanical means, and entirely insoluble in water; so the saliva has very little effect upon them even if mixed with them for several hours, while starch that has been boiled for a few minutes will be changed to sugar in a few seconds when mixed with saliva. If the starch is baked until it is light brown in color and then mixed with saliva, it is changed to sugar almost instantly. Cooking starch does not change it to sugar, as some have supposed, but it does change it to dextrin, and dextrin is easily changed to sugar by the saliva, so we may say that cooking does partly predigest starch, but further than this it can not go. If we wish to carry the process of artificial digestion still further, we must look to other methods besides cooking. The action of saliva is first to change cooked starch to malt-sugar and then to grape-sugar. Malt-sugar may be produced by first

letting grain sprout, then stopping the growth at a certain point, when there is the most malt-sugar present. This, then, has the power to change more starch into sugar when mixed with it. All so-called malted foods depend for their preparation upon this method for changing their starch into malt-sugar, which lacks but one step of being grape-sugar, and so is almost completely predigested. This method, being a process of growth, is a purely natural one, and not only harmless, but of great value in the preparation of foods for invalids and infants.

The only method of complete predigestion of starch is by boiling it for a time with a dilute solution of some mineral acid which changes the starch to glucose or grape-sugar, but this is strictly an artificial method, and the sugar thus produced is of very doubtful value on account of the poisons and impurities that it is almost certain to contain. The ideal way to cook starch to render it most easily digestible is first to boil the food thoroughly, thereby causing the starch granules to swell to the greatest extent possible and thus breaking up the capsule surrounding each starch granule; then after the excess of water has been boiled away, place the food in the oven in thin layers and bake until it is well dried out and a light brown crust formed. Beans, peas, and other foods containing starch are easily digested when prepared in this way, while for many they are almost indigestible when prepared by the common method of boiling for a short time. A thoroughly baked potato goes at once through both the process of boiling and of baking, from the fact that a potato contains seventy-five per cent of water, sufficient to boil and soften the starch during the first few minutes in the oven, and then if baked long enough the starch may all be changed to dextrin. A good way to bake potatoes is first to peel them, then cut them into thin slices, and place them to overlap one another in a baking pan, then bake in a slow oven until dry and crisp. Thus prepared, potatoes are very easily digested.

So the cook has but one food element to think of as far as thorough cooking is concerned, and that is starch. As a rule, starch is only half cooked. Eaten as it is in the form of mush or soft, poorly baked bread, it can not be properly masticated, and is not digested by the saliva as it should be, but lies in the stomach a sticky mass, preventing to a great extent the action of the stomach upon albumen, until the stomach often contains for hours and sometimes for days a putrefying mass which poisons the whole system. Starchy foods should be well cooked and served in a dry form, so that they can be well masticated and thus digested in the mouth or soon after reaching the stomach.

Cellulose, or woody fiber, although not to any great extent a food, since it can be digested only in very small quantities, is found more or less in nearly all our foods. It is very valuable in giving volume to the food in the digestive organs, in this way assisting in their mechanical work of moving the food along; at the same time it is very slow to ferment or decay. Cellulose is only slightly changed by cooking, and being indigestible, it matters not whether it is cooked or raw.

LET your digestion be but sound,
Your side unwrung by spasm or stitch,
Your foot unconscious of a twitch,
And could you be more truly blest
Though of the wealth of kings possessed?
— *Theodore Martin.*

Dangers of an Ill-Kept Refrigerator.

Most people seem to think that all that is necessary in order to keep food from spoiling, is to put it in the refrigerator. That this is not an infallible safeguard, and may even in some cases do more harm than good, is shown by a writer in *Good Housekeeping*, who says: "If raspberries are put in the refrigerator, they will almost certainly be smitten with mold. The sagacious housekeeper comes to find out that raspberries are as surely spoiled by a sojourn in the ice chest as they would be by being dropped into the garbage barrel. Small fruits, such as raspberries, cherries, strawberries, and currants, are much better kept on a broad tray, carefully spread out so that the air can circulate through them. Some housekeepers will even put bananas and cantaloups in with milk and sterilized water, with the result of both milk and water bringing to the palate of the subsequent partaker most unwelcome evidence of association.

"People are sometimes poisoned by the peculiar deterioration that goes on in a refrigerator. I knew a child in midsummer to sicken and die under circumstances that appeared no less than mysterious in view of the extreme sanitary precautions that had been taken with everything that pertained to the little one. My own by no means ungrounded suspicion was that the milk which had been so carefully sterilized for its use, had later on been defiled by the thick, strong, and complicated smells that infested the ice chest in which it had been kept, and whose walls were never thoroughly dried nor exposed to the sun's rays. An ill-kept refrigerator is a grave for the food put into it, and (not seldom) brings to the grave the people who use it."

SCHOOL OF HEALTH SEARCH QUESTIONS

WATER DRINKING

1. What evil results from taking too large a quantity of water at one time?
2. About what quantity is sufficient for one drinking?
3. What precaution should be taken in cold water drinking after violent exercise?
4. What class of persons are benefited by hot water drinking?
5. In fever cases, how often should water be taken?
6. Describe a convenient way of sterilizing water without boiling.

SUMMER CLOTHING

1. Name some of the extreme results of overheating.
2. What is one of the chief agents for regulating heat elimination?
3. Describe the texture and fabric most suitable for hot-weather raiment.
4. Name the disorders which may result from wearing foul, damp underclothing.

FOODS PREDIGESTED BY COOKING

1. Name the food elements that do not require digestion.
2. In what foods are these elements most liberally supplied?
3. What is the effect of cooking upon albumen?
4. Which of the food elements can not be digested raw?
5. What is the only method of complete predigestion of starch?

Health Chats with Little Folks

OUT OF DOORS

"GREAT, wide, beautiful, wonderful world,
With the wonderful water round you curled,
And the wonderful grass upon your breast,"—

WHO would stay indoors when he has a chance to be out in this beautiful, wonderful world? Who would have a roof over his head, when he can be out under the great, clear, blue, open sky?

At this time of the year a great many people are going away to the seaside, the mountains, the country, anywhere, for "change of air." All the change of air that many of them need is a change from house air — close, stuffy, indoor air — to the beautiful, fresh, pure, outdoor air, which is blowing all over the world.

There is life and health everywhere, in the fresh air, in the sunshine, for all who will go out and take it in.

People who stay indoors get pale and sickly looking. Those who go out in the fresh air and sunshine get a brown, rosy, healthy skin. This fine color means that the whole body is in a sound, healthy state.

