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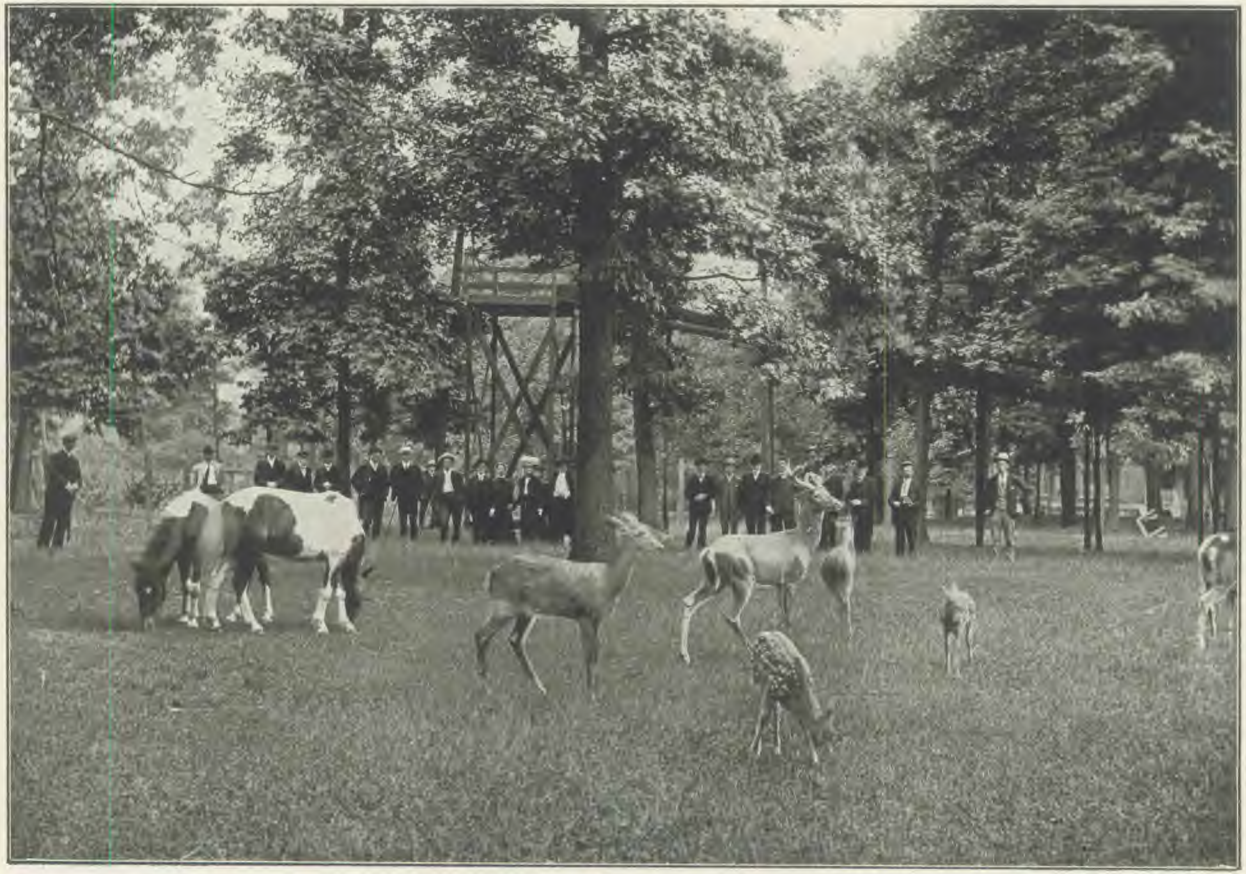


A SANITARIUM WALKING CLUB AFIELD.

GOOD HEALTH

A Journal of Hygiene

VOL. XXXVIII NOVEMBER, 1903 No. 11

"FLETCHERIZING" FOOD

BY J. H. KELLOGG, M. D.

FOR some years Mr. Horace Fletcher, a wealthy merchant of Venice, Italy, has been making experiments respecting the increased value of food when thoroughly masticated. He has published the results of these experiments from time to time, and recently has succeeded in interesting the most eminent physiologists and scientists of the world in his observations. Mr. Fletcher has taken up the question of dietetics from a purely philanthropic standpoint. From the very foundation Mr. Fletcher is a social reformer, and has written much and profoundly upon the subject of social reform. His writings have indeed shown a penetration of the foundation principles of social reformation equalled by few living writers upon these themes.

In Mr. Fletcher's opinion, dietetic reform is the foundation of all reform. The improvement of man must begin, according to Mr. Fletcher, with an improvement of his body. The slum region will exist as long as it is cultivated by bad diet, bad dress, bad dwellings, and whatever deteriorates the physical health. Hog wallows would not exist if there were no hogs to wallow, or if hogs could be cured of the disposition to wallow.

Mr. Fletcher made the interesting discovery that everybody eats too much; at least everybody who can get a chance, or whose stomach is still tolerant. According to the results of experiments which Mr. Fletcher has made upon himself and others, the so-called daily ration which has been established by scientific authorities is at least fifty per cent larger than it ought to be, and even this is exceeded by multitudes of hearty eaters. According to Mr. Fletcher's observations, a pound of water-free food is ample for anybody, and if care is taken to masticate the food thoroughly, the amount actually required is considerably less.

Mr. Fletcher's experiments, made under the most careful scientific supervision, have shown that if care is taken to chew the food four or five times as long as usual, the food is utilized to so much better advantage that its sustaining power is wonderfully increased, and hence the amount required is considerably diminished. The amount of energy needed for the digestion of food is very considerable, and varies greatly with different foods. Pawlow has shown, for example, that bread and butter requires five times as much energy for its digestion as an equivalent amount of liquid. This is a most important consideration, not only as regards economy in food, but as regards the greater economy in vital energy. The energy consumed in the digestion of food cannot be utilized in any other way, hence the large waste of energy which occurs through the neglect to masticate the food properly must detract to a very considerable degree from the vital en-

ergy available for useful purposes. Mr. Fletcher has proved this to the satisfaction of the most eminent scientific critics, both in England and in this country, and the saving of energy has been shown to be so very great that such eminent men as Sir Michael Foster, of England, Prof. H. P. Bowditch, and Professor Chittenden, of Yale, have thought it worth while to make a special, personal investigation of the matter, and Professor Chittenden has recently given public expression, in his interesting article in the *Popular Science Monthly*, to his endorsement of Mr. Fletcher's views.

The military department of the United States government, recognizing the importance of this question in relation to army regimen, has detailed twenty men to give their entire time for several months to an exhaustive series of researches, the aim of which will be to subject Mr. Fletcher's claims to the crucial test of exhaustive experimentation. The writer has no doubt that the observations which have already been made by Sir Michael Foster and other eminent scientists will be confirmed by these extended researches, and that the result will be the revision of views which have heretofore been held by most physiologists respecting the quantity of food required for the maintenance of weight and working power, and also respecting the amount of proteids required for daily consumption. Upon the latter point there has been a wide difference of opinion. Mr. Fletcher's experiments have shown that an ounce and a half of proteids daily is ample for the perfect support of the body even when subjected to arduous physical labor. This is scarcely a third of the amount ordinarily consumed, and will be represented by the amount of proteid material furnished in about six ounces of beefsteak or seven eggs. Proteids constitute the most expensive element of human food supply. Starch and sugar are cheap; fats are more expensive, and proteids are most expensive of all.

If Mr. Fletcher's theories are confirmed, and if the public can be educated to their adoption, the result will be an enormous saving. The amount of food material may be reduced at least one third, and the cost may be, to say the least, enormously reduced. Suppose, for example, the actual saving in quantity may be estimated at not less than one-half pound per day for each individual, which will amount to a saving for the seventy million people in the United States of more than seventeen thousand tons daily. A ton of flour, one of the cheapest of foods, is worth at the present time about sixty dollars. Seventeen thousand tons of flour would have a value of about $1,020,000. The saving of this enormous sum daily would in a few years pay off the national debt, and be sufficient to provide the comforts of life for every needy person in the country. This is proof that the dietetic reform may be made the foundation for a great and thoroughgoing social reform; may be made to solve economic questions of the most tremendous importance. Mr. Fletcher argues that in this question of the proper mastication of food is to be found a key to the most serious problems relating to human welfare.

Another interesting observation which has been made by Mr. Fletcher is the fact that when the food is properly chewed, there is marked absence of those fermentations and putrefactions which are so often present in the alimentary canal,— not only in the stomach, giving rise to flatulence, but also in the small intestine, particularly in

the colon, resulting in the formation of poisonous substances which thin the blood and permeate the tissues, interfering with all the vital functions, giving rise to a variety of chronic diseases as well as neuralgia, neurasthenia, insomnia, rheumatism, mania, degeneration of the blood vessels, Bright's disease, hardening of the liver, and other degenerations and ailments too numerous to mention.

The small residue which results when the food is thoroughly masticated is remarkably aseptic. Putrescent processes are almost altogether absent. Fecal matters are comparatively inoffensive, and greatly diminished in amount, and one of the greatest burdens under which the body struggles, through the necessity for eliminating from the skin, the lungs, and other excretory organs the enormous quantities of poisons produced by the decomposition of foodstuffs in the alimentary canal, is lifted, and as the result, the individual experiences a lightness and clearness of intellect, increased vigor, endurance, and resistance of disease which is almost past belief until one has actually experienced this delightful transformation.

That these views of Mr. Fletcher are not mere fancies has been demonstrated again and again, not only by himself and his immediate friends, but on a large scale at the Battle Creek Sanitarium, where, for many years, these ideas have been more or less thoroughly inculcated, and especially within the last two or three years. Any one can easily demonstrate the truth of Mr. Fletcher's contention by experiments upon himself. The habit of chewing thoroughly is very easily and quickly acquired, and when once the habit is formed, the increased satisfaction experienced in eating, the marked increase of energy, and the sense of well-being which results from this manner of eating, become sufficient incentives to lead to the continuance of the practice. Mr. Fletcher is doing an immense amount of good in his earnest propagation of these wholesome and health-saving ideas. It has been suggested that the thorough method of chewing which he advises, and which differs so widely from the current practice, should be termed "Fletcherizing." The treatment of food by heating at such a temperature as to destroy germs, so as to increase its keeping qualities, is generally known from the discoverer of the process as Pasteurizing. "Fletcherizing," or thoroughly chewing the food, increases its digestibility to such a degree that decompositions are prevented, and it thus becomes a sort of physiological method of sterilizing, or ascepticizing the food, and hence the name suggested seems entirely appropriate.

It is reported that "Fletcherizing" is getting to be a very common practice in some portions of New England as well as in Great Britain, where the influence of the royal example has led to the formation of munching parties in various parts of the kingdom. Parents and teachers would do well to give this matter careful consideration. It is but little trouble to train a child to the habit of thoroughly masticating the food, and the habit once acquired is likely to be followed through life. The readers of GOOD HEALTH will hear more of this subject from time to time, as this question is one which physiologists are bound to recognize as of vital importance, and it will unquestionably receive, in years to come, more attention in public school and medical college textbooks than heretofore. Mr. Fletcher is an optimist, and has the most profound faith in the final triumph of truth.

THE AUTUMN TIDE

When maple leaves flame in the wood,
And corn is ripening in the shock,
And sunshine, in a golden flood,
Rolls over every mountain top,

Then Autumn flaunts her banners bold,
Her scarlet banners streaming wide,
The purple blending with the gold
Along each vale and mountain side;

And regal hosts troop o'er the field
And garner in the golden grain;

Where bud and blossom fruitage yield,
She gives it back again

A thousandfold to him who plants
The tiny seed with care;
And princely gifts fill every want;
Rich heritage of earth and air.

Then sing her pæans far and near,
Whate'er befall, whate'er betide.
The benedictions of the year
Rest always on the autumn tide.

—*John Earle Coolidge.*

NATURE'S PREPARATION FOR WINTER*

BY J. F. MORSE, M. D.

WINTER is nature's time for rest. Therefore the first steps in preparation for it must be labor. That the work has been ceaseless is witnessed by the measureless miles of leafy forest and grassy plain, as well as our little harvest of orchard, garden, and field. Not a moment has been lost since the first touch of the warm sunshine reached the life which was hidden away in the leaf mold and in the tangled roots waiting for encouragement to grow. In its treasure of seed, or nut, or fruit, each tiny plant, as well as the towering oak, presents the multiplied evidence that no effort in harmony with God's great plan ever fails of its just reward. What a lesson to us who may sow for an abundant harvest of health.

MUSKOKA LAKE.

Most of the energy garnered by last year's growth has been used, and thus increased many times. Now the conditions necessary for completing the work are provided by the all-wise Gardener. The warm sunshine of a fall day encourages the process, until all forces are so busy that a hush hangs heavy on the air and scarcely a ripple breaks the surface of the water. Then Muskoka Lake is in her most bewitching mood; the cool, crisp nights tell of the coming of the hoary frost king; and at once from crag and hilltop the scarlet warning of danger is thrown to the breeze by the leafy sentinels of the wood. Our forest brothers in fur, both great and small, are laying ample plans for winter needs; and besides that, are industriously increasing their store of reserve energy in the form of fat, by well-masticated feasts of the healthful foods so bountifully supplied. Disturbed during their twilight grazing on the aftermath of the clover field, several deer bound into the

*We are indebted to the Grand Trunk Ry. for the cuts used in connection with this article.

SCARCELY A RIPPLE BREAKS THE SURFACE OF THE WATER.

underbrush, and from behind their leafy screen the buck sends forth his challenging inquiry, *snoof? snoof?* Everything in nature is ready for winter, and uses every moment of waiting in the fullest enjoyment of its possessions.

If we have been living at all in accordance with natural law, our summer has been one of busy physical activity. By positive exertion every lingering particle of waste material has been eliminated. If we have not been out to enjoy the refreshing tonic of the "cool of the morning," at the birds' matin service, the loss has been partly atoned for by a shower or a plunge later. Even though the mercury has fallen gradually from its summer station, and the pure soft water of the lake has out of sympathy followed in the fall, the mere memory of the glowing reaction after a brisk swim in its depths sets the blood fairly tingling months afterward. The nut-brown tan is evidence of many days spent in the field or forest or on the lake; and the clean vigor of perfect health is felt in every move.

Seeing our Heavenly Father in it all, are we not prepared to sustain with cheerful face and fortitude anything which the winter of nature or of adversity may bring.

PRAISE GOD

PRAISE God for wheat so pure and sweet of which to make our bread!
Praise God for yellow corn, with which his waiting world is fed!
Praise God for every winter's store of ice!
Praise God for summer's heat!
Praise God for fruit trees bearing seed; "to you it is for meat!"
Praise God for all the bounty by which the world is fed;
Praise God, his children all, to whom he gives their daily bread.

— *Edward Everett Hale.*

COLD WEATHER DISEASES AND GERMS THAT PRODUCE THEM

BY F. J. OTIS, M. D.

THE summer has passed. The diseases that have given us the most trouble were those affecting the intestinal tract. The children will no longer suffer from cholera morbus and summer diarrhea. Typhoid fever and dysentery will soon cease their activities. The germs that cause these diseases all belong to the same class. They are little bits of rods that live mostly in water and liquid foods.

The autumn leaves are falling rapidly. Soon they will be completely destroyed by the germ of decay. The juices produced at this time from this process are very favorable to the growth of typhoid and similar germs. Consequently it is common for typhoid to become quite prevalent in the fall. There are more deaths in October and November from typhoid fever than any other time during the year. These germs are apt to become very numerous. When cold weather comes, they will become latent, and remain uninjured until next season. Shortly after a thaw there is apt to be another epidemic, but prevalence of the disease is seldom so extensive in the spring as it is in the fall. Soon the water will all be frozen about the barn and house and elsewhere, so these little germs cannot multiply rapidly. Consequently the liability of contracting these diseases becomes very small.

The children who during the summer months have lived mostly outdoors, no longer roam the hills and pluck the flowers. The schoolbells all over the land have called them to their studies. From all kinds of homes they are gathered together for their school duties. The shorter days preclude much out-of-door life after school hours, and the lengthening evenings are passed around the hearth playing with their pets and toys. These playthings are often brought down from the garret, where perhaps they have been stored with the clothing of some little one that died of diphtheria the year before, or where similar things have been stored for years past by previous tenants.

Diphtheria is a disease caused by germs called *diphtheriæ bacilli*. They are little rods of varying shapes, some being like Indian clubs in appearance. These little micro-organisms wait patiently until some individual shakes them out of the garment in which they have been hiding. Like all other germs, they float quite readily in the dust.

The dust is set afloat by the movements of the household. The children come more or less in contact with it, and inhale it into their little throats, where the germ finds excellent food for sustenance. While the germ grows on the surface of the tonsils, it produces a very severe poison, which is absorbed into the child's system, weakens the heart, and may produce death very suddenly. For a day or two the germ lies there unheeded, unmolested. The children go to school. At every word that is spoken numbers of them are thrown out into the room. In a short time they become dry particles in the dust throughout the schoolroom. As a rule they are not distributed in a sufficient quantity to do damage until the throat begins to be inflamed. Now we can readily see the danger that is before the other children.

In the large cities, where this danger is the greatest, there are very excellently equipped laboratories. From

THE "YELLOW CORN WITH WHICH HIS WAITING WORLD IS FED."

these are issued little outfits with which the physician is able to take the germ from the child's throat, grow it for a few hours in a warm place, and in from eighteen to twenty-four hours he knows absolutely the extent of the danger that the child is in. Science has come to the rescue of the child through the discovery of a material called antitoxin, which, injected into the blood, will completely destroy the poisons of this germ and cause it to leave the child's throat, so that in two or three days the child is perfectly well.

We wish that all diseases might be so perfectly handled, and we regret that the smaller cities and country places cannot have the benefit of this method of recognition to detect and destroy these little germs.

Not all of us have adjusted our clothing for the winter. We may be waiting for a more thorough chill to remind us that it is time to dress more warmly. Every time we experience a drop in the temperature, there is a contraction of the blood vessels in the skin and extremities. There is no place for the blood to go, when it is denied admission to the skin, but to the internal organs. It is now in a smaller place than before. Its pressure is increased. Because of the pressure in the blood vessels the heart has to do more work. This pressure causes a congestion of the mucous surfaces. Then there is better food for the little germs that are constantly there. We now have the soil not only for diphtheria bacilli but for several other little germs that expect to thrive under the circumstances brought about by the unprepared condition of the people for cold weather.

These germs are very small spherules. Sometimes they become elongated, and somewhat sharpened at the ends.

One of these is known as the germ of influenza, and another as the germ of pneumonia. Dr. Sternburg, Surgeon General of the United States Army, discovered the germ of pneumonia. He inoculated some rabbits with some of his own saliva and shortly they died. By a careful examination he found that death was produced by this little germ. The same year (1882) he found out that this germ also produces pneumonia in man. It was also discovered that these germs exist in the throats of healthy individuals all the time. They do no harm so long as the individual is in a perfectly healthy condition, but when one exposes himself when heated by sitting down to rest in a draft, or in some other way causing a sudden cooling of the body, there is produced just the condition which permits the pneumonia germ to multiply very rapidly and invade the tissues of the body, producing that rapid and often fatal disease, pneumonia. Sometimes this little germ produces a sore throat. Then, in the blood from the tonsils, it passes through the circulation to the heart, grows upon the valves of the heart, causing heart disease. Again, it may grow in the membrane around the heart, causing pericarditis; or in the membranes of the brain, causing meningitis. In fact, there are a number of other diseases that these little germs produce when they are practically invited to enter other territory by the sudden cooling of the body.

The influenza germ was discovered by Dr. Pfeiffer in 1892. Although very much like the germ of pneumonia, it does not grow so readily in the laboratory. Many will remember that in 1892 in Russia considerable comment was made upon a disease that caused sore throat, running of the nose, headache, fever, and aching of the bones; in other words, the symptoms of a very severe cold. This disease, which was termed *la grippe*, spread very rapidly through Europe, thence to New York and westward over the United States. A thorough study of the disease proved that it was caused by the same germ that frequently produces the ordinary cold. It was during a hard winter when the people were poorly fed and their constitutions in an enfeebled condition that the germ became accustomed to invading portions of the body where it did not belong. The germ acquired the ability of producing poisons that were more severe than usual, so that the usual cold became more completely a constitutional disease.

Neither the pneumonia nor the influenza germ has power to move about from place to place. An eminent physician, wondering how these germs got about so rapidly, placed a plate of glass in front of a person while he was talking, and discovered, as many others have since observed, that there is a fine spray thrown off when one enunciates the sibilant letters. Each globule in this spray was found to contain large numbers of micro-organisms, often nearly two hundred. Not only is this the method by which the germs above mentioned are distributed, but germs of consumption are very rapidly distributed in the same way.

There is a group of germs called pus germs that exist on the skin and in and about the mouth. They are all perfect little spherules. Sometimes when people expose themselves in cold weather, one of these germs develops on the tonsils, instead of the germs previously mentioned. Not every exposure produces disease, but sometimes this group of germs just mentioned grows instead of those of influenza or pneumonia. These germs may produce ordinary sore throat, bronchitis, quinsy,

or follicular tonsilitis. They may enter the circulation from the tonsils and produce difficulties in other parts of the body, start inflammation around the heart, of the heart valves of the lungs, or of the membranes of the brain. In fact, there is no doorway to the body that occasionally swings so wide as that doorway represented by the tonsils.

Scarlet fever is another germ-disease that is very prevalent for the same reason that diphtheria multiplies so rapidly in winter. It is quite well understood that it is produced by a spherical germ something similar to the germ of influenza. It gains access to the air passages, and is distributed in a similar way. It enters the circulation from the tonsils, to lodge in the capillaries in the skin. It sets up quite a severe inflammation, producing the scarlet condition that gives the disease its name. After a few days the inflammation begins to subside, but the germs have penetrated into the layers of the skin. In time the skin begins to peal off in scales and carries with it all those germs that have succeeded in gaining access to the skin from the under surface. These scales are intermingled with the dust about the room and in it are kept floating in the air. The neighbors' children that happen to call at this time inhale portions of these minute pulverized scales, which lodge in the air passages and develop. In due time the neighbors' children have the sore throat and strawberry tongue of scarlet fever, and go through all the stages of the disease.

Our winters are often long and severe. During the long evenings the family gathers about the fireplace with their magazines and books for self-culture. It certainly is as it should be, but often such a family circle has a member in it that is a consumptive, or perhaps some one visits them at this

time who is consumptive. In their conversation these germs are spread about the house in ways already described, and gain access to the air passages of those who are comparatively well. They may begin to grow immediately; again, they may linger there without developing for some time.

In 1882 Dr. Koch discovered the germ that causes this disease. It is a little rod that is about $\frac{1}{4000}$ in. long and one-sixth as wide as it is long. Dr. Koch was able to make it grow, but he found it a very slow grower. It required a month to produce any very appreciable amount. It is not surprising that it should grow so slowly, for the disease is a very slow one. As there is a variety of this disease known as quick consumption, scientists studied the germ considerably and determined its rapidity of growth. Dr. Hess found out that when a special kind of media was provided, the germ would grow very rapidly. It was later observed that if some mucus from the throat were added to this culture it was possible for a much larger growth to take place in twenty-four hours than when grown in this material alone.

In the healthy throat there is little or no mucus, so we can readily see that the individual who happens to contract a cold at the same time that there are a few consumptive germs in his air passages will in less than twenty-four hours be possessor of a large culture.

Similar to the first germs mentioned, these also may enter the circulation, and because they require oxygen, will develop more rapidly in the lungs. However, people do not always contract the disease when they catch a cold during the winter, but when there is one consumptive in the family, as before mentioned, it is only a short time until the family have contracted the disease. It may remain insidious for a long time.

Perhaps no other germ known to man provides so large a variety of diseases. There are few germs that are more persistent in their growing qualities. One seventh of the deaths in the cities are from some form of this disease, and one fifth of the people who are examined are found to have suffered from the activity of this germ. Tuberculosis, scrofula, joint disease, white swelling, Pott's disease of the spine, peritonitis, cerebro-spinal meningitis, and a large number of other difficulties are caused by it.

In the Southern States these diseases are conveyed from individual to individual more separately. The germ does not have access to the entire family as it does in the North. Patients who develop this disease in the winter are apt to become quite ill in the spring. If they live through the spring, they will as a rule get along quite well for the rest of the summer, but the germs make new and more extensive inroads upon them each winter. The most fatal time for consumptives is in April and May. During August and September there are the fewest number of deaths from consumption. The little germ has a very wide distribution, affecting nearly all the domestic animals.

With the winter just before us, this question is very important, How shall we prevent the spread of these diseases? First: Give every sore throat prompt attention. Watch it carefully, and if there is any suggestion of a white membrane, call a competent physician. Second: Prevent all colds by keeping the system so toned up that it can endure a moderate amount of exposure. This can be done by taking cold morning baths, at the same time being careful to perform the proper amount of work to secure adequate exercise, and by selecting a good wholesome diet.

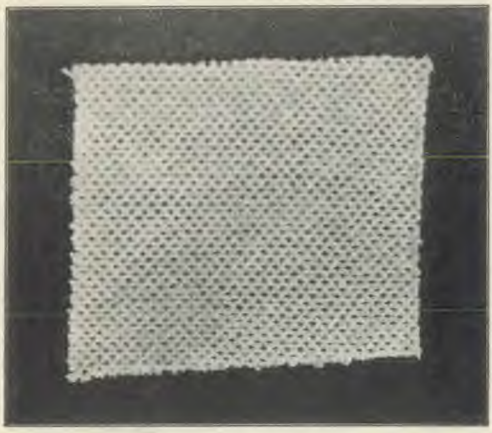
WHAT TO WEAR AND HOW TO WEAR IT FOR WINTER

BY CAROLYN GEISEL, M. D.

THROUGH all the glad summer it was well to be uncovered to the warm air and sunshine which holds in its touch so much more of life than we have dreamed, but now that November sounds a warning of winter's approach, we'll take a lesson from nature and prepare a protection for the temple of our soul's indwelling. The trees are putting on a thicker bark; the sheep are keeping all their coat of wool; and our friend in feathers snugs his undervest of down close about him under his sober winter dress of brown, and we, — why — we'll go buy flannels (?).

And if not flannels, why, pray? Our grandmothers prepared red flannels for their families before time was for us; shall we not continue in the good old way? Surely wool is good, but not unqualified good as it is now used — abused may be a better word. Wool worn next the skin absorbs so very much of the refuse matter that has been unloaded upon the skin's surface by the tiny temple cleaners whose duty it is to put out the waste matter brought to them by the blood, and this waste matter is not *all* separated from the garment by washing, because wool cannot be boiled. Some germs remain in the flannel, and this garment put on for clean is not, after all, so clean as it should be, having been, as is sometimes the case, worn for two weeks to save shrinkage in the laundry, you see. So it is allowed to be shrunk by the body's perspiration, an excess of which it excites. And now, wet with perspiration, this garment of wool becomes a sort of continuous poultice, a most debilitating thing of itself, and when filled with waste matter thrown out by these little busybodies in the skin, it is add-

edly pernicious; for do you not see that the poultice effect makes the little absorbent mouths to gap, and gaping wide they take in again the refuse once carried out. It is as if our good janitor (the blood is this living temple's faithful janitor) had swept clean all the rooms and halls of our dwelling house, and,



DEIMEL LINEN-MESH.

having left the dust on the porch by the open door, the ladies, coming in arrayed in the now prevailing fashion of sweeping skirts, bring the dust all back into the house again.

Unquestionably this matter of woolen underwear is one of the causes of the malaise and dullness that come to so many of us in the long winter months. This dullness is nothing less than an avoidable autointoxication brought on by that overthick, unclean bit of wool worn next the skin, sometimes at night as well as day, unchanged for two long weeks.

A better than this good old way of our grandmothers is a return to an older way still,— back of our grandmothers' time to the time of our great-great-grandmother. See with what fastidious carefulness she prepared undergarments of linen for her household. Fresh from the loom her own hands operated, it was often a bit loosely woven and coarse, which made it all the better, and when returned from the wash, which in ye olden times was always dried in ye open sunshine, it was unquestionably clean, having of course been boiled. Instead of this particular sort of linen, which we of today may not have, there is for us the Deimel linen-mesh, which, because of its openness, allows the skin to breathe the air which freely reaches it through the meshes. Over this may be worn the not-too-heavy flannel, which, held away from the skin by the linen, can become neither so soiled nor so adherent. While Deimel linen-mesh is unqualifiedly the best thing to be worn next to the body, a very light weight of gauze worn under the flannel would be an improvement over the prevailing plan, and a more frequent changing of the wool will help the matter much. Two suits used upon alternate days, the one put in the sunshine while the other is being worn, is a healthful plan, for there is no purifier like sunshine. Then, *of course*, the day garment must be exchanged for another at night, for absolute cleanliness of the surface will help to keep clean the inside of the house beautiful.

More important than what we wear is how we wear it in the wind and the weather of winter, for the question of the economy of heat-producing material is quite as important to the individual as to the nation.

Queerest of all queer people under the blue are we in our steam-heated, furnace-fired, overwarm American homes. We sit by the radiator with the temperature of the room at summer heat, and, looking out on the snow-covered lawn and icy driveway, we fancy ourselves to be cold, and possibly add to the al-

ready overweight of clothing a shawl or "fascinator." It was Mrs. L.'s little Anita of whom auntie queried, "Why do you keep the shawl on in the house?" and the wee one answered, "Mamma put it on me, 'cause her's cold, I guess." Seemingly only because out of doors there is snow and icy weather, though within the atmosphere may be a very summer of peace, we cover our bodies with multitudinous layers of goods, and upon going out of the house don only an extra thickness over the torrid zone of our bodies, and call it protection.

By far a more reasonable plan would be to wear clothing suited to the pleasant heat of the indoors and upon going out put on garments sufficient to keep out the cold. The extremities, because of their distance from the heart and their apartness, are, of course, hardest to heat of all the apartments in this living temple. From them, too, especially from the hands and feet, there is more rapid heat elimination, for by contact with other things which are cooler or cold, heat is withdrawn from the surface rapidly. These, then, should be covered most warmly of all, but in our daily practice this is rarely or never done.

That jacket of yours, my dear, is only long enough to reach to your belt, and so enfolds only the very warmest of all the temple apartments,— the engine room itself (the heart), and the compartments closely adjacent to it, — and when you go out of doors you rarely add anything extra to the clothing of your lower limbs or even to the feet themselves. Tights of warm wool should belong to every woman's wardrobe, and for every child and schoolgirl, as well, this garment should be made ready as one of the most important protections from winter's discomforts. Put on for out-of-door use, removed with the hat and jacket upon coming in, it will do more toward saving coughs, colds, and doctors' bills than numberless other things that might be mentioned. Save its price from the cost of that heavy fur you meant to buy for your neck (which would only be harmed by the wearing of fur); then with something lighter for the neck, and the warm tights for the extremities, a marked point of reasonableness will be reached in your attire.

Such is the fashion of woman's clothing that numerous thicknesses cover the trunk, which is by far the warmest part of the body, while often but one thin layer of material is over the extremities. It probably would surprise most of us were we to stop just now to count the layers of clothing around our waist, — from the linen-mesh, which comes first, to the lambswool vest, the satin and steel corset, the lace and linen corset cover, the lined dress waist, and the padded lining of the fur jacket,— all of this and sometimes more, as set over against the thin open-work or silk stocking covering the knee.

This uneven distribution of clothing is one of the commonest causes of the frequently recurring congestions of the important viscera. Yet quite unconsciously we continue to pack our clothing on the outside of our trunks; it might be more healthful to pack some of these things as for a journey, lock them up, and throw away the key.