We can see that the sunshine makes the

A SANDY BEACH IN A BACK YARD

plants grow strong and vigorous, and gives them beautiful, bright colors. It will do the same thing for boys and girls. So we should let the air and the sunlight get not only to our hands and faces, but as much as possible to the whole of our bodies. For this reason, as little clothing as possible should be worn in the summer.

By permission of Suburban Life
FUN ON A HOT SUMMER DAY

Our picture shows one way in which boys and girls can have fun out of doors in hot weather. Those who can not go to the seaside can have a sandy beach right in their own yard.

Some children are not happy out of doors unless they are making something else unhappy — shooting the birds, stoning the turtles, or spearing the frogs. Many boys get a great deal of fun out of fishing. This cruel sport may be fun to the boys, but it is anything but fun to the fish. But the boys are so absorbed in their own sport that they do not think of this.

How one boy learned what it means to the fish, is told by Mr. C. A. Stephens, who took a party of boys camping in the Adirondack Mountains.

"Suddenly," he says, "a loud cry of distress rose near the end of the line of fishers, and I saw Porter capering wildly over the stones, with Malcolm circling round him, shouting, 'Hold still! Hold still! Hold still!' What I feared had happened. One boy had hooked another.

"Malcolm had swung his hook, and there were two large fly hooks on one main line which forked six feet from the end. One of these hooks had whirled out sidewise, and caught Porter by the back of the calf of his left leg, upon which he had leaped away, and buried the barb still deeper. When I reached him the hook was up to the shank in the fat, soft calf, and he was shrieking like a young crow. Malcolm, still holding the line, stood aghast.

"After his first wild, foolish leap had

buried the barb deeply, Porter had dropped his rod, and, seizing the shank of the hook, had tried to pull it out. But the barb held fast in his flesh. Frightened anew because he could not get free, and also hurt anew by his pulling of the shank, he pranced and shrieked again.

"At first I hardly knew how to manage him; he was so crazy with fear and pain, and so angrily eager to rush at Malcolm for 'satisfaction.' When we had secured him and forced him to sit down on a stone, I remarked, 'It's nothing; don't be foolish. Let me get it out.'

"He stuck out his under lip, stared at me, and said, 'I guess you'd think it was something if you had it, Mr. Stephens.'

"'I dare say I should,' said I, smiling at him, 'and I'd certainly let some one else rid me of it.'

"That seemed to calm him, and he let me examine the wound. No wonder he quivered, for the whole crook of the large barbed hook was buried in the flesh.

"I had the hook out almost before the boy knew it. Then, after making the blood flow by squeezing the wounded part, I took the boy across to camp in a canoe, carefully covered and closed the wound with a piece of adhesive plaster, and turned him loose again. By this time he was smiling once more, and as brave as ever. But the accident had, so to speak, given the fisherman a taste of his own medicine.

"'Mr. Stephens,' said Porter very seriously, 'do you suppose it hurts a fish every time one is caught as much as that hurt me? Because if I thought it did,' he added, his eyes very wide and earnest, *'I would never go fishing again as long as I lived!'*"

There are so many ways of being happy out of doors without interfering with the happiness of others. We should respect the rights and the feelings of all God's creatures, and be careful —

"Never to blend our pleasure or our pride
With sorrow of the meanest thing that lives."

E. E. A.

A WAKE-UP SONG FOR SUMMER

"WAKE up! wake up!" chirps the sparrow,
"Don't you know it is to-morrow?"
"I see you!" pipes robin bright,
"Sleeping in the morning light!"
Up! all lazy boys and girls,
Straighten out your tumbled curls!
Open eyes and brighten faces,
Don your smiles and pretty graces!

. . . . . .

Everything is wide-awake —
Hear the crickets in the brake!
Grasshoppers, down in the grass,
Say, "Has it come to such a pass
That the children sleep so late
As we heard the robin state?"
Oh, who would be a sleepy head,
Lying in a stuffy bed?

— *Youth's Companion.*

.. By the Editor ..

HOT-WEATHER TEMPER

A PSYCHOLOGIST has discovered that it is easier to keep good natured in cold weather than in hot weather, and suggests that as one can not change the weather, the only thing to do is to keep one's temper in cold storage during the heated term.

This is a capital idea. The practical phase of the question is how to do it, which our psychologist does not explain. Here are a few suggestions for hot-weather regimen which have proved serviceable: —

1. Avoid flesh foods. Flesh meats increase irritability at all seasons, and especially in hot weather, when the nerves are already overstimulated by the heat, and require a cooling rather than a heating diet. Dog-keepers recognize this, and suppress meat entirely when teaching tricks or training the animals for hunting purposes.

2. Eat sparingly in warm weather. An excess of any sort of food disturbs digestion, and the effects are speedily seen upon the disposition.

3. Avoid mustard, pepper, pepper-sauce, ginger, and all irritating condiments. These things simply burn, blister, and sting. They have no nutritive properties whatever, and their effects are altogether mischievous. The Mexicans are noted as being the most hot-headed people in the world. They are also the greatest consumers of red peppers.

4. Take a short cool bath every morning, and a longer neutral bath at night. The morning bath may be taken with a towel wrung out of cold water, or may be a quick rub in a tub of water at the temperature at which it runs from the pipe. However taken, the duration of the bath should not be more than twenty to forty seconds. The evening bath should be at a temperature of 92° to 96°. It should be a full bath. The duration should be anywhere from ten to thirty minutes. It is a most excellent means of cooling off, and has a quieting effect upon the nervous system which secures sound sleep and complete recuperation. There is nothing like the neutral bath to combat insomnia. It is better than all the sleeping medicines ever discovered.

5. Drink plenty of water during warm weather. Do not be afraid of taking a little fluid at meal-time. Half a glass, or even a glassful, of water or some fruit juice may be taken at meals without injury, provided it is taken at the close of the meal or in very small sips during the meal. The principal harm from drinking at meals results from rinsing the foodstuffs down before they have been properly masticated. If care is taken to chew every morsel until it is reduced to liquid in the mouth, and to avoid taking water and food into the mouth at the same time, the principal difficulty from drinking at meals may be avoided. Of course, it is harmful to drink great quantities. The amount of water taken at a meal should not usually exceed four to eight ounces.

6. Live as much as possible in the open air. Sleeping outdoors in the summer season is a most excellent practise.

7. Make large use of fruits. Fruit juices are an excellent antidote for biliousness, summer complaints, and other disorders peculiar to the warm months.