And now will you see this picture with me? This is the baby we caught for our mental picture gallery as we came down Broadway by the breezy Flatiron: —

Many plumes tossing on the beaver so snugly tied by broad ribbons over the wee man's ears; rounded chin quite out of sight in the fur tippet that muffles

the little neck so cozily; velvet coat, with its lining of quilted satin, twice covers the baby chest, and reaches to the hem of the daintily decorated skirts, and there it stops, and the skirts stop, and anything that may be under the skirts stops, leaving the shapely knees looking like dimples carved in cold blue marble. To be sure, there is the sock only a little lower down and a reasonably heavy patent leather boot over the sock, but those dear, dimpled knees — why, mother, have you not noticed that just under the bend at the back of this joint is one of the largest arteries in this precious baby body? — the popliteal artery, through which every drop of blood in his body must pass every forty-two seconds, and between the blood in this artery and the frosty wind and weather of this November day there is nothing but the wall of the artery and his delicate baby skin? Can you not see that it does not matter much what amount of packing covers his heart, for his blood, and through his blood his whole body, is chilled by this exposure of his knees?

Just come with me a minute. Let us take a hasty trip across the water; here we are in Scotland. We will just stand here a bit and look over this low stone wall while the procession slowly files through the gate. You are noting the naked knees of the tiny toddlers among this mourning group, and now you are seeing what every traveler in Scotland is impressed with at first glance,— the great number of baby beds under the snowy coverlid in this low-walled enclosure; for here is the home of this cradle-robbing fashion. This same, out-of-proportion number of baby graves is also to be noticed in the cemeteries of Switzerland, where the fashion of uncovered knees is markedly prevalent.

We need stay no longer; we 'll leave the old sexton leaning on his shovel by the still uncovered treasure box. Keep the spade in hand, good sexton, for there will be more graves to cover next year, many more.

THANKSGIVING

THE beautiful summer is cold and dead;
She has passed away like the rest —
The other fair summers long since fled
From the woods and meadow crest.

* * *

The fields are shining yellow and dun,
Where the autumn gathered its tale of grain;
We thank thee, Lord, for the blessed sun,
We thank thee for the rain.

— *Susan Coolidge.*

FROM THE SNAKESKIN TO THE SANITARIUM

BY M. W. K.

IN thinking of the new light that, through sanitariums especially, is shedding its healing rays over the physical maladies of the world, how natural it is to revert to the superstition and errors of the past. When one recalls that one's own mother was bled five times in a week for supposed tuberculosis, and this by three of the best physicians of the little town where she was at school, it is easy to excuse the following remedies employed by uned-

ucated Negroes of our Southland.

Some years ago the writer was nursing a very sick child, so ill that the physician scarcely dared hope for recovery, and every breath of the little one was watched with close attention. In the midst of the anxiety the child's Negro nurse asked for permission to go to her home, a country town some miles distant. The request was granted, although it excited surprise, as the woman was devotedly attached to the baby. The second day she returned with a snakeskin. When asked why she had brought it, her reply was, "I was afeared my chile might die, and I went to de country just to git dis here snakeskin, for I knowed if I put a pinch of it in his milk and tied de res' roun' his neck it would make him teethe easy." When made to understand that her trip had been in vain, she said, "You needn't be afeared er dis; I cured my brother las' year er typhoid fever, and he had one of de bes' white doctors they is. After de doctor lef', I put his medicine up on de shelf and went out and got me a nice lot er manure. I made tea out er a part of it, and de balance I mixed up in poultices and kep' my brother's bowels covered wid dem, but, er course, when I seed de doctor comin', I snatched off my poultice so he couldn't smell it, but I certainly cured my brother all de same, and dat white doctor never knowed nothin' 'tall about it."

An account of a more savory remedy comes to mind, told years ago by a faithful, loving, and beloved servant of the writer's grandmother. Some mention being made of Bishop L—, of the Protestant Episcopal church, "Aunt" Viney looked up and said, "Honey, I knowed de Bishop long 'fore he wuz a bishop. It wuz dis way: Mr. L—, he come to Tennessee to 'tend to some church business, and stayed long er

"AUNT" VINEY.
"I ain't, so to say, han'som', but I wuz allus considered a monstrous stylish-lookin' 'ooman."

ole mistis, your grandma. He warn't long dar before he wuz laid up wid a chill, and mistis said, 'Viney, go upstairs and see what you kin do for Mr. L—.' Arter I took a look at him, I went to de gyarden and pulled nigh on to six dozen years er corn and biled 'em; den I packed dat hot corn all around and on top er Mr. L— and kivered him up wid mistis' bes' double blankets, and it warn't long befo' I had dem chills sweated clar out er him. Dat's de reason Mr. L— thought sich a sight er Viney," the old woman said, as she drew herself up in pride at the recollection of her medical skill.

We smile at these stories and enjoy the humor of them, but we rejoice that the day of superstition is passing and

that the gospel of health and right living is being preached and accepted by black as well as white in our dear Southland. One of the hopeful signs of the progress of the race in medical lore and health principles was the body of physicians, surgeons, and nurses who were prominent in the convention of Negroes held recently in the city where lived the two women whose experiences we have related, and who, we fear, would not approve of the methods of the Sanitarium for Negroes in Nashville; that is, for their own people, "caze you know dem ways may do fer white folks, but de Sperit strives in a different way wid colored ones."

We feel sure, however, that with "line upon line, and precept upon precept" on the part of their teachers, the younger generations will come to see that there is a "more excellent way" than that practiced by their grandmothers. Many of them we believe will, in time, add to the faithfulness and devotion of their grandmothers the principles of the new teaching which leads through nature's remedies up to nature's God.

An unfilled need of our Southern country is the establishment and maintenance of cooking schools, especially in the larger cities. The old cooks, trained by careful mistresses in the antebellum days, have passed away, and in their stead, we have an everchanging kitchen maid who adds to dense ignorance of the culinary art perfect satisfaction with her own ideas and no desire to be taught systematic methods, thoroughly believing that—

"Cookin's like religion is—
Some's 'lected and some ain't,
An' rules don't no more mek a cook
Den sermons mek a saint."

There is a grain of truth in this, we must admit, but we are very certain that the guesswork practiced in many kitchens might be improved upon, and the institution of permanent cooking schools such as Boston, Philadelphia, and other large cities have, would bring a priceless blessing to the people.

The dietetic sins of the South are perhaps a little different from those of the North. Sweets are not nearly so much used in the South. In traveling, the writer has often seen on Northern breakfast tables, pickles, preserves, and cake. This is never the case in the South. A little orange marmalade as an adjunct to the universal hominy grits, is sometimes seen on Southern breakfast tables, but even this is rare. Our special shortcomings are perhaps found in the almost ubiquitous waffles, batter cakes, hot rolls, and coffee, and in the use of lard, pepper, and mustard. In the old days one always knew when a fresh box of mustard was in the house by the tears the cold slaw brought to the eyes (and stomach) of those who indulged in it. If the suggestion were made to "Aunt" Viney that she had been too lavish in her use of mustard, the reply invariably was, "Ole marster always said, 'Seasonin's the life,' and so it is"— this with a toss of the head which implied that you were talking of things you did not understand.

However, the tables of the better class of Southern people compare favorably with those of any part of the country, and nowhere else do we see the beaten biscuit which, when properly made, is a delicious and wholesome food. Hoecake, also, is thoroughly hygienic, and is an every-day dish in most Southern families, and when eaten with the accompaniment of good buttermilk is, in the opinion of the writer, "food for the gods."

The South is rapidly becoming one of the most prosperous sections of the

country, and we shall hail with delight the day when a knowledge of the chemistry of foods and its application to the needs of the human body shall not be confined to the favored few, but shall be taught as a part of the curriculum in every public school in the cities, and thence find its way to the dwellers in the coves and isolated regions of our mountains.

THE STORY OF PRIESSNITZ

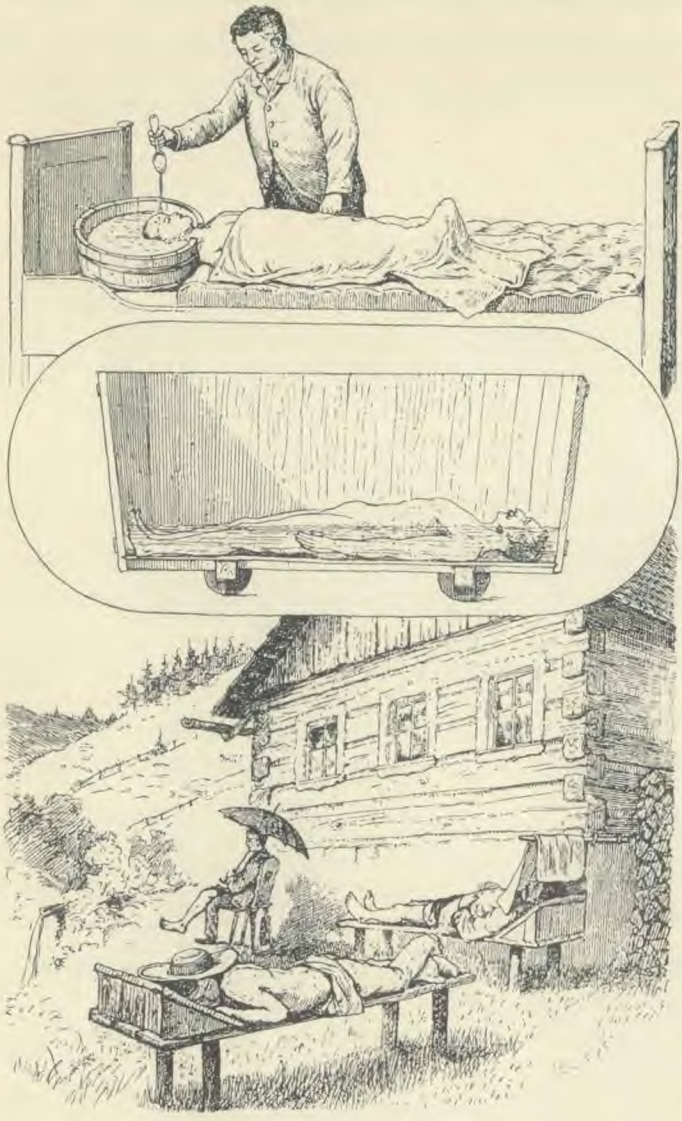
BY J. H. KELLOGG, M. D.

THE principles which underlie the rational use of nature's remedies were well understood by Priessnitz, and nearly all of the methods now in vogue for the treatment of disease were in a primitive way made use of by this father of hydrotherapy, as will be seen by the accompanying illustrations.

The kind of tub used by Priessnitz in his practice seventy-five years ago is still employed at Graefenberg to-day. Stopping once at one of the little hotels in the water-cure famed town, I heard in the early morning a sound like thunder rumbling at a distance. By and by it was close to my door. I found it was an immense bathtub which had been brought down the hall on wooden wheels. The patient does not go into the bathroom, but the bathroom comes to him. It is rolled into the room beside his bed.

Priessnitz understood the benefit of light and air and sunshine as well as of water. The illustration on the following page shows the manner of taking a sun bath in those days. One of the patients is exposing the feet to the sun; another, the back; and another, the legs.

LOCAL APPLICATION OF WATER TO HEAD AND LIMBS.



The water employed at Graefenberg is very cold — 60° in winter time; sometimes even as low as 40°. An attendant rubs the person continuously while in the bath. When a man came to Priessnitz with gout, it was his custom to have him given a cold foot bath and rubbed in this way for five, six, or seven hours continuously. It was found that this would cure even very bad cases of gout. The patients remain in sitz baths, being rubbed every little while by an attendant, anywhere from one hour to three hours. Not infrequently one would see a patient sitting in the bathtub reading a newspaper or book to while away the time, fresh water being occasionally put in the bath to keep it cold. This seems like very heroic treatment. It was; but if it did not kill them, it cured them.

In some cases the patient had a wet sheet thrown about him. The attendant manipulates the sheet so that the patient is cooled by the evaporation of the water.

After having had his wet-sheet rub, the patient, holding the two corners of the sheet in front, takes a walk with the attendant behind him continually shaking the sheet, as shown in the illustration on the opposite page. This was a combination water bath and air bath.

Priessnitz believed in out-of-door exercise. One of his favorite means of exercise was sawing wood. Up in the mountains there was an abundance of trees; to chop these was a part of his patients' occupation. If the patient was unable to go to the wood, the wood was brought to him, or her, for women

were likewise required to exercise with the saw and horse. Clubs and dumbbells were also among the accessories of his curative means.

Another thing every patient was required to do was to walk almost continuously when not occupied with his various baths, early in the morning, and a little before noon, or after noon; and the rest of the time that was not necessarily occupied in eating or sleeping was spent in climbing the hills. In the morning he would take the cold plunge until he was blue and shivering, and then he must walk until he was warm, if it took until noon, before he could have any breakfast. When he came to a cold spring he was requested to take a glass of water. Some patients drank as many as fourteen glasses of water before breakfast; some, as many as thirty or forty in the course of a day.

We have in the life and achievements of Priessnitz an illustration of a wonderful truth; that is, that a truth that is necessary for the world, comes at the right moment, and in the right place, and in the right way. Priessnitz was born in just the right place for the work of hydrotherapy. Graefenberg was exactly fitted for the outworking of the healing art by the use of water. The wooded hills about the town, with the cold, pure water springing out from the rocks, was just the place for hydrotherapy to be born. It was not an accident that Priessnitz was born there, because he was the right man in the right place at the right time. It was a providence, and so it was a success. Although Priessnitz had no education, no training

in the schools, he had a conviction of truth, and that conviction was so vivid, so complete, so magnificent that it took possession of him and enabled him to do a thing which made such an impression on the world that it has been growing, growing, growing ever since.

The End.

THANKSGIVING HYMN

We thank thee, O Father, for all that is bright—
The gleam of the day, and the stars of the night;
The flowers of our youth and the fruits of our prime,
And blessings that march down the pathway of time.

We thank thee, O Father, for all that is drear—
The sob of the tempest, the flow of the tear;
For never in blindness, and never in vain,
Thy mercy permitted a sorrow or pain.

We thank thee, O Father, for song and for feast—
The harvest that glowed and the wealth that increased;
For never a blessing encompassed earth's child
But thou in thy mercy looked downward and smiled.

We thank thee, O Father of all, for the power
Of aiding each other in life's darkest hour;
The generous heart and the beautiful hand,
And the soul-help that sad souls understand.

We thank thee, O Father, for days yet to be—
For hopes that our future will call us to thee—
That all our eternity form, through thy love,
One Thanksgiving day in the mansions above.

— *Will Carleton.*

WINDOWS AND WINDOW CURTAINS

BY JEANETTE FIELDING

THE wave of sanitary reform which for the past forty years has been sweeping over the civilized world has touched and improved nearly every detail of home and housekeeping.

Among these the much-abused and poorly appreciated window, with its multitudinous draperies excluding the healthful sunshine, and causing one to wonder if the arch enemy of the human race had not invented them for the express purpose of excluding us from the

benefits of this wonderful channel of blessing, — even these have yielded somewhat to the influence of the good angel of reform which would fain lead us all into wholesome and happy relations with our generous Mother Nature.

Yet in the matter of window appointments, as well as in many other details of household care and thrift, there is still much room for improvement. In most modern homes the windows are now made so that they can easily be raised and lowered, and thus the admission of sun-purified air is wholly at the option of the housekeeper. Still it is not unusual to find windows so closely fitted that for years the connecting paint around the sash has never been broken.

The old-time theory of keeping a room so dark and unwholesome that even a sensible fly would refuse to live in it, has been blown far back toward the dark ages whence, doubtless, it originated, and to-day the practical homemaker uses his windows, not for ornament, but for ventilation and the admission of the health-giving and germ-killing sunshine.

When curtaining windows, three objects are to be kept in mind: First, a tasteful and attractive appearance from both the exterior and the interior of the home; second, the exclusion of the outside gaze when desirable; third, the shutting out of the strongest sunlight, especially in hot weather. Though really a simple matter, the dressing of a window very rarely accomplishes these ends. The heavy curtain usually supposed to serve as a screen for the home circle, is nearly always hung at the top of the window and kept drawn over from one to two thirds of the glass, thus shutting out the greater portion of the light without excluding the public gaze. Now can anyone explain the use of this opaque curtain, unless it be for the very purpose mentioned above? And why should this stiff, rustling article of furniture be allowed when even the lightest breeze causes it to crackle, rustle, and bump more or less,

to the great disturbance of would-be sleepers at night and the comfort of most persons at all times? A graceful festooning or draping of the sheer lace curtains or of the many dainty, gauzy fabrics now obtainable at so reasonable a price, will appear much better, and will admit both light and air without noise.