8. Avoid excessive use of fats in the summer-time. There is a general tendency to a slowing of the digestive processes dur-

ing the hot months. Fats have a tendency to interfere with gastric digestion, hence should be used sparingly.

9. Take great pains to masticate every morsel of food so thoroughly that it will be reduced to liquid in the mouth, and reject everything which can not be made liquid or at least semi-liquid by mastication. A large amount of coarse rubbish swallowed into the stomach is very harmful, especially to persons suffering from gastric catarrh and slow digestion.

THE CAUSE OF GALL-STONES

THE experiments of Italia, Gilbert and Fournier, Herter, Hartmann, and others, have shown quite conclusively that gall-stones are produced by an abnormal secretion by the mucous membrane lining the gall-bladder and the biliary passages, and that this abnormal secretion is generally produced by the long-continued action of certain bacteria. The colon bacillus and the typhoid bacillus seem to be most commonly active in producing gall-stones, but they are also caused by pus-producing germs, many of which are very commonly found present. Gall-stones frequently follow an attack of typhoid fever. In one case a luxuriant crop appeared within three weeks after the onset of the fever.

From the studies which have been made on this subject, however, it seems very clear that microbes alone are not sufficient to produce gall-stones. There must be, in addition, some interference with the normal flow of bile. In health, the bile is always found sterile, but if, from any cause, the outflow of bile from the biliary passages into the intestine is interfered with, microbes make their way into the bile passages and gall-bladder, and stones may be rapidly formed.

Two causes are now clearly recognized as being especially productive of gall-stones; namely, the corset and sedentary life. The recognition of these causes explains very readily the fact observed by Schröder that gall-stones occur nearly five times as frequently in women as in men.

The corset produces gall-stones by compression of the biliary passages in such a way as to interfere with the proper outflow of bile. Tight belts and bands may produce precisely the same effect.

The sedentary life tends to produce gall-stones because of the weakness of the abdominal muscles which results from the sitting posture, and the lessened strength and activity of the diaphragm that naturally follow inactivity. In a healthy, well-developed person, the descent of the diaphragm with each inspiration compresses the liver, gall-bladder, and bile passages in such a way as to empty them of blood and bile, the blood being forced onward toward the heart into the hepatic vein, while the bile is forced into the intestine. The effect of this action of the diaphragm is very greatly increased by exercise, whereby this great breathing muscle is made to contract with unusual vigor. It is thus apparent that in a person who neglects to take daily active muscular exercise, there is necessarily a decided tendency to stagnation of the bile. In consequence, the colon and other germs which are constantly swarming in the intestine readily find their way up through the duct into the gall-bladder, and the formation of gall-stones begins.

Still another cause of gall-stones which should be mentioned is infection of the gall-bladder through the absorption of bacteria into the portal vein from the intestines. Adami, whose authority to speak on this subject will be universally recognized, asserts "that the colon bacilli in small numbers are in a healthy individual constantly finding their way into the finer branches of the portal circulation; and that one of the functions of the liver is to arrest the further passage of these bacilli into the general circulation, and to destroy them through the agency of the specific cells of the organ. Then if the action of the liver cells has been disabled by the toxic products of the bac-

teria, these may reach the bile and spread through the gall-bladder and ducts."

It is evident, then, that the liver is a sort of sentinel, guarding against the entrance of microbes which may give rise to gall-stones, and which are constantly knocking for admission. It also appears from Adami's statement that this power of the liver to destroy germs may be lost through a crippling of the liver cells. Roger and other investigators have clearly shown that nicotin, the poison of tobacco, strychnia, lead, mercury, and numerous other poisons may thus cripple the liver. Other investigators have shown the same to be true of the poisonous extractives found in the flesh of animals. Voix has shown that the liver is crippled by pepper, vinegar, and butyric acid, as well as by alcohol, all of which give rise to cirrhosis of the liver. Uric acid and allied bodies produce similar effects.

It is thus apparent that the average individual is in his daily life constantly exposed to causes which may give rise to gall-stones. Errors in dress and diet, a relaxed position in sitting, and neglect of exercise, are potent causes which are in operation in the cases of a very large proportion of men and women in civilized lands.

The cure for gall-stones is, then, not to be found in surgery, but in a correction of wrong habits of life which produce gall-stones. A person who has gall-stones may need to have them removed by a surgeon, but the same causes which have produced the stones, continuing in operation, will produce another crop, or a series of successive crops if he submits to successive operations. Every surgeon who operates for the removal of gall-stones should take care to see that the causes which have been in active operation to produce these concretions in each particular case are as far as possible removed, so as to prevent their re-formation. But it is most important of all that those who have not yet contracted this diseased condition should so change their habits of life as to prevent its development. Post-mortem examinations made by Recklinghausen showed that ten per cent of persons dying between the ages of thirty and sixty have stones in their gall-bladders, and that the same condition exists in more than twenty-five per cent of persons dying at sixty years of age or upward.

This is another case in which an ounce of prevention is better than a pound of cure.

Swimming for Obesity.

The best form of exercise for obese persons is swimming, but a short dip in the surf is not sufficient. To be effective, the exercise must be taken for from one to two hours daily. It is not only the exercise, but also the low temperature of the water, which burns up the surplus tissue. Exercise accelerates the movement of the blood, and thus stimulates the consumption of tissue in the muscles and other parts, while the low temperature, acting through the temperature nerves, stimulates heat production. A person taking active exercise in water at the temperature of ordinary sea water in summer-time, burns up his tissues three or four times as fast as one who is sitting quietly in the shade, fanning himself to keep cool. The rational diet; that is, the cutting off of a large part of the carbohydrate foodstuffs (starch and sugar), combined with swimming for one or two hours daily, may reduce the flesh of a corpulent person to healthy proportions.

A very fat person can swim very easily. It is only necessary for him to take a little pains to keep his balance, and he can easily float on the water. The great mass of fat acts like a life-preserver for him; but if he can not swim, he can walk or lie in shallow water and make active movements with his arms and legs.

If conveniences for swimming are not accessible, an ordinary bath-tub may answer the same purpose. The bath may begin with water at a temperature of 102°. The patient sits in the bath-tub, which is filled within six inches of the top, and makes active movements with his arms and legs, rubbing the legs and the trunk with his

hands until he finds himself perspiring freely. The cold water is then turned on so that the temperature of the bath may be gradually reduced to 75° or even 70°. Just at the close of the bath, a lower temperature of 65° or 60° may be permitted for a few seconds as a means of producing a good reaction; or, the bath may be terminated by a cool shower-bath of ten or fifteen seconds. The duration of the bath may be fifteen to thirty minutes if reaction is good, but the bather should never remain in until shivering or decided chilliness is produced. Cold hands or feet after the bath is an indication of defective reaction from too long contact with the cold water.

The Cocain Habit among School Children.

It has recently come to the knowledge of the Chicago police that the school children of that city are becoming addicted to the use of cocain. It is claimed that in one school more than fifty boys are addicted to the practise of using "flake," as the drug is known to them. The cocain is purchased from the druggists by certain boys, and distributed to their comrades. Those who are not familiar with the terrible consequences of the cocain habit are not prepared to appreciate the enormity of the crime committed by a druggist who will sell such a pernicious poison as cocain to boys, or, for that matter, to any one who has acquired the cocain habit.

Cocain works the destruction of mind and body more rapidly than any other known drug. The victim always ends in the insane asylum, if he does not die before he gets there, and the work of ruin is usually accomplished within one to three years. There should be a law against the selling of cocain for purposes of drug addiction, with a penalty attached sufficiently severe to secure due respect for the same. The pitfalls for boys nowadays are certainly manifold. If a boy escapes the cigarette pit, he is likely to fall into the hard-cider slough; and if he escapes this, the cocain habit offers a veritable abyss of evils. The twentieth-century boy, especially the city boy, has a poor chance for his life.

The return-to-nature movement offers the only hope, from a physical standpoint, for the rising generation, but it is very unlikely that more than one boy in a thousand will be to any extent benefited by the simple-life idea. Artificial habits and customs have obtained such a hold upon our modern society that there seems little chance to hope for better things. Nevertheless, we must earnestly work for the promulgation of the truth, hoping that we may save some.

Why Americans Die Young.

Public Opinion calls attention to the fact that "a foreign investigator has discovered that Americans die young. In every 1,000 of the population, Germany has 179 between the ages of forty and sixty, the United States only 170. Germany has 78 in 1,000 more than sixty; America, 65. We have always known that the gods loved us, making it easier for us to accomplish more in a short time than other nations, and so tempting us to exhaust our energies with needless rapidity. And we are abusing this gift of quick achievement. The trouble is not so much that we work too hard, as that we work *too nervously*. Strenuousness has been overpreached. Is it not time to enter a plea for good, old-fashioned leisure?"

We can hardly agree with *Public Opinion* respecting the cause of the lessened longevity of Americans. Americans undoubtedly live too fast, but it is not for lack of leisure; it is rather the artificial life and the almost universal practise of such destructive habits as smoking, tea and coffee drinking, and the excessive consumption of meat which must be regarded as the cause of the rapid progress of race degeneracy in this country. Return to simple habits of life is the only remedy. The outdoor life, simplicity in eating, thorough mastication of food, the disuse of mustard, pepper, pepper-sauce, tea, coffee, flesh foods, and all other unnatural and disease-producing substances, are among the measures most necessary for the staying of the downward march of race deterioration in this country.

The Open-Air Treatment in City Hospitals.

It is interesting to note that the leading hospitals of the country, particularly the Johns Hopkins Hospital, of Baltimore, are giving great attention to outdoor treatment. The nurses take their charges out in wheel-chairs and on cots in great numbers whenever the weather will permit.

The writer recently had an opportunity to visit the admirably managed State insane hospital located at Rochester, Minn., and observed that a great number of patients were outdoors. Some of the men were engaging in an animated game of baseball, which was watched by hundreds more, apparently with as much interest as is ordinarily displayed on such occasions.

It is encouraging to note that in the plans for the nine-million-dollar hospital which is to be built in New York to take the place of the old Bellevue Hospital buildings, ample provision is made for wide balconies communicating with every pavilion, and for a great roof garden, so that all the patients will have opportunity for contact with the outdoor air. The outdoor treatment is a measure of the greatest importance, and is destined to receive increasing attention from medical men and those for whom they care.

A Curious Occupation.

In passing a London pawnshop nowadays one is almost certain to see displayed in a conspicuous manner a sign reading, "Old teeth bought and sold here;" and from the advertising one sees in the newspapers, it is apparent that quite a business has sprung up in Great Britain in the traffic of second-hand teeth.

Now comes the news that a considerable number of persons in London make their living by selling portions of their skin which may be needed in the surgical repair of the victim of some accident. This traffic in human skin is an illustration of the influence of new discoveries and scientific progress in creating new industries.

The Corset a Cause of Cancer.

According to the London *Lancet,* an eminent English physician has pointed out the fact that the corset is a cause of cancer of the breast. The pressure of the hard corset upon the delicate structures of the breast produces irritation which lowers the resistance of the tissues, and gives rise to cancer of the breast. The right mammary gland is most subject to the disease, because of the greater activity of the right arm. Dr. Lucas, who calls attention to this form of malignant disease, gives to it the name "corset cancer." He recites numerous cases of cancer, the history of which shows the origin to be such as he has indicated.

Arrested for Spitting.

The newspapers announce that about thirty persons were recently arrested in Chicago for spitting on the sidewalks. Every city should have an ordinance against spitting on the sidewalks, in street-cars and other public places, and the ordinance should be enforced. This is one of the most effective means of educating the public respecting the dangerous character of saliva as the principal source of infection by tuberculosis.

Solution of Pig's Kidney.

One of the most recently suggested remedies is a solution of the kidney of the pig prepared by pounding the kidney to a pulp, and macerating in water for several hours. The solution thus prepared is to be drunk in three portions during the day, in cases of inflammation of the kidney. It would seem that one would be quite as likely to contract renal disease from a pig's kidney as to be cured of disease of the kidney, for the pig certainly does not take much better care of his kidneys than does the average human being. Examinations by experts have shown that the kidney of the hog is in many cases affected by tuberculosis. The kidney is also not infrequently the seat of cancer.

. . . Question Box . . .

10,225. Acidity of Stomach — Nuts — Linen Underwear. — G. C., Wisconsin: "1. Will meltose agree with one having free acid in the stomach? 2. How many ounces of nuts, say pecans, should one eat to get the required amount of fat? 3. Can linen underwear keep the body warm enough for out-of-door work during zero weather? 4. What kind of linen is preferable — a knit garment, or one after the style of the Deimel linen mesh? Is there more warmth in the latter? 5. In wearing linen, with excessive exercise I soon become exhausted, and oftentimes have headache. Is it on account of too much evaporation? 6. In wearing woolen over linen, is the ordinary outside woolen clothing all that is necessary, or should it be a suit of woolen underwear worn over it?"