For the lower sash a soft draw-curtain attached to rings which slide easily on metal rods, is all the blind necessary. This may be pushed to one side when not needed, and quickly readjusted when occasion demands. This arrangement permits the window to serve its original purpose.

White draw-curtains appear more dainty and look cooler in hot weather

than colored ones; yet for sleeping or dressing rooms, unless very thick or double, they are not serviceable as screens, the artificial light from within silhouetting the figure of the occupant on the curtain. Hence for such apartments colored material is preferable, and if very thin it should be very closely figured. In one dining room double-faced canton flannel draw-curtains have been in use for twelve years, and although they have been exposed to the fierce rays of the summer suns through a south and a west window, they have changed color but very little. This material is very easily cleaned. Other beautiful goods for this purpose can be found and at prices which suit all purses.

Visitors sometimes say to me, "Why, you have your windows curtained upside down!" Still I persist in thinking that it is others who have inverted the proper order with their thick shades at the top, where there is no use for them.

Nature is so anxious to bestow her blessings of light and air and sunshine upon her children, why should we permit ourselves to be defrauded of our birthright by any of the "many inventions" which man has "sought out"?

WHO said November's face was grim?
Who said her voice was harsh and sad?
I heard her sing in woodpaths dim,
I met her on the shore, so glad,
So smiling, I could kiss her feet!
There never was a month so sweet.

October's splendid robes that hid
The beauty of the white-limbed trees,
Have dropped in tatters; yet amid
Those perfect forms the gazer sees
A proud wood-monarch here and there
Garments of wine-dipped crimson wear.

— *Lucy Larcom.*

THE STIMULUS OF REWARDS IN THE TRAINING OF THE CHILD

BY A MOTHER

AN inducement to right conduct largely employed in the training of children, the use of which, without great discrimination, is likely to do incalculable harm, is that of a promised reward. It is often far easier for a parent to offer the child a reward if he will behave well than to give the time and painstaking necessary to secure good behavior by other measures, but the motive appealed to is by no means the best. The child should early learn to fear the sin, the wrongdoing which is the occasion for a punishment, rather than the punishment itself, and to love right because it is right rather than for any external gain it may bring him.

Through the counter inducements of punishments and rewards we may so influence the child's actions as to secure right doing upon occasions, but our purpose should not be so much to induce him to do well at any one time as to establish in him a will to do right at all times. Goodness that is secured by promise of reward or that which is paid for by indulgences and privileges can scarcely be regarded as the genuine article. How often do we hear a mother thoughtlessly say, "Now be a good child while I am gone, and I will bring you something nice." A child is told to do his work well and some special privilege will be granted him; to give

up to some younger member of the family some desirable treasure, and something better shall be given to him. At school and even Sabbath school he is urged to learn his lessons perfectly each day, that he may earn a prize.

It is not wisdom to bribe children to the performance of plain duties. The child who is induced to do some necessary but unpleasant thing through the promise of a stick of candy or a lump of sugar will be less willing to do the same thing next time unaided by the lure of some sweet morsel. Extraneous rewards offered for good conduct do much to stimulate the element of self-love in a child's character. Another result of such management is that the child entertains the idea that the matter is wholly optional with himself; he may comply with the requirements and secure the reward and your favor, or he may fail to fulfil the conditions and forfeit them. The whole transaction is a matter of inclination and not of duty.

It is desirable that right conduct should appear attractive to children, but in order that this shall be, it is not necessary to depend upon an external incentive. There is an old saying that virtue brings its own reward. The doing one's duty because it is duty, the choosing of right for right's sake, brings its own blessing and reward.

Children need to learn to do things which ought to be done, even if they do not want to do them. It is the following of inclination rather than duty that has led many a child to ruin.

Parents sometimes endeavor to cure recognized faults by bribing the child to overcome them. He is rewarded for his generosity or his courteous behavior. Though there may be the outward semblance of reform, the selfishness is only turned in another direction, and in nowise eradicated.

With the frequent recourse to rewards as a means of government their effect upon the child becomes lessened, and his natural strength of character weakened through being accustomed to foreign stimulus. The happiness following the child's own inward consciousness of having done right is a natural reward. In this the child should early learn to find his satisfaction. Froebel says, "Does a simple, natural child, when acting rightly, think of any other reward which he might receive for his action than this consciousness? How we degrade and lower human nature, which we should raise, how we weaken those whom we should strengthen, when we hold up to them an inducement to act virtuously."

There are rewards which follow upon right doing as the natural sequence of the child's deeds. For example, the child who does his work promptly and well, gains time for recreation. The one who bears himself kindly toward his associates gains their good-will and esteem. The boy or the girl who studies faithfully is rewarded by the pleasure felt in the acquisition of new knowledge. Such rewards are safe and wholesome, some akin to that mentioned by the wise man in Prov. 11: 18, "To him that soweth righteousness shall be a sure reward."

There is another powerful incentive to right doing closely allied to these natural rewards which can be safely offered the child to aid him in the struggle toward righteousness. It is the hearty word of appreciation, the loving approval freely bestowed by parents upon him when he is justly deserving. The love of approbation is a strong element in human nature. Where love rules in the home and where there exists that perfect sympathy between parent and child so necessary for the

child's well-being, it forms a more potent spur to right doing than any extraneous reward. Even we children of older growth are by no means indifferent to a word of appreciation, and listen with eagerness for the longed-for "well done." A look of love, an expression of satisfaction, makes us feel amply repaid for the most wearisome task.

How often we wrong the child by withholding the word of loving appreciation of his efforts. If everything he does be taken as a matter of course, his best efforts calling forth no approval, he will soon become discouraged and cease trying to do well. To one who is striving to do well, the knowledge that he is succeeding, though it be ever so little, will act as an incentive to spur him on to greater efforts. Let us not be too chary of our appreciation and praise, but let us use even these judiciously. Too much praise becomes flattery, and engenders vanity. Too frequent praise may serve to make the child feel either that he has already attained to that place where he is much superior to his fellows, or make him satisfied with his present achievements, thus preventing greater efforts. Children ought not to strive to do well solely for the sake of approbation; it is better that this reward should come unexpectedly after they have done well.

In the work of character building, it should be the parents' purpose to strengthen the child's moral fiber by enlisting his will on the side of right doing from the first, teaching him deliberately to choose to do his duty because he knows it is his duty.

Closely connected with the method of seeking to secure goodness by the bestowal of rewards, is the plan pursued by many parents of paying their children for helping about the housework,— of giving them so much per day for bringing in wood or washing dishes. The reason for so doing is undoubtedly to foster the child's desire to earn money, a laudable purpose in itself, but do the ends justify the means? Ought not every person, small and great, to feel that the work to be done for the family comfort is simply a privilege he has because of his membership in that family, and that what he does is just as much for his own benefit as it is for any other member of the family? To pay the child for his share of the family cares, estranges him from the true family life. To pay a child for polishing papa's shoes is paying him for doing a duty to which he ought to be prompted by love for his father and not love for gain.

We hear of sons and daughters grown to manhood and womanhood avariciously striving to get possession of their parents' estate or money, even at the expense, it may be, of the loss of a home to their aged father and mother. Such sad cases are by no means infrequent, and may it not be that the greed for gain which has evidently swallowed up the filial love which ought to reign in their hearts, originated when that father or mother proposed to pay them a stipulated sum for performing tasks which ought to have been done lovingly and willingly and gladly, because they were trying to follow out the apostle's injunction, "Bear ye one another's burdens"?

Doubtless paying a child for his work may not always result so disastrously, but we have seen many children who were thus paid whose only willingness to help turn the family wheel seemed to be based upon the inquiry, "How much will you pay me for it?" and there is certainly danger of creating a wrong tendency in the child's mind, of

which we would better run no risk. "Every appeal to an improper motive has a tendency to deaden moral perceptions; every appeal to noble ones draws us to a higher plane of thought and action."

Rather give the children a weekly or monthly allowance with which they are to provide themselves with certain necessary articles, as pencils, pins, needles, threads, or the lesser articles of their wardrobe, and allow them to have for their own all the money they can save from this allowance by taking care of what they purchase or already possess. Most children will find ways by which they can save a good deal when thus required to provide for themselves, and will also learn many a valuable lesson from this plan, which costs the parent but little, if any, more than to do the purchasing for the children. It teaches the children the value of money as well as the importance of economy. They will realize it is to their advantage to pick up and save the pins and buttons they find upon the floor, that they may not need to spend their money to buy pins and buttons. They will be apt to be more careful to mend their gloves when the first stitch breaks, that they may not be obliged so soon to replace them.

It is indeed desirable that children should have opportunities to earn money for themselves, but there are few parents who are able to pay their children for working who could not arrange to allow them a certain percentage of their time to earn something by doing work unconnected with the necessary labor of the household; for example, little girls who can mend or darn nicely can generally find ample opportunity to secure such work for remuneration outside the home circle. The raising of flowers, vegetables, the baking of home-made bread, etc., for sale, are other ways by which children can earn for themselves, under the supervision of their mother.

Give them opportunities to do for themselves, but expect them to do for the home that which is required without asking or anticipating other reward than that of approval and love.

Very Dissipated.

There are a good many persons who might be said to be dissipated and "all broke up" according to the Japanese use of the word, illustrated in the following anecdote: —

"They are telling in Boston of two or three Japanese students of rank who have been in the habit of dining each Sunday at the residence of one of the prominent citizens of the Hub. On a recent Sunday one was absent, and when the host asked why, one of the guests said solemnly: 'Oh, he cannot come. He very, very dissipated!' The host thought it best not to make any further inquiry at the time, but after the meal he ventured to ask the same young man in private, 'You say Mr. Nim Shi is not well?'

"'No, he not very well — he very dissipated.'

"'He hasn't been drinking?'

"'Oh no, no! he no drunk.'

"'Not gambling?'

"'No, no gamble.'

"'May I ask what he has been doing, then?'

"'Oh, he very dissipated. He eat sponge cake allee time — he all broke up now.'"

HEALTHFUL DRESS

IN our last article we brought our readers to the outside dress, which is to be built upon the gown form illustrated last month. Should we just give a method of underdressing, and not carry it to the outside garments, we would fall far short of a comfortable and hygienic dress. By our method of draping, the outside garments are as comfortable as those worn underneath. It will be noticed that the gown form or waist lining has the same freedom across the chest as the underwaist. While we do not adhere to one particular style in the draping, we do use this lining for every gown, no matter what the draping shall be.

As the winter season is drawing on, when street suits are so much used, we are here showing a pretty street suit, consisting of skirt, waist, and jacket. The skirt and waist are joined together at the waistline by means of buttons on the waist and buttonholes in the top of the skirt, or with small fastenings which consist of short horizontal bars on the waist and large flat hooks on the skirt. The jacket is cut as custom dictates, for we know that styles are ever changing, and we cannot say this or that shall be worn as an outside garment. We can only represent from time to time those features that can be adjusted to the hygienic dressing that will bring comfort as well as style and neatness to the wearer.

We meet in our work many women who have discarded the tailor gown because it is not fitted to a natural form, but is stiffened at the waist, and has padded hips. Yet when this gown is cut to the natural form, it is both artistic and very comfortable.

Our second illustration shows a school dress which is made of suiting.

Just here we will put in a word for our growing girls. Verging into womanhood, they are very apt to have a disposition to copy their seniors. We have a complete dress for misses,—the freedom waist which closes in the back, to which skirts and all undergarments may be adjusted, thus forming union suits coming directly from the shoulders, yet giving the natural beautiful outline of the body. When girls are of this age, mothers generally think them out of proportion, but such is not the case. Let the waist develop naturally with the proper standing, poise, etc. The chest will expand, and the girl will develop into a young lady in the natural, graceful, and beautiful way. But, on the other hand, if the girl is allowed to wear a corset and draw it in tightly, her muscles will soon become relaxed. The Venus de Milo has a waist circumference which is 47.6 per cent of the height of the figure, and in the study of the natural figure of a growing girl, we find these are her proportions. These, too, are the proportions which will be maintained if only the corset and too tightly constricting bands are not permitted. Should she depend upon stays for her support before developing into womanhood, she will become a deformed and irritable young lady, and mother wonders why it is.

Could every mother only know the value of educating herself and her daughters to admire the natural body, which brings health, vigor, and beauty, would she not gladly exchange the old method for the new? Is this subject not of sufficient importance to every mother having the young to train and educate, that she give at least a little of her time to the art of healthful dressing? When we see those about us longing to know how to begin a reform, we feel that we are not too urgent in this matter.

Nature's Methods in the Sick Room

STEAM INHALATION

THE inhalation of air saturated with moisture and warmed by mixture with steam, improperly called steam inhalation, is a very old-fashioned but an extremely valuable remedy for both acute and chronic inflammations of the air passages. The so-called "croup-ket-

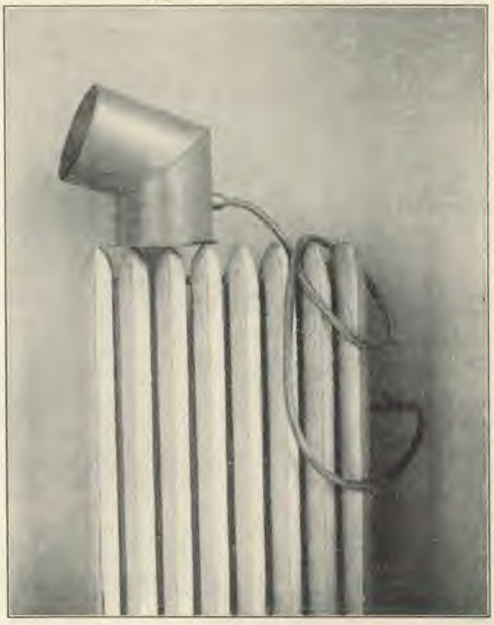
STEAM INHALER.

tle," though a crude affair, has been the means of saving many lives, and alleviating the sufferings of hundreds of little ones. When it is desirable that the patient should breathe the vapor continually, very effective means may be conveniently arranged by aid of the portable oil stoves and gas stoves now in use. The stove should be placed by the bedside of the patient, with a teakettle, or in the absence of anything better, a basin in which water may be continuously and vigorously boiled. By means of a yard of wire mosquito netting, rolled into the proper shape, and covered with oilcloth, rubber cloth, or newspapers, it is possible to construct a cone whereby the vapor may be brought to the face of the patient lying close to the edge of the bed; or for a small sum a tinner may be employed to make a more convenient and durable arrangement for conducting the steam from the boiler to the patient. It is not necessary nor desirable that all air should be excluded except that which comes through the apparatus. It is only important that the patient should breathe the air as moist and at as high a temperature as possible.

In cases of croup and diphtheria, the moist, hot inhalation aids greatly in maintaining the resistance of the tissues, and facilitates the separation of the false membranes. It must be remembered, however, that complete saturation of the air with moisture seriously interferes with the absorption of oxygen by the lungs; so that if marked cyanosis is present, the inhaling apparatus must be removed, or the inhalation of pure oxygen gas may be employed in connection with it.

By far the most important use for steam inhalation is in the treatment of acute or chronic catarrhal affections of the nose and throat. The simplest form of inhaler consists simply of a tin cup with a loosely fitting cover, through which a tube passes, by which the patient is enabled to draw from the interior of the cup, warm saturated air, which finds its way in about the edge of the cover. More than twenty years

ago the writer devised a convenient inhaler, which is illustrated on the opposite page. This construction permits the addition of some medicament to the water when desirable, and provides an extra water compartment outside the inhaling cup, by which the heat of the latter is retained for a long time. In acute inflammations of the pharynx, the postnasal region, the larynx, and even in acute bronchitis, the faithful employment of the steam inhaler aids greatly in securing early recovery. The inhaler should be used many times a day in order to secure the best results. Ten or fifteen minutes in each hour is the usual prescription. In acute conditions, in which the parts are very sensitive and painful, the temperature of the inhalation should be moderate. The effect of the application should be soothing. In chronic conditions, especially when there is thickening of the mucous membrane and hypertrophy of the glandular structures, as in cases of large or elongated uvula, enlarged tonsils, follicular hypertrophy of the tonsils, or adenoids, the temperature of the inhalation should be as high as can be borne. A tolerance for heat is quite readily established by the mucous membrane, so that after a few minutes a higher temperature can be employed than at first. It is not necessary to change the temperature of the water on this account, however. At the beginning of the inhalation the patient makes short, quick drafts through the inhaler; then, as tolerance is established, he draws longer and deeper breaths, especially if the bronchial mucous membrane is involved. It is easily possible to manage the inhalation so as to confine the effect almost wholly to the naso-pharynx.



ARRANGEMENT FOR INHALATION OF STEAM ATTACHED TO STEAM COILS.

INHALING STEAM.

The effect of the hot vapor upon the mucous membrane is precisely that of circumscribed applications of heat to the cutaneous surface. The tissues are excited to increased activity, the movement of blood through congested

parts is encouraged, and the improved circulation aids the reparative processes, assists the absorption of exudates, and promotes the resistance of the tissues against invasion by parasitic microbes, to which the chronicity of catarrhal affections of the naso-pharynx is chiefly due.

Another method of administering steam inhalation, devised by the writer, has been shown by experience to be possessed of so much merit that it is entitled to brief mention here. It consists of the inhalation of steam from a receptacle to which it is conducted by a pipe communicating with the steam-heating system of the building. The receptacle is of such shape that the entire head in front of the ears may be pushed into it, thus exposing the skin of the face to contact with hot steam, at the same time that the heated moist air is drawn in through the nose or the nose and mouth. By this means the entire mucous surfaces and a large part of the cutaneous surface, associated directly and reflexly with the diseased parts, are brought under the influence of the hot application. Thus while the vasomotor stimulating influence of the heat is acting upon the mucous membrane of the nose and throat, this direct action is greatly assisted by the strong hyperemia of the skin produced, and consequent draining of collaterally associated vessels of the mucous membrane. Patients experience from this treatment a degree of immediate relief such as is afforded by no other measure with which the writer is acquainted. Obstructed nostrils are opened up, viscid and inspissated masses of secretion are loosened and discharged, pain and pressure are removed, hoarseness is relieved, and the patient recognizes so thoroughly the benefit received that it is not necessary to urge him to persevere in the employment of the measure until permanent results can be obtained. The treatment should be administered three times a day, fifteen minutes each time. At the conclusion of the treatment, a towel wet in ice-water is applied to the face for half a minute. The latter procedure restores tone to the relaxed cutaneous vessels, while at the same time securing continued activity and a lasting hyperemia, thus prolonging the effect of the treatment.

In cases in which there is great loss of tone of the vessels of the naso-pharynx, exposures to the hot steam may be alternated with ice-water applications, the steam being employed one minute and the ice compress fifteen seconds. The alternations should be repeated ten or twelve times.

A CORRESPONDENT in a recent number of the *Woman's Home Companion* offers some valuable points, which those likely to have the care of cases of contagious diseases will do well to note. She says: —

"When my small boy came down with the diphtheria, I was unprepared for the emergency. Deeming it wrong to ask anyone to wash such articles, the first change of bedclothing and nightdress was burned. Then I searched my chests, and found several old sheets, from which I made temporary nightdresses and pillowcases. I also bought cheesecloth, and made sheets and cases. These were consigned to the flames as soon as soiled. The cost was small compared with the first loss. I used no towels, napkins, or handkerchiefs, substituting soft pieces of old cotton and linen garments, and

cremating them as soon as once used. The danger of contagion was greatly lessened, I believe, by this procedure. A friend who had the soiled linen from her child's sick room laundered at home had the disease spread through her entire family. I limited it to the one case. In convalescence I gave my boy paper soldiers, scrapbooks, cheap crayons, colored pencils, and blocks of inexpensive paper with which to amuse himself, and I put every scrap into the stove when he was released from quarantine. It will pay any mother to devote one box or drawer to an accumulation of old garments, to be used in such an emergency as came to me and may come to any family at any time."

WHO has not witnessed a prompt response from dashing a few drops of cold water on the face of a fainting person? The liver, stomach, heart, lungs, and other important organs can be physiologically aroused to similar increased activity by a brief application of cold to the skin overlying them. The skin is a sort of keyboard upon which we can so play as to secure increased and more efficient activity from the organs within. Short applications of cold act as a sort of fire-alarm to the various tissue-cells of the body. It has been found that cold applications over the stomach increase the quantity of gastric juice. After a short cold bath which is followed by good reaction, twenty-five per cent more white cells are abroad in the general circulation than before, and as they are important agents in the repair and restoration of the tissues, the significance of such an increase must be apparent.

Such applications may consist of a hand bath, cold towel rub, or a short full plunge bath, and should be taken in a warm room and followed by vigorous friction with a coarse towel until a thorough glow and sense of comfort is secured all over the body. Such a bath not only increases the physical activities of the body, but the mental as well. An eminent English clergyman had a bathroom provided back of the pulpit, and made a practice of taking a cold bath just before preaching his remarkable discourses. He said that when he took such a bath he was able to master any audience that was before him.— *David Paulson, M. D.*

AN English physician, on finding his patient, a French marquis, very much in need of a bath, prescribed for him:

"Soap, warm water, a towel, and friction."

"Mon Dieu!" exclaimed the horror-stricken marquis. "That is washing one's self!"

"I must admit," replied the physician, "that the prescription is open to that objection."

A similar incident happened in my own experience. At one time I met an old gentleman up in the North woods who was complaining of not feeling well and who asked, "Doctor, what would you think would be good for me?" It was unnecessary to feel of his pulse to make a diagnosis, for my senses told me what would be good for him, and I accordingly prescribed a bath. "Doctor," said he, "a drop of water has not touched my back for forty years."

"BETTER than grandeur, better than gold,
Than rank or titles, a hundredfold
Is a healthy body, a mind at ease,
And simple pleasures that always please;
A heart that can feel for a neighbor's woe,
And share his joy with a friendly glow,
With sympathies large enough to enfold
All men as brothers, is better than gold."

PUMPKINS AND PIES

WHEN our forefathers came to this country, they found the pumpkin growing in the Indian cornfields and at once made use of it. Although as food it did not supply what its handsome exterior promised, yet in the absence of other fruits and relishes, of which the exigencies of a new country deprived them, they soon found the pumpkin quite palatable, and the taste cultivated through necessity has been handed down from generation to generation, until, prepared in one form or another, the pumpkin has become an established favorite. Ripening late in the autumn, near the time of our annual harvest festival, it has come to be looked upon as a product belonging essentially to the Thanksgiving menu.

Its appearance upon our tables is most frequent in the form of pie, although when properly cooked it makes a very palatable sauce. It contains in its composition a small percentage of sugar, for which reason the fruit is highly esteemed in some countries for its sweetening property.

The firmness, shape, and rich coloring of the fruit well adapts it also for decorative use. Bells, boats, bowls — almost anything round, which fancy may desire, may be fashioned from the fruit to adorn the festal board. Nothing makes a prettier centerpiece for the Thanksgiving dinner than a pumpkin basket resting upon a doily of bright autumn leaves; filled with golden and rosy-cheeked apples, russet pears, and grapes. Tiny seed pumpkins as baskets or vases filled with flowers may be used at individual places.

The best results in the making of pie from this fruit depend particularly upon painstaking in its cooking. Choose a fine, well-ripened fruit, scrub it thoroughly with clean water and a vegetable

brush, then cut into golden cubes, rejecting the center pith and seeds. It is not necessary to remove the skin before cooking if the fruit is well cleaned on the outside. Many cooks think it more easily disposed of by sifting the fruit through a colander when it is cooked.

In stewing the pumpkin but very little water should be employed, only just enough to prevent burning before the juice of the fruit is sufficiently extracted to provide requisite moisture. The safest plan is to use a double boiler for the cooking, but if a single boiler is preferred, it should be one perfectly smooth and whole on the bottom, and the cooking should be done slowly, to prevent the liability of burning.

As the fruit softens there is danger of its sticking to the bottom of the kettle, particularly if there be any rough places, and for this reason it should be stirred very frequently. If the skin was not previously removed, as soon as the fruit is perfectly soft it should be rubbed through a fine seive. It may then be put into a lightly oiled dish and placed in a moderate oven to evaporate; or if preferred, returned to the double boiler, or turned into a crock set within some other dish filled with hot water to cook until dry. There are various ways to accomplish the same result; namely, the evaporation of all the water added for cooking. Pumpkin should never be drained, as thereby much of the sweetness is lost. Several hours' slow cooking will be required to perfect the fruit, and it is always well to plan to prepare it the day before it is needed for pies.

To compound the fruit, when well cooked, with other ingredients so as to produce a toothsome, wholesome article requires considerable culinary skill. Tastes, like opinions, differ with individuals. To provide a choice, both healthful and delectable, we present a symposium of recipes gathered from various excellent authorities: —

Pumpkin Pie (Mrs. Perkins).— Two cups of canned pumpkin, four rounded tablespoonfuls of sifted peanut meal, two rounded tablespoonfuls of flour which has been browned to a dark cream or light brown color, one level tablespoonful of white flour, four or five tablespoonfuls of molasses or three or four of brown sugar, one teaspoonful of salt, one egg, and one and one-half cups of water. Those who are still using milk can substitute one and one-half cupfuls of milk for the nut meal and water and use only a teaspoonful of white flour. When pumpkin that is stewed until dry is used, a smaller quantity will be required. Do not try to substitute peanut butter for the meal.

For the crust use two parts of nut meal to one of pastry flour, add a little salt and just enough ice-water to make the particles hold together. Roll out without kneading.

Pumpkin Pie.— For each pie required, take one and one-half cups of pumpkin cooked until dry, to which add two-thirds cup of sugar, a pinch of salt, a little grated lemon or orange rind, a cup of boiling milk, and one or two beaten eggs.

Pumpkin Pie.— To prepare the pumpkin, cut into halves, remove the seeds, divide into moderately small pieces, and bake in the oven until thoroughly done. Then scrape from the shell, rub through a colander, and proceed as follows: For one and one-third pints of the cooked pumpkin use one quart of hot, rich, sweet milk. Add one-half cup of sugar and the well-beaten yolks of three eggs, beat well together, add the whites of the eggs beaten to a stiff froth, and beat thoroughly. Line the

tins with a stiff cream paste, fill, and bake in a moderate oven till the pies are barely firm in the center, or till the custard is well set.

Pumpkin Pie No. 2.— For each pie desired, take one-half pint of baked pumpkin, a pint of nut cream, one third of a cup of sugar, and two eggs. Mix the sugar and eggs, add the pumpkin, and lastly the nut cream, which should be hot, and beat all together with an eggbeater until very light. Fill the crust, and bake slowly.

Pumpkin Pie without Eggs.— Prepare the pumpkin as previously directed. For two medium-sized pies, heat a pint and a half of milk in a farina kettle, and when scalding, stir into it two scant tablespoonfuls of white flour rubbed smooth in a little cold milk. Cook, stirring often, until it thickens. Add half a cup of sugar, or a little less of syrup, to a pint and a half of the sifted pumpkin, and after beating well together, stir this into the hot milk. Bake in an under crust; or, for three pies, take one quart and a cupful of pumpkin, three fourths of a cup of sugar, two thirds of a cup of best New Orleans molasses, and three pints of hot milk. Beat all together thoroughly. Line deep plates with a cream crust, and bake an hour and a half in a moderate oven.

Pumpkin Pie (J. C. Broady).— Dissolve four tablespoonfuls (4 oz.) of almond butter in a quart of water. To this add one-half teaspoon of salt, one-half cup of sugar, three-fourths cup of meltose, two tablespoonfuls of browned flour, three cups of cooked pumpkin, dry and brown, and three well-beaten eggs. Bake in a crust made of one-half cup of nut meal and the same quantity of flour made into a dough with water or cocoanut milk. Bake in a slow oven until done.

E. E. K.

AH! on Thanksgiving day, when from East and from West,
From North and from South come the pilgrim and guest,
When the gray-haired New Englander sees round his board
The old broken links of affection restored,
When the care-wearied man seeks his mother once more,
And the worn matron smiles where the girl smiled before,
What moistens the lip and what brightens the eye?
What calls back the past, like the famed pumpkin pie?

O fruit loved by boyhood! the old days recalling,
When wood grapes were purpling and brown nuts were falling!
When wild ugly faces we carved in its skin,
Glaring out through the dark with a candle within!
When we laughed round the corn heap, with hearts all in tune,
Our chair a broad pumpkin — our lantern the moon.

— *Whittier.*

FRUIT GELEE

BY LENNA F. COOPER

MUCH has been said about the evil effects of ice cream, which involves the bad combination of sugar and milk, together with the intense cold. Notwithstanding the bad dreams, stomach aches, bad taste in the mouth, and other unpleasant results, many still persist in eating it.

Recently experiments have been made with the hope that something wholesome and yet "as good as ice cream" might be obtained, the following recipes being the result.

The fruit gelées have little food value, the articles used being either the pure elements, which are easily and quickly assimilated, or predigested foods.

Lemon Gelée.— Two cups lemon juice; two cups sugar; two quarts water; one ounce Japanese jelly or agar-agar; one and one-half cups meltose, beaten; one and one-half tablespoonfuls vanilla; whites of three eggs.

Put the agar-agar, which is a seaweed, and may be obtained at a drug store (but do not accept moss), to soak over night or for several hours before using. Remove it from the water in which it has been soaking and add three cups of fresh water. Cook till perfectly smooth and of the consistency of cream, stirring frequently to prevent burning. While this is cooking, put together the lemon juice, water, and sugar. Beat the meltose until quite light in color and add the vanilla. Beat the egg whites until stiff. Fold the beaten whites into the meltose. Strain the agar-agar through cheesecloth and add to the mixture, stirring constantly to prevent solidification. Then add the meltose and egg mixture, and freeze to the consistency of a stiff mush.

Pineapple Gelée.— Three and one-half cups grated or four cups pineapple juice; two cups sugar; one-half cup lemon juice; five cups water; one ounce agar-agar; one and one-half cups beaten meltose; one and one-half tablespoonfuls vanilla; whites of three eggs.

Put together the same as for Lemon Gelée.

Other flavors may be used, such as orange, strawberry, raspberry, grape, peach, or apple. If fresh fruit is used, it should be put through a colander.

The above recipes will each make one gallon. It should be remembered that in eating this, as with all other cold foods, it should be taken so slowly as to permit of its becoming warmed in the mouth before passing into the stomach.

Recipes.

Stewed Potatoes in Cocoanut Sauce.— Bake some medium-sized potatoes. When done, remove the skins and slice evenly. Prepare a sauce by adding to one cupful of cocoanut cream an equal quantity of water, or by dissolving two thirds of a cup of prepared cocoanut butter in one pint of water. Thicken this when boiling with two heaping tablespoonfuls of flour rubbed smooth in a very little water. Season with salt and if liked a half cup of strained tomato. Add the sliced potato and stew for an hour or longer in a double boiler.

The Hundred Year Club

LET ME BUT LIVE

Let me but live my life from year to year
With forward face and unreluctant soul,
Not hastening to nor turning from the grave;
Not mourning for the things that disappear
In the dim past, nor holding back in fear
From what the future 'veals, but with a whole
And happy heart, that pays its toll
To youth and age, and travels on with cheer.

So let the way wind up the hill or down,
Through rough or smooth, the journey will be joy;
Still seeking what I sought when but a boy,
New friendship, high adventure, and a crown,
I shall grow old, but never lose life's zest,
Because the road's last turn will be the best.