Ans.— 1. In such cases meltose must be taken in moderation with the meal, or at the beginning of the meal.

2. Two and one-half to three ounces.

3. In cold weather, woolen underclothing, for warmth, should be worn in addition.

4. It is not very material, but of course the heavier the fabric, the more protection it affords.

5. The headache is doubtless due to the exercise, and not to the evaporation.

6. The amount of woolen underclothing should be adjusted to the season and to the bodily needs. A maximum supply of underclothing is better than an excess of heavy outer clothing.

10,226. Inflammation of Fingers. — Mrs. W. K., New York: "For some time the little finger of each hand has been inflamed and swollen to the first joint; there is also a discharge of pus from the nail roots. At times it seems about to heal, but in a few days the trouble appears again. 1. What is the cause? 2. I am troubled with constipation, dyspepsia, foul breath, and bad taste in the mouth in the morning. Kindly suggest treatment."

Ans.— 1. You should consult a physician at once respecting your fingers. The disease may be parasitic, or it may be something more serious.

2. You ought to visit a sanitarium and have your stomach put in order. Possibly it may be helped by a correct dietary. You should adopt immediately the Sanitarium system of diet. We would advise you to address the Sanitarium Food Co. for special diet prescription, which will be sent you, from the Dietetic Department, with other instructions.

10,227. Nervous Dyspepsia.— K. B., California: "Have a continual gnawing sensation in the stomach, and a burning sensation over the solar plexus, which is increased when anything is taken into the stomach. There is much gas; food comes up covered with mucus; sour and oftentimes leathery froth, resembling saliva. 1. Is this nervous dyspepsia? 2. Can it be cured? 3. What diet would you recommend? I use no butter, sugar, nor meat; live principally on eggs, milk and cream, zwieback, malted nuts, fruits, and gluten wafers. 4. If one gains in flesh, would it denote that the nerves are getting better? 5. Is the burning sensation nervousness or inflammation? 6. Will it gradually leave? 7. Would mustard plasters be of benefit? 8. Which is the most injurious to stomach, due to fermentation,— the acid from fruit, milk, butter, or vegetables?"

Ans.— Your case is a very aggravated one of indigestion and gastric catarrh. You will have to follow a very strict dietary for a long time, and improve the general health. Our advice is to visit a sanitarium for treatment and training. There are several excellent institutions in your State. You will find their address in the list of sanitariums given elsewhere in this number. Your case is too complicated to be properly managed at home, but we will make a few suggestions in answer to your questions.

1. Your disease is gastric catarrh.

2. Yes, by a long and special course of treatment.

3. Avoid milk and cream; otherwise your dietary is all right.

4. Yes.

5. Neither one, but the congested and irritated state of the nerves.

6. It will be somewhat improved.

7. The relief will be merely temporary. We advise fomentations night and morning, and the moist abdominal bandage to be worn night and day. The bandage should be covered well with mackintosh and flannel.

8. Butter and all clear fats are very harmful in such cases as yours. Milk and cream are also detrimental. Your stomach is doubtless dilated, and milk must always be avoided in such cases. Fruit is healthful if properly eaten, avoiding the skins, seeds, etc. Very acid fruits may be avoided if irritating. Coarse vegetables must be avoided. Only such should be taken as can be reduced to a pulp in the mouth; for instance, spinach, green peas, excluding the hulls, etc.

10,228. Stomach Trouble.— Mrs. A. O. B., Illinois: "1. What are the indications of prolapsed stomach, cause, and remedy? 2. Are the bowels necessarily elevated when a full inspiration is taken by a person in an erect position who has never constricted the waist? 3. Why, in the same person, is there an upward movement of the bowels when the lungs are filled while in a lying posture? 4. Does heart trouble have anything to do with it? 5. What is indicated if one feels as if holding or drawing in the bowels if there is a slight disposition to elevate the shoulders instead of freely dropping them? 6. What is the state of the stomach when gas is eructated if one or two long breaths are taken? 7. Suggest aid to overcome habit of smoking. 8. Does indigestion give consciousness of heart pulsations in the back or in the top of head? 9. What is indicated if the cheeks flush? 10. Does an empty stomach or indigestion cause a feeling of depression and foreboding? 11. Is there any particular disorder of the stomach that causes the 'blues'?"

Ans.— 1. The only positive indication is prolapse of the stomach. The bulging of your abdomen is a pretty certain indication of prolapsed stomach. The location of the stomach can be determined with precision only by a careful physical examination by a skilled physician.

2. No. When the lungs are filled, the bowels are compressed by the descent of the diaphragm.

3. The abdominal walls are drawn in by the lifting of the ribs, but the bowels are not elevated.

4. Probably not.

5. There is probably a spasm of the abdominal muscles due to visceral irritation.

6. It is probably distended with gas.

7. Stop smoking. Follow a sanitarium dietary strictly, and the appetite will disappear.

8. Yes. Local palpitation often results from indigestion.

9. That may be hectic fever. The temperature should be taken. The cause may possibly be indigestion.

10. Yes, very frequently.

11. Indigestion, with prolapse of the stomach and bowels and a congested state of the viscera, is the most common cause of blues.

10,229. Itching Piles—Pain in Back—Kidney Trouble.— Mrs. L. W. K., California: "1. Kindly prescribe treatment for itching piles. 2. Give cause of pain and lameness in back between shoulders, more especially toward the left; same pain sometimes down in left side. 3. Is it neuralgia or rheumatism? Have used hot applications without improvement. 4. Does puffiness under the eyes indicate kidney trouble? 5. Give cause of and cure for sleeplessness."

Ans.— 1. Bathing in very hot water will often give relief.

2. There may be prolapsus of the bowels, or irritation of the solar plexus and lumbar ganglia arising from indigestion.

3. Probably not.

4. Not necessarily, but frequently. The case should be carefully investigated.

5. The disease may be due to too much blood in the brain, or to irritating poisons in the blood. The cause must be removed. A warm foot bath taken just before going to bed will often induce sleep by withdrawing the blood from the head. A wet bandage, well covered with flannel so as to produce thorough warming, will often accomplish the same result, and also the moist abdominal bandage, covered with mackintosh and well covered with flannel, worn about the abdomen. The neutral bath is an excellent means of relieving sleeplessness due to irritation from poisons in the blood. The temperature should be from 93° to 95°, the duration fifteen minutes to two hours, or until the patient is tired or falls asleep. Great care should be taken to avoid chilling or too much rubbing and exercise after the bath. The patient should be gently dried after the bath and put back to bed.

LITERARY NOTES

A REMARKABLE book, full of interesting suggestions for all educators and parents, is "Tolstoy as a Schoolmaster," by Ernest Howard Crosby. When the Russian serfs were freed half a century ago, the Count set to work to educate the peasant children of his native village, to fit them for their newly acquired freedom. The views on education set forth in this small volume are based mainly on his personal experience and experiments.

The ideas contained in the book are somewhat revolutionary, but not therefore to be condemned. The summing up of his deductions is that the sole basis of education is freedom — the freedom of the pupil to make up his own mind as to what he will learn and how he will learn it. "That the pupils should come to learn of their own accord, is a *conditio sine quâ non* of all fruitful teaching, just as in feeding it is a *conditio sine quâ non* that the eater should be hungry." What a child eats with an appetite nourishes it, but that which you force down its throat gives it indigestion. The best thing to do, therefore, is to confine instruction largely to the answering of the cravings of the child, helping him to develop along his own lines. The prevailing education of the day he regards as moral despotism,— the determination of one individual to make another individual exactly like himself. The hours of school should be fixed, he thinks, but the pupils should be free to come or not, as they pleased.

Tolstoy would take especial care to free the children of the well-to-do from what he calls "the parasitic tendencies" of their position. "Let them," he says, "do all they can for themselves; carry out their own slops, fill their own jugs, wash up, arrange their rooms, clean their boots and clothes, lay the table," etc. These things he believed to be one hundred times more important for the children's happiness than a knowledge of French or history.

The book is full of charming little incidents showing the practical working out of the principles laid down. It should have an honored place in the library of every parent and teacher.

The Hammersmark Publishing Co., 151-153 Wabash Ave., Chicago, Ill.

"The Handbook on the Prevention of Tuberculosis," issued by the Committee on the Prevention of Tuberculosis of the Charity Organization Society of the City of New York. Cloth, $1.00. Paper, 50 cents.

This is a valuable contribution toward the world-wide movement "to put an end to the most deadly and most needless scourge with which humanity is afflicted." It contains a number of papers and essays on the causes of consumption and the proper methods of treatment, and gives the social and statistical aspects of the subject. Crowded cities are shown to favor the development of this deadly disease, and certain races and occupations seem to be specially liable.

Indirect methods of dealing with the disease are coming to be more and more relied upon. "The problem would soon disappear of itself," says the report, "if it were possible for everybody to breathe fairly pure air, to be clean with a reasonable effort, and to have enough of the right sort of food to eat." Concerning the recent magnificent donation of Mr. Rockefeller of seven million dollars to search for a specific medicine to cure consumption, Dr. Knopf says: "I could wish that the University, representing the city of Chicago, which is the recipient of the gift, were allowed to use the greater portion of these millions for the purchase of the worst tenements in that city, and the erection of model houses for the laborer in their stead; for the establishment of a few playgrounds; for public baths; and last, but not least, for the establishment and maintenance of sanatoria for poor consumptives."

One very encouraging feature of the report is that the mortality from consumption is decreasing, especially in those localities where attention is being paid to the necessary sanitary reforms.

"The Coming Revolution in Diet," reprinted from the *National Review*, is an able advocacy by Neville Lytton of the uric-acid-free diet so strongly recommended by Dr. Haig. The so-called "uric-acid diseases" are shown to be simply "poisonings by unnatural food," which may be prevented or cured by refusing to swallow it. The progress of the revolution in diet is shown in the fact that the vegetarian "is no longer a special type. He exists where he is least expected, in court circles, in sporting circles, and among workingmen. The ideal would be if he could multiply to such an extent that hostesses, hotel-keepers, and those who

cater for table d'hote on board ship, would not think it unreasonable to provide at least one nourishing dish for those who abstain from meat, and thereby save them from much unnecessary privation."

Printed and published by Walbrook & Co., Ltd., 13–15 Whitefriars St., London, E. C.

For both timeliness and vivacity the July number of the *Atlantic* is a notable one. The leading article, a plea for Publicity for Express Companies, by Prof. F. H. Dixon, is a searching study of the vast but little understood business of the express companies in this country which will open the eyes of many people.

The *Woman's Home Companion* for July has much that is appropriate to the season besides the regular good things for which it can always be depended upon.

Gen. Nelson A. Miles contributes to *Success Magazine* for July an interesting article on "The Ambition of Japan." He discusses the subject of her military successes from the viewpoint of an expert, and is evidently impressed with the fact that Japan has become one of the great world powers.

So commendable are the aims and purposes of the National Congress of Mothers, it is not surprising the organization has the hearty support of hundreds who are not mothers, but who have the welfare of the country at heart. As the chief object is to raise the standard of home life and develop wiser, better-trained parenthood, the work of the congress is civic work in its broadest and highest sense. Juvenile-Court work and the probation system have been successfully inaugurated in many localities, and through the public schools the homes of the masses are being reached. The preparation of children's lunches, the hygiene of home and food supply, and the care of childhood mentally, physically, and morally is furthered by the association. The work of the congress, though unique, many-sided, and far-reaching in its scope, is practical, effectual, and vital, the sole aim being the protection, in its highest possibilities, of the home — the strength of the nation. Only as all children have the very best opportunities for development will our homes, our schools, our factories, our laws, and our national life reach the highest standards.— *The July Pilgrim.*

Under the title of "Women in Turkey," Mary Mills Patrick, in *The Forum* for July-September, gives a vivid picture of the position of women in the land of the Sultan, showing the progress they are making in many fields, and tending to dispel some of the popular notions concerning them. The educational advantages afforded to young girls are especially dwelt upon.

MOTHER'S CAKE.

WHITES of three eggs; beat them well;
(Mollie, let me fasten your pin,
Lost your rubbers? I'll find them, dear —
Here, you forgot to bring them in.)

One cup sugar (Certainly, Dick,
I think I hung it up in the hall;
Wait till I brush your coat, my boy;
Yes, I cared for your bat and ball.)

Four tablespoons of water, cold;
(Your check-book, Jack? I laid it up,
Afraid the children might get it there.)
Pastry flour, one level cup.