—*Henry VanDyke.*

A VENERABLE OLD LADY

On the fourth of last February there died at Woodham, Ontario, at the advanced age of one hundred and fifteen years, Mrs. Mary Ann Mills. One of her countrywomen says of her:—

562 Mrs. Mary Ann Mills.

She was born in the county of Fermanagh, Ireland, near the town of Pettig, on Oct. 18, 1788. Mrs. Mills and her husband immigrated to Canada in 1857, and settled in the virgin forests of Osborne Township, Huron County, on the concessions of the Canada Land Company. Mr. Mills died two years after landing in Canada. Mrs. Mills had, therefore, been a widow for nearly half a century. Of their family of nine children, four sons and five daughters, seven are still living, some in Ireland, one in New Zealand, one in California, and some in Canada. The second son, James, is a bright young man of seventy-six years, who bids fair to pass the century mark himself. Mrs. Mills had descendants to the sixth generation.

Mrs. Mills was born in the reign of King George III, and lived under the rule of five British sovereigns, George III, George IV, William IV, Victoria, and Edward VII. She saw three cen-

turies. Until a year or so before her death she could readily recall and fluently relate stirring events of the early part of the nineteenth century; although her memory was clear and unimpaired, it was difficult to converse with her owing to her growing deafness. When she had the accompanying photograph taken, she drove three miles to town, and ascended a long stairway to the photographer's studio with a brisk, light step without any assistance.

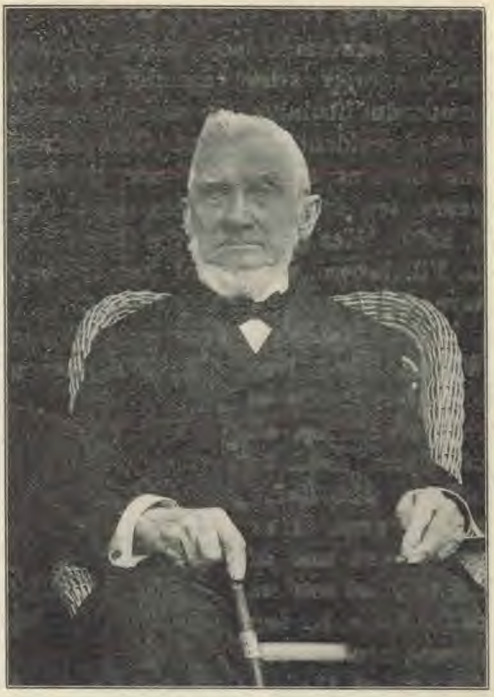
She never used tobacco, snuff, or stimulants in any form, and worked hard all her life.

Wm. H. Seymour.

Prominent among American centenarians is Wm. H. Seymour, of Brockport, N. Y., who celebrated his one hundred and first birthday July 15 of the present year.

He was born in Litchfield, Conn. At sixteen years of age he began his business course, engaging in company with an older brother in the sale of general merchandise at what was then known as Murray Four Corners, a frontier settlement of western New York. In 1823 he removed to Brockport. Some twenty-five years later he established a foundry and soon began the manufacture of reaping machines, being associated with the late Cyrus H. McCormick in the production and sale of his wonderful saver of labor on the farm. He retired from business in 1882, having amassed a fortune. He has since spent considerable time in travel. He toured England at the age of eighty-six, and when over ninety spent weeks in Chicago, visiting the Columbian Exposition nearly every day.

He celebrated his one hundredth birthday by taking a long ride in his automobile, a recreation of which he is said to be especially fond.



MR. WM. H. SEYMOUR.

Mr. Seymour is cousin of Horatio Seymour, the famous governor of New York State.

His family is noted for longevity. He is fifth in descent from Richard Seymour, whose name appears on the records of Connecticut in 1639, as is attested by a monument erected to the first settlers of Hartford in the churchyard of the old Center Congregational church. The aggregate ages of Mr. Seymour and his four paternal ancestors is 420 years.

Mr. Seymour has retained both physical and mental vigor in a marvelous degree. His daughter, writing concerning his habits of life, says: "He has no organic disease. He has been accustomed to take long walks and considerable gentle exercise. The real secret of his health, I think, is good wholesome food taken in moderation with regularity, with moderate exercise and relaxation, recreation, and general absence of worry."

Mrs. Nancy T. (Wing) Frost.

This venerable lady whose picture, taken shortly after reaching her one hundredth birthday, is here presented, was a resident of Piqua, Ohio, where she died at the age of one hundred years, ten months, and six days, Oct. 4, 1902. Her grandson, the Rev. Chas. L. Fillebrown, writing of her history, says: —

"Mrs. Nancy T. Frost was born in Wayne, Me., Nov. 28, 1801, being one of a family of twelve children, all of whom lived to old age, she living the longest. Her father was one of the original settlers of the town, having moved into the wilderness of Maine about 1785, taking up a farm, upon which all his children were born, and lived till they set out for themselves. At the age of twenty-eight years she was married to Isaac Frost, a farmer. To them were born three daughters, the oldest of whom is my mother. My Grandfather Frost died in 1863, but for fifteen years before his death he was unable to do any work on the farm, and from 1848 to 1876 his wife managed the farm herself, with the exception of three years that my parents had charge. In 1876 she sold the farm, and since that time has made her home with my parents, who came to Ohio in 1882, my grandmother being at the time eighty years of age — an old settler.

Mrs. Nancy T. Frost.

"By this brief statement you will see that she passed the greater part of her active life out of doors. She was very fond of vegetable diet, eating little meat. For drink she used no tea and little coffee, but was fond of making a beverage of the crust of the so-called 'Boston brown bread,' composed of cornmeal and rye flour, the crust having first been toasted to a crisp. She used neither tobacco nor alcohol in any form.

"Her mind was clear to within twenty-four hours before she died. Her weight was from two hundred to two hundred and twenty-five pounds during the past twenty-five years."

Others of her friends mention her as "an unusually busy woman, and even when her eyesight had failed so that she was not able to see her work, she did no little needlework that would have done credit to one far younger, and thus kept employed."

"She was sweet-spirited and had a kind word for everybody as long as she could express it. A woman of excellent memory and of wide acquaintance with men and women and books, she was most interesting in conversation and a charming woman to the last."

Only one person in 1,000 dies of old age.

THEN keep the good old festal day;
Sing the old songs the fathers sung;
Around your altars kneel to pray;
Let praises rise from joyful tongue.

God moves in all the rolling year,
In clouds and tempests, sun and rain;
He bids the tender grass appear,
And loads the autumn fields with grain.
— *Tarbox.*

"FEW people seem conscious," says Mr. Herbert Spencer, "that there is such a thing as physical morality. Men's habitual words and acts imply the idea that they are at liberty to treat their bodies as they please. Disorders entailed by disobedience to nature's dictates they regard simply as grievances, not as the effect of conduct more or less flagitious. Though the evil consequences inflicted on their dependents, and on future generations, are often as great as those caused by crime, yet they do not think themselves in any degree criminal. It is true that, in the case of drunkenness, the viciousness of a bodily transgression is recognized, but none appears to infer that, if this bodily transgression is vicious, so, too, is every bodily transgression. The fact is that all breaches of the laws of health are physical sins. When this is generally seen, then, and perhaps not till then, will the physical training of the young receive the attention it deserves."

VIENNA telephone booths are] furnished with napkins bearing the inscription, "Wipe, if you please." The napkins are changed frequently, and this undoubtedly serves to keep the mouthpieces of the transmitters in good condition.

"YES," said the dentist, "to insure painless extraction you 'll have to take gas, and that's fifty cents extra."

"Oh!" said the farmer. "I guess the old way 'll be best; never mind no gas."

"You're a brave man."

"Oh! it ain't me that's got the tooth; it's my wife." — *Philadelphia Ledger.*

WHEN Conan Doyle was practicing medicine in the days previously to his literary success, he had little patience with hypochondriacs — persons who imagine themselves to be ill when really there is nothing the matter with them. Robert Barr tells of a man who visited Doyle one day with an imaginary ailment in his side. He described his ailment in great detail. Putting his hand above his hip, he said: "I get a pain here, Doctor, whenever I touch my head." "Why on earth, then," said the physician, "do you touch your head?"

SAYS Edward Everett Hale: "If this were the last word that I were ever to speak to any audience, I should like to say that, after a long life, in which I have been acquainted with many men of science, many men of letters, many men whose business it was to work their brains, and to work them hard, even harshly, I can testify to you, as they would testify to you, that, if the brain is to do its work, if it is to be kept at work, if it is to produce the marvels of literature, the spirit and body must be kept pure, kept under subjection."

AT a recent meeting of the New York Society of Medical Jurisprudence, Dr. T. K. Tuthill declared that more inebriates were being made in one month by druggists, who sold so-called tonics, than all the liquor saloons produced in a year; and that it was appalling the number of women who were becoming the victims of drink without knowing it through the use of a popular "tonic" wine.— *Medical Times.*

IN Japan the temperature is reckoned by "jackets." If the temperature is three jackets, it is temperate; four jackets, moderately cool; five jackets, cold; six jackets, keen; and when the temperature is ten or fifteen jackets cold, the weather is extremely severe.

YOU have not fulfilled every duty unless you have fulfilled that of being pleasant. — *Charles Buxton.*

AN exchange says: "The art of living is the mastery of self. Fear and anger are the two great forces of evil, depression, ill health, and lack of success. It stands to reason that this should be so when actual scientific experiments have demonstrated that the breath of an angry man breathed into a glass deposits a brown substance which, if injected into a dog, will cause death. Anger is poison, and when a person is angry, his whole system is being poisoned by exactly the same thing that kills that dog. This has also been proved true of fear."

HERE'S a sigh to those who love me
And a smile to those who hate;
And whatever sky's above me,
Here's a heart for every fate.

—*Byron.*

RIVALRY between medicine and surgery will soon be as great as that between the pathies.

First Lady — I'm taking four kinds of medicine. How many are you taking?

Second Lady — Oh, medicines don't count. Operations are all the go now. I had three this summer.

A SURGEON once prescribed a bath for a soldier. On entering the bathroom, after waiting an hour, he found the soldier seated upon the side of the bathtub, the water in the tub having been perceptibly lowered since the soldier entered the room. "My faith," said the soldier, "you may put me in the guardhouse if you want to, but I can't drink another drop."

THE TWO KINDS OF SPORT

"'Tis a beautiful morning," a sportsman said;
"The world looks so happy let's each take a gun,
Go out and kill something for pastime and fun,
And proudest be him who counts the most dead."

They blotted out lives that were happy and good;
Blinded eyes, and broke wings that delighted to soar.
They killed for mere pleasure and crippled and tore
Regardless of aught but the hunger for blood.

"'Tis a beautiful morning," a sportsman cried
Who carried a kodak instead of a gun;
"The world looks so happy, so golden the sun,
I'll slip to the woods where the wild things hide."

The deer that he "shot" never dreamed of his aim,
The bird that he "caught" went on with her song.
Peace followed his footsteps, not slaughter and wrong,
Yet rich were his "trophies," and varied his "game."

— *Calla Harcourt.*

EDITORIAL

TENT LIFE FOR CONSUMPTIVES

THE following abstracts from an article by J. E. Stubbert, M. D., in the *Medical Record*, should receive wide and careful attention. No doubt if these ideas could be carried out, the "white plague" would be robbed of much of its terror: —

In ancient times it was highly improper to expose a tuberculous patient, especially one beyond the first stage, to a breath of fresh air except on the mildest days in summer, while the night air was dreaded and avoided as the plague. Then the more observant and thoughtful men noticed that those who lived more in the open air did not die so quickly as the hothouse patients, and they began to urge an outdoor life and moderate exercise as a prophylactic as well as a cure for those in the early stages of consumption. Those in the more advanced stages were allowed fresh air only when it was at summer temperature, but even this was better than being kept indoors in warm, ill-ventilated rooms the whole year.

There are several plans by which the victim of tuberculosis may continuously breathe pure, fresh air by night as well as by day. Sleeping out in the open air is not harmful to a large majority of tuberculous people.

Millet, of Brockton, Mass., reports the cases of five patients whom he recommended to sleep out of doors at night. They were allowed no roof over their heads except in rainy weather. They wore soft felt hats and cotton nightshirts, sleeping under ordinary bedclothes in beds arranged on the roofs of their houses. Improvement was noted in two weeks. Coughs disappeared, temperatures became normal, respirations were easier, and weight increased rapidly. No attention was paid to dampness and drafts, and heavy dews were regarded as inconvenient simply because of the necessity of drying the bedclothes.

Sleeping in a small room with an open window does not appear to be nearly so beneficial to the patient as when the nights are passed on a veranda or in a tent where there is a free circulation of air on all sides. If a patient were fortunate enough to have a large room with a southern exposure and containing one or two open fireplaces, in addition to large windows on three sides, which might be opened wide at night, he might derive approximately the benefit incident to tent life.

Mc Graham, of South Carolina, prefers the circular to the army tent, and thinks it better to place it on a platform two feet from the ground, and to do without carpets and draperies. Draperies are not necessary, but rugs add greatly to the comfort and convenience of those in ill health, and their use can be made perfectly safe by exposing them to the sunlight for a few hours daily.

Tent life should be under medical supervision; and, in addition to the air, the patient should have food, rest, and comfort; the strenuous life of a healthy camper should form no part of the invalid life. The ideal arrangement would be to have for the summer a wall tent, the sides of which could be elevated day and night, and lowered only to protect the occupant from a driving rain. For the winter in a cold region, the conical tent of Gardiner or the wall tent or tent house of Holmes will answer. Both are constructed with the idea of obtaining the most perfect ventilation in all kinds of weather, it being possible, at the same time, to heat them to 60° or 65° when necessary. Lack of proper facilities for toilet and bathing purposes seems to be the only drawback to this treatment for nearly all cases of pulmonary tuberculosis, no matter how far advanced the disease.

The lives of many persons in the incipient or moderately advanced stages of the disease can be saved by a continuous open-air life the year round. Such a life is more desirable in a climate like that of Arizona, New Mexico, Colorado, or southern California, but there are many who must remain at home and, perhaps, even work while receiving treatment. To those who still retain a fair degree of strength, good appetite and digestion, and who are possessed of courage and a dauntless determination to get well, the winter tent life is not only possible, but desirable.

The erection of tents in connection with hotels in health resorts should be advocated. This would obviate the refusal to receive consumptive guests by the hotel authorities, and also render it possible for the families of patients to reside near them.

A great value of open-air treatment is its cheapness, combined with its demonstrated efficacy. It can be arranged for all classes in nearly all climates with more or less comfort and enjoyment to the patient, according to his financial standing.

The most desirable site for a camp is not in a forest, but on the edge of woodlands, where one can have the full benefit of sunshine and free circulation of air, at the same time being protected from the winds that come with the colder weather, and within reach of shade on hot days.

THE FOOD VALUE OF FRUIT ACID

MANY erroneous notions prevail respecting the food value of acids found in most fruits and in certain vegetables. The mischievous idea that fruit acids give rise to rheumatism or at least aggravate this disease, is widespread, and it is responsible for many disastrous dietetic experiments. Persons suffering from chronic rheumatism or other uric acid disorders greatly aggravate their ailments by discarding fruits and adopting a more or less exclusive flesh diet.

Fruit acids and other organic acids differ from mineral acids in the fact that by the process of digestion and assimilation they lose their acid character. Fruit acids are treated in the system in precisely the same manner as starch or sugar. They oxidize, or burn, and thus lose their acid nature. Recent studies of the subject show that comparing equal weights of fruit acids and sugar or starch, the acids have a nutritive value about one half that of starch or sugar. Fruit acids, however, have the advantage over starch and sugar in the fact that they require no digestion, but are ready for immediate absorption, and on account of the alkaline character of the blood, they are absorbed with great facility, even more rapidly than is pure water. This accounts for the universally refreshing effect which is experienced after taking a little ripe juicy fruit, or after taking a glass of freshly pressed apple juice or diluted fruit juice of any kind.

Fruit acids, like fruit sugars, represent predigested foodstuff which has been cooked and digested by the actinic rays of the sun, and is ready for immediate assimilation.

The following table presents the chemical formulæ of the most commonly known organic acids: —

Formic $C H_2 O_2$
Acetic $C_2 H_2 O_4$
Oxalic $C_2 H_4 O_2$
Lactic $C_3 H_6 O_3$
Succinic $C_4 H_6 O_4$
Malic $C_4 H_6 O_5$
Tartaric $C_4 H_6 O_6$
Citric $C_6 H_8 O_7$

Of the above acids the three last are the only ones which have any value from a nutritive standpoint. Malic acid is the acid of apples and of most fruits. Tar-

taric acid is the acid of grapes. Citric acid is the acid of lemons, sour oranges, and the other members of the citrous family. Citric acid is also found in the cranberry, and to a small extent in some other fruits. It is a curious fact that citric acid is found also in milk. The milk produced by a good cow each twenty-four hours contains as much citric acid as the juice of two or three lemons. Recent experiments have shown that malic, tartaric, and citric acids are wholly consumed in the system. These acids are the result of constructive activity. They are food acids. Formic, acetic, oxalic, and lactic acids result from fermentation. These are not used by the body, but are eliminated as waste substances.

THE HUNGER CURE

FASTING is unquestionably a valuable means of combating disease. Many diseases originate in putrefactive processes taking place in the alimentary canal. The germs which flourish in the stomach and intestines, find in the undigested food, residues upon which they subsist, and by the aid of which they grow. It is evident, then, that in case of autointoxication in which the blood is contaminated by poisons derived from the alimentary canal, the withholding of food for a space of time sufficient to starve out parasitic microbes, must be advantageous.

In the condition commonly known as biliousness, manifested by a very foul tongue, loss of appetite, nausea, perhaps vomiting, intense headache, and so-called sick headache, multitudes of germs flourish in the alimentary canal, and hence fasting is an excellent remedy. In cholera, cholera morbus, and in other acute intestinal disorders which prevail during the warm weather, in winter cholera, also in typhoid fever, fasting for two or three days is a remedy of greater value than almost any other which can be applied in these maladies. Appendicitis must also be mentioned as a condition in which the withholding of food is of primary importance; also in stricture of the bowels. Whenever it is necessary to cleanse the alimentary canal, food may be withheld with advantage. In obesity the weight can be reduced more rapidly by withholding food than by any other means. When no food is eaten, the body naturally loses in weight at the rate of about one eightieth of the total weight each twenty-four hours.

In diabetes the sugar may be made to disappear almost entirely by withholding food. In acute rheumatism, fasting brings relief from pain sooner than almost any other measure. Fasting is indispensable as a means of cure. Persons suffering from uric acid diathesis are almost universally benefited by fasting a few days, or even a week or two, providing their strength will permit of their so doing. When food is withheld for several days, the body is compelled to feed upon itself, and naturally first lays hold of the imperfectly burned products, which might be termed tissue cinders, of which uric acid is the leading representative.

Notwithstanding the great benefit which may be derived from fasting in the conditions above mentioned, it should be stated right here that fasting is seldom necessary, with the exception of cases of gastric ulcer, in which the stomach needs absolute rest, and also in cases of appendicitis and of obstruction of the bowels, and acute gastritis. All the benefit which may be derived from the total abstinence from food may be obtained by confining the dietary to fresh, ripe fruits and fruit juices. Ripe fruits represent foodstuff which is practically predigested. The small amount of undigested albumen present is so inconsiderable that it may be left out of the question. The fruit diet is to be preferred to fasting,

for the reason that it is a much more comfortable regimen. The stomach is filled, the system is supplied with predigested foodstuff which cannot undergo putrefaction, while the fruit acid supplied acts as a disinfectant for the alimentary canal, destroys the germs which induce putrefaction and other destructive agents whereby toxins, or poisons, are produced. Thus the chief desirable effects which may be expected from fasting are obtained with less inconvenience and some additional advantages.

PUBLIC BATHING HOUSES

We are not yet sufficiently civilized to provide proper public facilities for cleanliness. Old World cities are ahead of us. Glasgow, Edinburgh, London, Paris and Lyons, France, and many other European cities are provided with numerous public bath establishments in which for a small sum, ranging from four to ten cents, a good tub bath or a swim in a large tank can easily be secured. The following brief description of the establishment at France, prepared by Hon. J. C. Covert, U. S. Consul, we quote from the *Sanitarian*, hoping that the example may stimulate some philanthropic American to set on foot similar enterprises in various parts of this country:—

"In 1898 a concession was given to a Lille company to build small bathhouses on the public squares of this city, eight of which are now doing business here. They are of porcelain, each 20 ft. long by 14½ ft. wide and 12 ft. high. Inside are six stalls, each of which is divided into two compartments by a waterproof curtain, on one side of which is a dressing room containing a mirror, comb and brush, clothes rack, chair, and spittoon. The other side is provided with an electric bell, soap, washstand, with warm and cold water and all the appointments necessary for a good shower bath, the water falling from above or from the sides, according to the fancy of the bather. The limit of hot water given to each bather is a little over ten gallons; no limit is fixed to the use of cold water. The furniture of the apartment also includes an iron basin for a footbath. In winter these stalls are never allowed to become cold, and in summer they never become very warm. Under the bathhouse is a cellar six or seven feet deep, in which are the coal, the boiler, a continuously heated thermosiphon, and the appliances for heating and driving the water.

"The price of a shower bath in these little concerns is fixed, in the act authorizing them, at three cents, towels and soap included. In no case is the woman in charge permitted to ask more or to accept a gratuity. This latter regulation is never honored by observance when occasion is offered for its transgression. The towels must be eighty centimeters long and fifty centimeters wide (31½ by 19¾ in.). The rules require the disinfection of every towel after once used.

"The company that manages these bathhouses receives from the city of Lyons a subsidy of 20,000 francs ($3,860) per year, and the free use of the ground for thirty years, at the end of which time the establishments are to revert to the municipality; but if, at the end of ten years, the number of persons using the bath in the city is less than two hundred per day, the experiment will be considered a failure, and the city will have the right to cancel the contract, first giving the company six months' notice."

If some one who is in touch with Mr. Carnegie would persuade him of the importance of the public bath, it is quite possible that he might be induced to connect this most useful public health measure with his public library plan, and thus be the means of accomplishing as much good for the bodies of the rising generation as his wonderful philanthropy is doing for the developing American mind.

INJURIOUS EFFECTS OF SALT IN NEPHRITIS

BUNGE several years ago called attention to the injurious effects arising from the use of salt. Numerous preceding writers have advocated the disuse of salt. Hutchinson, the latest authority in dietetics, recognized the fact that chloride of sodium is not necessary as an addition to ordinary foodstuffs, since the food contains the small amount of chloride of sodium which the system actually requires. Another author has recently pointed out the fact that the blood contains two kinds of chloride of sodium — chemical chloride of sodium, and chloride of sodium in organic combinations, from which it seems probable that chloride of sodium added to food is not at all essential to health in any case, but is treated simply as a foreign body, the system being able to utilize as food only the chlorides which exist as organic combinations in foodstuffs.

F. Widal (*Presse Medicale*, Paris) has recently published an extremely interesting account of a case suffering with dropsy from nephritis. The patient was a man of sixty-two. Edema and albuminuria existed to a marked degree. It was found that the edema and the albumen were both increased to a very marked extent by adding salt to the food. The edema disappeared entirely when salt was entirely withheld. It was observed that the regulation of the amount of albumen in the food had no influence upon the edema. The edema disappeared even when the patient was subsisting upon a hearty meat diet, providing chloride of sodium were withheld.

Widal found a milk diet excellent in edema, providing no salt were added to the milk. The addition of salt to the milk produced edema at once. The experiment was repeated nine times, and invariably when salt was withdrawn, the edema disappeared, reappearing as soon as salt was added to the food. Widal insists that salt should not be given to cows which furnish milk to patients suffering from nephritis.

This observation by Widal is one of the highest importance. Coming from so able an authority, the observations cannot be questioned. Observations were made upon several different patients. The results were uniform. It is true that the edema from the use of salt was produced only in persons suffering from Bright's disease. This does not lessen the importance of the observation, for the reason that it is of the greatest value to know that salt must be withheld in cases of this sort. We are also justified in believing that chloride of sodium produces such pernicious effects. In cases in which the kidneys are somewhat crippled, this drug cannot be altogether harmless when used by persons in ordinary health. That salt when freely used, impairs digestion is well known. It has been shown that it lessens the antiseptic or germicidal power of the gastric juice, and in other ways interferes with the digestive process. If chloride of sodium is not excluded from the dietary, its use should be confined to the smallest amount possible, and there can be no doubt that it may be wholly discarded with a great deal of benefit.

HOW TO BECOME FAT

AMERICANS as a class are like Shakespeare's Cassius, who had "a lean and hungry look." Shakespeare goes on to tell us that Cassius was dangerous because he thought too much, and to assure us that he preferred men who "sleep o' nights." This is the reason many people are thin; there is a constant anxiety of mind that causes a waste of energy that should be used in digestion. If a person is consuming to-day all the food digested yesterday, he cannot accumulate

anything. It is just like a locomotive that consumes all the coal taken in at one station while going to the next; it will not accumulate anything. Suppose it does not use all the coal taken in at the different stations; there will be a gradual accumulation, and by and by it will have to be loaded on to the coaches. This is the condition of obese people, and is not one to be desired. Neither is an empty tender a good thing, because you cannot keep up steam without coal. Leanness is always a lack of power to defend the body, especially when it is carried to an extreme degree. Nevertheless, lean people endure better than very fat people. This fact was shown in the late war. Prisoners who were lean stood the hardships and privations better than those who were very hearty and fat, and apparently robust. It is of the highest importance that one should have good food if he is thin, for leanness is a weak state of the body, and it is not wholesome to live in a weak state. A reasonable amount of fat is necessary as a defense, not only against cold, but disease; such a person is better able to resist disease than is a thin person. In addition to good food the person who desires to grow fat must have plenty of sleep. If you cannot sleep from eight to ten hours, stay in bed ten hours. It would be well for lean persons to go to bed in the middle of the day; if that is not enough, then they should once or twice a week take a day off and stay in bed. One must be in earnest about this — make a business of getting fat. It is often a good plan to stay in bed two or three weeks.

Eat food that is easily digested, and eat three or four times a day. There is a great difference in food in regard to its digestibility. Boiled rice digests in from an hour to an hour and a half, whereas roast pork requires nearly five hours for digestion; bread and butter from three and a half to four hours for digestion; whereas toasted wheat flakes and similar foods require only an hour to an hour and a half for digestion; so one can easily digest these simple things when taken in moderate quantity three or four times a day. One should also take foods that are fattening. These are starch, sugar, and fats. A diet of fruits, grains, and nuts is the best diet for a person who wishes to become fat. One must not take an excessive quantity; a diet made up of twelve to fourteen ounces of starch, an ounce and a half of sugar, and three ounces of proteids or fat, would be a splendid diet to become fat on. One who desires to get fleshy must avoid vinegar and all sorts of pickles, as they greatly discourage digestion.

An Ancient Recipe for Unleavened Bread.

Thoreau, the philosopher and naturalist, was led to use unfermented bread by an accident. Living alone in his cottage in the woods, where he conversed with nature and wrote delightful essays, he prepared his own meals. On one occasion he accidentally scalded his yeast, so he was obliged to make bread without it. After this he discarded leaven and learned to appreciate the sweetness and other good qualities of unfermented bread. To this circumstance we are indebted for the following translation of a recipe for making unfermented bread, attributed to Marcus Portius Cato, 200 B. C.:—

"Make kneaded bread thus: Wash your hands and the trough well. Put the meal in the trough; add water gradually; knead it thoroughly. Mold it and bake it under cover in a baking kettle."

ANSWERS TO CORRESPONDENTS

Constipation.— C. A., Colorado, thirty-five years of age, has always been troubled with constipation. The climate of this State seems not to agree with her. Suggest remedy.

Ans.— The adoption of a natural dietary, out-of-door life, the use of granose flakes, acid fruits, malted nuts, malt honey, the daily cold bath, and the wet girdle worn at night, are to be recommended.

Uremic Poisoning.— S. M. B., New York: "A minister of sixty-eight has for two years been troubled with uremic poisoning, and has had convulsions. What home treatment can you recommend,— diet, exercise, bathing, drinking? Can he be cured?"

Ans.— This case is one which requires residence in a sanitarium under careful medical supervision. With such advantages the patient may be cured to such a degree as will enable him to enjoy good health for a number of years.

Fontanelle.— E. R. A., Missouri, asks: "At what age should the fontanelle be closed? Our daughter is eighteen months old, and there is an unclosed place as large as a quarter. The child has never been ill."

Ans.— The fontanelle is generally present only during the first few months of life. In this case the development seems to be more than usual. Suitable means should be adopted of improving the general condition of the child. The child should be kept constantly in the best of air. Short sun baths of two or three minutes' duration several times a day are to be recommended. The sun bath should be followed by rubbing with the hands dipped in cold water. The diet should be especially nourishing. Malted nuts and granose flakes are to be recommended.

Eggs.— W. F., Oregon: "1. If the hen is a scavenger, can eggs be a pure article of diet? 2. If not, why recommend their use in healthful cookery, and especially for the sick?"

Ans.— 1. Eggs may not be the best, although chemical examination has shown no deleterious properties in freshly laid eggs.

2. For the reason that the nitrogenous element furnished by eggs is highly essential. This element is also found in milk, meat, and nuts. Of these four substances, nuts and nut products are preferable when obtainable. Eggs come next in order; milk next; and flesh foods last, and should be altogether avoided except as the last resort in an emergency.

Raw Diet.— J. H. A., Virginia: "1. Is a strictly raw diet of nuts, grains, fruits, and vegetables better than if cooked. *Physical Culture* claims that cooking takes the strength of food. 2. What were the experiments of the Agricultural Department with raw and cooked foods?"

Ans.— 1. No; but fruits and nuts may be eaten raw without detriment. There is no evidence that cooking "takes the strength of food."

2. We have seen no report of experiments of this sort.

Peanuts.— G. M. G., New York: "1. What is the difference in food value and flavor between Virginia and Spanish peanuts? 2. Can you give me a recipe for peanut butter?"

Ans.— 1. The food value is practically the same. The Virginia nuts are somewhat sweeter than the Spanish nuts.

Cook the nuts in an oven, and place in the oven with them a pan of water. Be careful not to roast the nuts brown, as this renders them indigestible.

Catarrh of Stomach and Bowels.— A patient in New York observes mucus in stools. What does this indicate? He uses gluten bread occasionally with the zwieback and granose biscuit. Is this permissible in this case?

Ans.— The indication is that the patient is suffering from catarrh of the bowels. The diet mentioned is wholesome. If the general health is improving, this is a good indication. When the health is restored, the mucus will disappear. Proper treatment should be administered. A hot enema followed by a cold enema every other day will be found beneficial. A natural dietary should be strictly adhered to.

Carbon Crackers — Sand in Constipation. — C. G. R., Wisconsin: "1. Are carbon crack-

ers good for flatulency? 2. Granose and granola do not relieve my constipation."

Ans.— 1. Yes.

2. In your case the constipation is probably due to spasm of the bowels. A warm enema every other day will be found very beneficial. In many cases three to six ounces of raw linseed oil administered by enema at night proves helpful.

Oatmeal — Water — Colds — Buttermilk — Sleep.— A subscriber in Honolulu asks: "1. Is oatmeal mush good for breakfast in this climate? 2. Should water that flows through pipes be boiled for drinking purposes? 3. What is the best preventive against colds? 4. Is buttermilk harmful? 5. Is it wrong to drink it between meals? 6. Which are the best hours for sleep?"

Ans.— 1. No. Oatmeal mush is not good food. It produces indigestion and constipation.

2. Boiling is not necessary if the water is pure.

3. The daily cold bath and abundant exercise in the open air. Avoid excessive clothing, and warm rooms day or night.

4. Buttermilk is more easily digestible than sweet milk.

5. Buttermilk is food and should be taken only at meals.

6. Probably from 10 P. M. to 6 A. M.

Cocoa and Butter — Heart Disease — Charcoal.— G. H. T., California: "1. What are your objections to cocoa and butter as foods? 2. Outline diet in valvular disease of the heart; also general treatment. 3. Does charcoal prevent fermentation of food and aid digestion? 4. Where may I procure Dr. Densmore's 'How Nature Cures'? 5. What works on hygiene and diet can you recommend?"