Baking powder and flavor next;
(My! the baby has wakened now.)
Have I forgotten to add the yolks?
Surely I must, though I don't see how!

Rock-a-by, baby, rock-a-by —
Ah, you rogue, you are wide awake!
I'll tie you into your little chair,
And you shall watch mama finish her cake.

— *Florence J. Boyce, in July Good Housekeeping.*

The New England Magazine for July holds its own well among current publications. The number opens with some illustrated material on the quaint and historically interesting town of Kingston, Mass., by Ethel Hobart. Other excellent articles are too numerous to mention. The number also contains some unusually excellent poetry.

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

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All such persons are earnestly invited to contribute to the columns of this journal a brief statement of their experiences in dietetic reform, not omitting to record their mistakes and failures, as well as their successes.

For valuable contributions of this sort reasonable remuneration will be given. All such communications should be received by August

25, and should be addressed to GOOD HEALTH, Publishers' Department.

A NEW VEGETARIAN CAFE FOR ST. LOUIS.

WE have received the announcement of the opening of a new vegetarian café at 814 Pine St., St. Louis, Mo. Judging by the sample menus, this new departure will be welcome indeed to those who wish to obtain healthful and palatable preparations, and to those who are tired of peppery dishes, accompanied by still more "fiery" relishes. Meals served at "The Vegetarian" are free from all injurious condiments and from the poisonous substances found in flesh foods.

Those in St. Louis who have heretofore experienced a difficulty in obtaining many of the Battle Creek Sanitarium foods will be pleased to know that a complete line is carried in connection with the café, with an experienced salesman in charge.

THE annual International Congress of the Vegetarian Federal Union was held in London at the Memorial Hall, Farringdon St., June 21-24. The first day of the Congress was occupied by the meetings of the Women's Vegetarian Union. On the 22d, Mr. Eustace Miles, M. A., of Cambridge University, took the chair, and papers were read by Dr. A. B. Olsen, Mr. G. H. Allen, Mr. Albert Broadbent, and others, on Diet and Physical Deterioration, Diet and Temperance, The Selection and Cooking of Vegetarian Foods, etc. On the 23d, the Rev. James Clark was chairman, and the subject of the papers read was The Ethical Aspect of Vegetarianism. A great variety of vegetarian products were on exhibition during the Congress.

SAVE THE BOYS.

No person can fairly estimate the ruin that has been accomplished by the various alcoholic beverages. But as great as it may be, when we consider all the conditions of the case, the ruin wrought by alcohol is far exceeded by tobacco using. For the past fifty years or more the various temperance organizations and legislation have in some measure stayed the ruin of the rum traffic. But all this time the masses have been asleep to the onward march of the death-dealing nicotin. True, some voices have been heard denouncing the evils in tobacco, but the masses have been asleep, till the habit of using tobacco in some form has become almost a household evil, and tobacco shops are far more numerous than the saloon. And it almost seems as if nothing short of the deadly cigarette would ever arouse sleeping fathers and mothers to the danger lurking in tobacco.

Hon. Geo. W. Stubbs, judge of the Juvenile Court of Indianapolis, recently read a paper before the Indiana State Teachers' Association, on "The Evils of the Cigarette," in which he said:—

"I have had before me more than six hundred boys who were users of cigarettes, most of whom had become cigarette fiends — that is to say, they had been addicted to the habit so long that it had mastered them; and I have found that in nearly every case where the offense charged was of a grievous, criminal, or degrading and debasing nature, the defendant was a user of cigarettes. Never a week goes by, and sometimes scarcely a day passes, that boys are not brought before me who are cigarette fiends."

Mr. E. E. York, superintendent of the Indiana Boys' School at Plainfield, Ind., says that "out of the six hundred boys admitted to this institution during the past three years, sixty per cent were absolutely known to have been cigarette fiends, while less positive evidence at hand shows that ninety per cent formed the habit that sapped their virtue and strength at an early age." The charges that he lays to the effects of the cigarette are, listlessness, restlessness, nervousness, no energy or ambition, bleared eyes, emaciation, sunken chest, and agonizing deaths.

Miss Martha J. Ridpath, principal of the Greencastle High School, says of the boy who uses cigarettes that "his moral sense becomes so perverted that no dependence can be placed upon what he says. He does not know the truth from a falsehood. His moral sense is low in all respects. He will turn the most lofty sentiment in literature to vulgarity, and the most beautiful paintings to vileness. He is slouchy in his manner, his clothing, and his talk. There is a point beyond which a boy can not be saved."

And now we appeal to the readers of this journal; we appeal to them in behalf of the boy who has not yet gone beyond that "point;" in the name and for the sake of Him who died to save the boys, we appeal to them to arouse to the situation, and aid us in the cir-

culation of our anti-tobacco journal, *Save the Boys*. Only 30 cts. a year — monthly — twelve pages — set as a defense to our boys against these evils. Order now before you forget. Address, Save the Boys, 118 W. Minnehaha Boulevard, Minneapolis, Minn.

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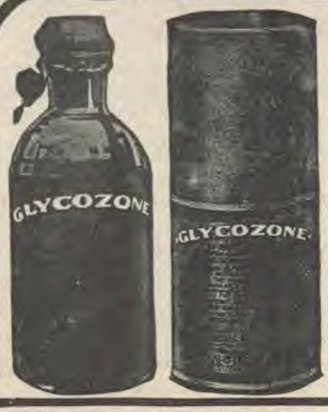

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COURSE IN
DOMESTIC SCIENCE

THE Battle Creek Sanitarium management have organized a new department of instruction, to be known as the School of Domestic Science. It will be carried on in connection with the Training-school for Nurses and other educational work conducted by the institution. This course will cover a year of study.

The course of instruction will consist of lectures, demonstrations, practical drills and training, and laboratory work. The following subjects will be included in the course: Elementary Anatomy; Physiology and Hygiene; Household Physics and Chemistry of Common Things; Didactic and Laboratory Work; Sewing — Dressmaking; Domestic Sanitation; Household Bacteriology; Economy; Heating; Ventilation; Lighting; Care of the House; Sanitary Laundering; Household Pests; Cleaning, Special and General; Hot Weather Housekeeping; Gymnastics of Housework; Dietetics; Cookery; Microscopy; Chemistry of Cooking; Cooking for the Sick.

The course will be in every way practical and up-to-date. Nowhere in the world can so thoroughgoing a course be obtained as in this course. Only such persons as can give first-class references will be admitted to this course.