Ans.— 1. Cocoa contains theobromin. Butter and dairy fats are not digested in the stomach, and interfere with the digestion of other foods.

2. Easily digestible nut foods of all sorts. No special dietary is required.

3. Charcoal is beneficial especially in cases in which fecal matters have a very foul odor.

4. We are not acquainted with the work.

5. Address the publishers of this journal for catalogue.

Lead Poisoning.— B. W. S., Iowa: "What treatment would you advise for lead poisoning, caused either from working in a printing office or by using white lead for piles?"

Ans.—Copious drinking of pure water, especially distilled water, and prolonged warm baths followed by rubbing with cold water.

Menieres Disease.— R. F. asks if there is any relief for constant dizziness caused by Meniéres disease.

Ans.— No; there is no known remedy which affords any considerable relief for this disease.

Catarrh — Fainting. — Mrs. L. G. R., Washington: "1. Please advise treatment for a ten-year-old girl with catarrh and offensive breath. The Vaporizer gives only temporary relief. 2. I have at times a sensation of fainting, although conscious. It comes on with a chill pain in the back and is followed by headache. Am thirty-one. At times there is severe pain around the heart. These spells occur periodically, and my mind is bewildered. I observe a healthful diet, and take a cold bath every other day. What is the cause and cure? 3. Is it injurious for more than one to use the same Vaporizer?"

Ans.— 1. A short cold bath twice daily; out-of-door life; the windows of the sleeping room should be open at all seasons of the year, proper protection being afforded, of course, during the cold months; swimming; sun bathing; cleansing the nostrils daily with an atomizer with the application of an antiseptic solution. The services of a good nose specialist will probably be required. A natural dietary is essential.

2. The symptoms indicate indigestion and neurasthenia. Rest and recuperation are required. An out-of-door life and sun bathing are essential.

3. No; but of course care should be taken to cleanse the instrument thoroughly.

Catarrhal Bronchitis.— F. C., New York: "I am thirty years old; about a year ago, I had pains in chest, side, and shoulders, with chills and terrible cough. It was termed catarrhal bronchitis, but I still have a cough. Expectorate quite a bit, two or three times a day the cough almost exhausting my strength. The color of the sputum varies from a foamy white to a greenish yellow. The mucous membrane of the nose becomes dry; upon coughing there is a watery discharge from the nose. In the region of the fourth rib and near the breast-bone is a pressure, which is some-

what relieved by coughing. What is my trouble? and the remedy?"

Ans. — The disease is probably chronic bronchitis. An out-of-door life; daily cold bathing; the chest pack; a nourishing, natural diet, are the means essential for a cure. A residence for a few months in a properly conducted sanitarium is advisable.

Perspiration. — J. B. T., Illinois: "Please suggest a remedy for excessive perspiration under the arms, the person being obliged to change the clothing three times daily."

Ans. — Build up the general health, and bathe the affected parts alternately with hot and cold water fifteen seconds each, alternating ten to fifteen times.

Oil Rubs. — G. M. R., Tennessee: "1. Why should a bath be followed by an oil rub? 2. Is it always a warm bath that is followed by this rub? 3. Which do you prefer, cocoa butter or almond oil? 4. Do you use the oil of sweet or bitter almonds? 5. What is the quantity for one rub?"

Ans.—1. The oil rubbing is not necessary except in cold weather, when it is required to replace the natural oil secreted by the skin glands, which furnish the necessary protection to the skin.

2. Yes.

3. Both are good if sweet.

4. Neither, though both are good.

5. The smallest amount with which the surface of the body can be covered.

LITERARY NOTES

Current Literature for October presents its usual quota of interesting articles. Among the specialties of this number are: "The Isthmian Canal Problem;" "The Wonders of the Sudan;" and a beautifully illustrated article on "The American Sculptor's Widened Field," by Edward Hale Brush. The selections and excerpts are up to their usual high standard, which makes of this magazine a general favorite with the reading public.

Among the papers of the Adams family there has been for many decades unpublished a vivid narrative by Mrs. John Quincy Adams, describing her journey alone with her six-year-old son (Charles Francis Adams) in the winter of 1815, from St. Petersburg to Paris, along the trail that Napoleon's retreating army made, arriving in France just as Napoleon returned from Elba. This remarkable document appears in the October **Scribner's,** with a brief introduction by her grandson, Brooks Adams.

The favorite household magazine, **Good Housekeeping,** has outdone itself in the enlarged and improved issue for October. Not only is the number of pages increased, but the typography is new and the illustrations and decorations far surpass those of preceding issues. The number opens, for instance, with a tribute to California Girls, by Charles F. Lummis, illustrated with many beautiful portraits printed in a tint; then there are pictures of handsome suburban houses, brought out in the same rich manner. A signature of sixteen pages on tinted paper contains an article, "In the Homes of Japan," by Florence Peltier, accompanied by charming drawings by Mr. Yeto, a Japanese artist; also a richly illustrated article on The Influence of Arts and Crafts, by Madeline Yale Wynne. Other notable features of this issue, which is as practical as it is handsome, are an eloquent tribute to "The Schoolma'am," by Jacob A. Riis; "The Daily Newspaper and the Family," by Charles Emory Smith; "Experiments upon Children," by President G. Stanley Hall, of Clark University; a finely illustrated account of Mrs. Thompson Seton as a hostess; a splendid illustrated article on "Headaches;" a rhymed and illustrated toast "To the Bachelor Girl," by Oliver Herford, etc., etc.

The "Literature" section of the October-December **Forum** is occupied by an examination of recent books dealing with "The Making and Remaking of Nations." The writer, Mr. H. W. Horwill, reviews "The Cambridge Modern History" and other treatises on the origin and growth of this country, and then compares the lessons taught by the modern development of India and Japan.

McClure's October number, in its gorgeous crimson cover, can be seen twice across the street, and it's worth crossing the street to buy. First and foremost, there is Lincoln Steffens's long-looked for Chicago article,

"Chicago: Half Free and Fighting On," a fine, inspiring story of what the writer regards as the most signal and significant achievement in real municipal reform that any of our great cities have to show. Then follow John La Farge's paper on the three great French artists, Corot, Rousseau, and Millet, with its beautiful tint reproductions of many of their famous canvases; Walter Wellman's account of what is without doubt, next to our own Isthmian Canal, the biggest and most important engineering project of the age,—the drainage of the Zuyder Zee, whereby the Dutch are planning to increase the tillable land of their little kingdom by almost one tenth; A. W. Rolker's article on the "Babies of the Zoo," for which, of course, all the baby animals have sat for their portraits. Other articles too numerous to mention are well worth the reading.

One of the more notable artistic features of the October **Housekeeper** is the full-page illustration by F. DeForrest Schook, portraying the end of summer days. "A Romance of the World's Fair" is the story of an interesting incident in the family of the Chinese Commissioner to the St. Louis Exposition. A novelty in women's magazines is the new department, "His Royal Highness," in which an amusing man presents the masculine view of matters domestic and spares not the rod. The subject of Mrs. Hiller's cookery lesson this month is cake baking. Uses for autumn apples and novel Hallowe'en entertainments are topics treated in other articles by Mrs. Hiller in this issue. All the regular departments, such as How to Be Your Own Milliner, Hints for Home Dressmakers, Home Handiwork, Hygiene in the Home, Council for Mothers, are up to their usual high standard.

In the Hygiene of Childhood Department, in the October **Health Culture**, Mrs. Almon Hensley has very practical suggestions in regard to school children and their health; also on the care of infants. Dr. Ellen Goodell Smith writes against the use of mushes, and advocates the eating of foods that need chewing and mastication instead of soft foods.

In addition to the profusely illustrated leading article by Arthur T. Lovell, there is an interesting article in the October **New England Magazine** about the father of the late famous artist, Whistler.

Radium, that wonderful new discovery, whose value is placed at millions of dollars a pound, is described in a way scientifically correct and yet so clearly that all may understand.

Picturesque Detroit is described and pictured, with an account of the history of this interesting city of the West, while for the history of the East we find a finely written description, properly illustrated, of that noted library of Boston, the Boston Athenæum.

NOW READY.—"Four Epochs of Woman's Life." Second edition, revised, and greatly enlarged. By Anna M. Galbraith, M. D., Fellow of the New York Academy of Medicine, etc. 12 mo. volume of 247 pages; cloth, $1.50 net.

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"Manual of Medicine," by Thomas Kirkpatrick Monro, A. M., M. D., Fellow of and Examiner to the Faculty of Physicians and Surgeons, Glasgow; and Physician to Glasgow Royal Infirmary. Octavo volume of 901 pages, illustrated. Price, $5.00, cloth net. This is an imported work and *cannot be sent on sale*, but must be bought outright.

W. B. Saunders & Co., publishers, 925 Walnut St., Philadelphia.

PAMPHLET RECEIVED.—"Nauheim Methods in Chronic Heart Disease, with American Adaptations." By Thomas E. Satterthwaite, M. D., New York.

CORRECTION.

WE wish to correct an error which occurred in last month's issue. The tables on pages 516 and 517 were transposed. The table on page 516 should be on 517, and vice versa.

☞ **See the advertisements of our magazine and**

THE general results of the recent discussion in this paper on the relative value and safety of various antiseptics derive confirmation from a monograph which we have received from the Pasteur Institute of Paris. We described the volatile or essential oils of plants as the safest — and the most pleasant, might have been added — of antiseptics for direct human use; that of eucalyptus holding a very high place. Two professorial members of the Association of Analytical Chemists of the Pasteur Institute have been studying Listerine, which is named after the great English surgeon. Listerine is a mixture of the essential oils of thyme, eucalyptus, baptisia, wintergreen, and mint. It has relatively non-toxic properties peculiar to these oils, but the Parisian savants have brought out the important fact that the mixture of oils is much more potent than any one of them singly. It attacks more than one joint in the bacterial armor. Carbolic acid — used so much mainly because it is the original antiseptic employed by Lister — is 146 times as toxic as Listerine. — *London Daily Chronicle.*

THE DOCTOR'S STORY.

DEACON ROGERS, he came to me:
"Wife is a-goin' to die," said he.
"Doctors great and doctors small
Haven't improved her any at all.
Physic and blister, powders and pills,
And nothing sure but the doctors' bills!
Twenty women, with remedies new,
Bother my wife the whole day through.
Sweet as honey or bitter as gall—
Poor old woman, she takes 'em all.
Sour or sweet, whatever they choose—
Poor old woman, she daren't refuse:
So she pleases whoe'er may call,
An' death is suited best of all.
Physic and blister, powder and pill!
Bound to conquer and sure to kill!"
Mrs. Rogers lay in her bed,
Bandaged and blistered from foot to head;
Blistered and bandaged from head to toe!
Mrs. Rogers was very low.
Bottle and saucer, spoon and cup,
On the table stood bravely up.
Physics of high and low degree:
Calomel, catnip, boneset tea—
Everything a body could bear,
Excepting light and water and air.
I opened the blinds,—the day was bright,—
And God gave Mrs. Rogers some light.
I opened the window,—the day was fair,—
And God gave Mrs. Rogers some air.
Bottle and blisters, powders and pills,
Catnip, boneset, syrups and squills,
Drugs and medicines, high and low,
I threw them as far as I could throw.
"What are you doing!" my patient cried;
"Frightening death," I cooly replied.
"You are crazy!" a visitor said;
I flung a bottle at his head.
Deacon Rogers, he came to me:
"Wife is a-gettin' her health," said he.
"I really think she will worry through;
She scolds me just as she used to do.
All the people have poohed and slurred,—
All the neighbors have had their word:
'T were better to perish, some of 'em say,
Than to be cured in such an irregular way."
"Your wife," said I, "had God's good care;
And his remedies, light and water and air,
All of the doctors, beyond a doubt,
Couldn't have cured Mrs. Rogers without."
The deacon smiled, and bowed his head;
"Then your bill is nothing," he said.
"God's be the glory, as you say!
God bless you, doctor! Good day! good day!"

— *Will M. Carleton.*

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And lay it to the weather;
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While I make up the coffins,
All ready for the cortege.

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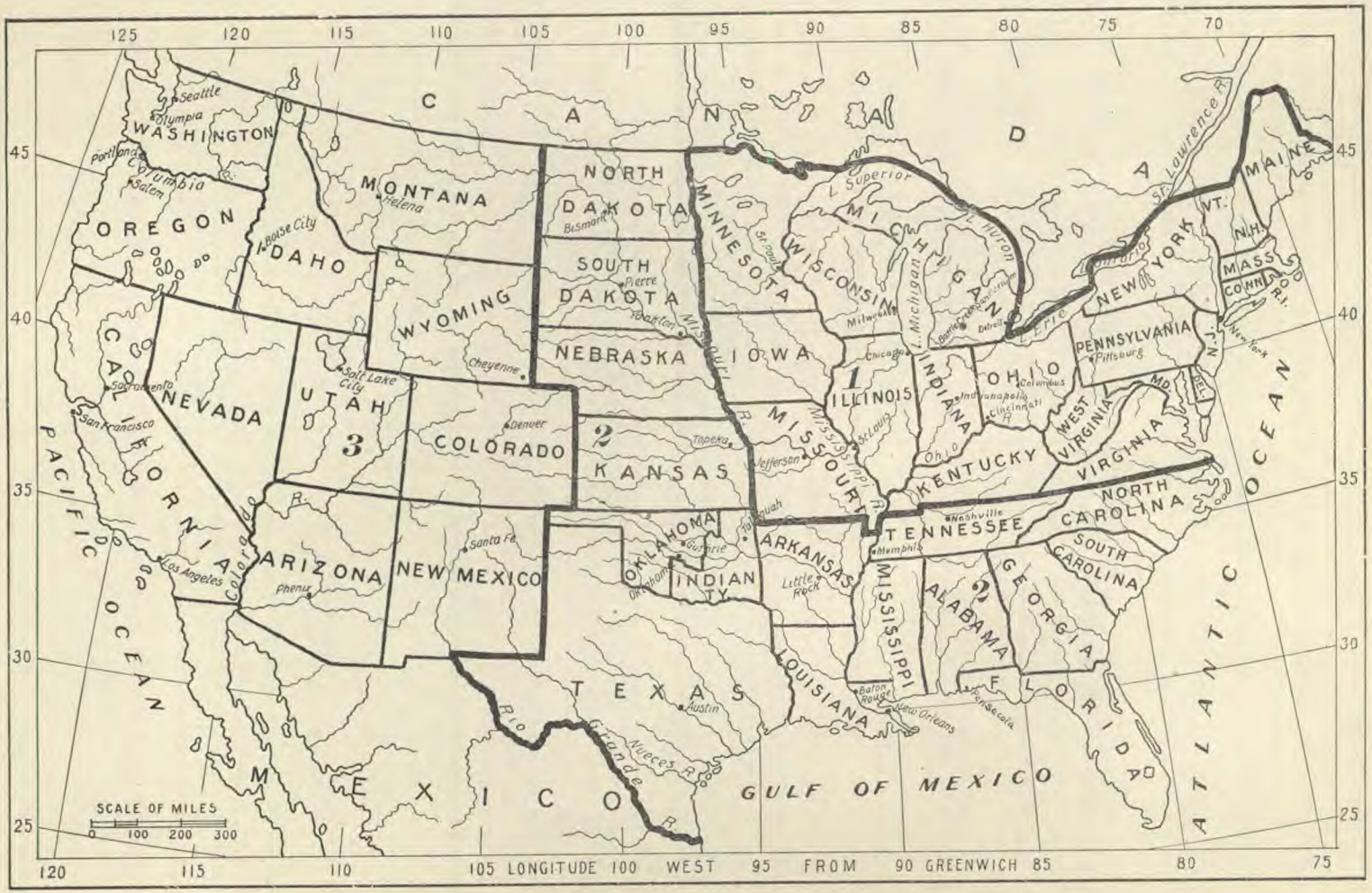

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