TERMS: The terms for instruction in this course are exceedingly liberal. Students will be given an opportunity to pay for room, board, laundering, and instruction by six hours' work daily. Those who desire to do so will have an opportunity to work eight or ten hours daily, and receive compensation at a fixed rate per hour for this extra work. This will make it possible for able-bodied persons to earn eight or ten dollars a month in addition to board, room, and instruction while taking this course. The class hours are arranged in the evening, and at such other times as will not interfere with the regular duties, so as to enable those who desire to do so to put in full time in work.

This is by all odds the most favorable opportunity offered young men and women, of limited means, who desire to prepare themselves for a useful life work. A young man or young woman without a dollar in pocket can begin this course in Domestic Economy, and after completing it, can enter the Sanitarium Training-school for Nurses, and, after passing through this course, can enter the American Medical Missionary College, and can finally graduate into the medical profession and pay his way from the beginning to the end of this long and thorough course of training in labor for the institution.

Each course fits those who take it for a useful and lucrative position. Those who finish the Domestic Science work can readily find positions as cooks, matrons, and in other domestic capacities.

Graduates from the Nurses' Training-school are in constant demand, and command good wages. Those who are interested in this educational opportunity should address for further information, Mrs. M. S. Foy, Secretary of School of Domestic Science, Battle Creek Sanitarium, Battle Creek, Mich.

The course begins June 1st. Students received until July 15th, but may be received at any time by special arrangements.

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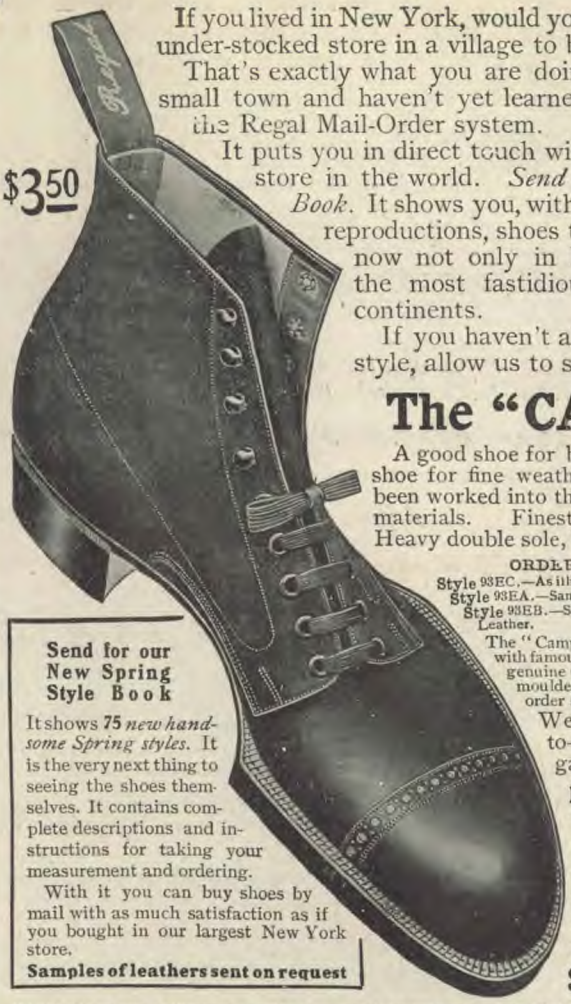

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Vegetarian Cafe, 814 Pine St., St. Louis, Mo.
Vegetarian Cafe, 1519 Stout St., Denver, Colo.
The Vegetarian, 755 Market St., San Francisco, Cal.
Vegetarian Dining Rooms, 317 W. 3d St., Los Angeles, Cal.
Portland Sanitarium Rooms, Mt. Tabor, Oregon.
Vegetarian Cafe, 214 Union St., Seattle, Wash.
White Rose Restaurant, W. H. Nelson, 36 W. 18th St., New York City.
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Vegetarian Cafe, 105 6th St., Portland, Oregon.

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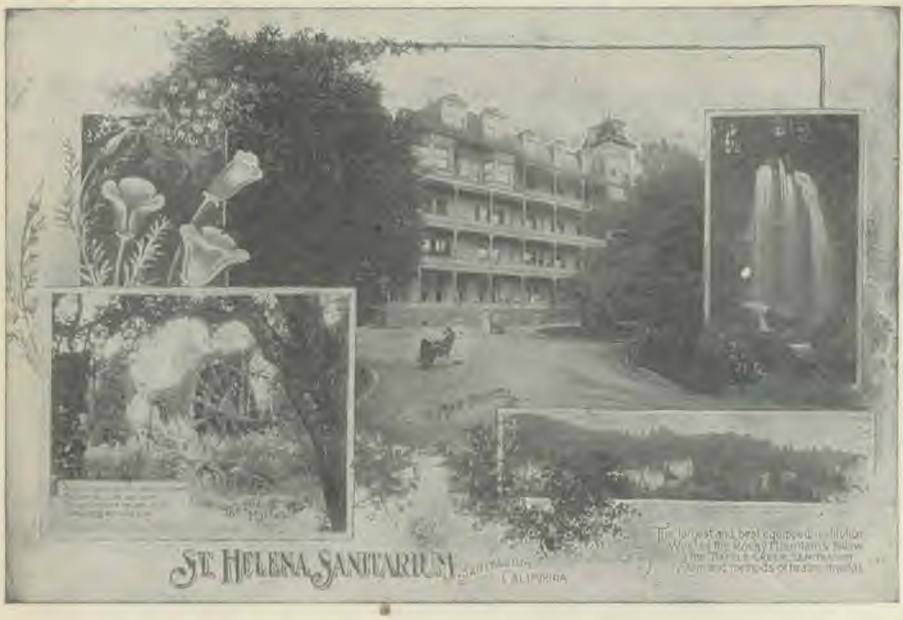

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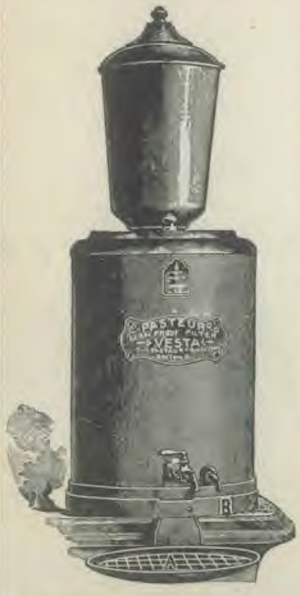

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