

The New Method in Health Culture.

W. E. FOREST, M. D.

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THE
NEW METHOD
IN
HEALTH CULTURE

A GUIDE TO HOME TREATMENT
OF THE SICK

—BY—

W. E. FOREST, B. S., M. D.

Member of N. Y. Academy of Medicine, Medical Society of
County of N. Y., and N. Y. Medical Union.

Fifteenth Edition, Edited, Enlarged and Illustrated

BY

ALBERT TURNER,

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EDITOR'S PREFACE

Never has there been as much interest in the subject of health culture as is manifested at the present time. Men and women are beginning to realize that for success in any field of effort there must be the highest possible degree of health, strength and vigor, physical and mental.

It is also being realized that this comes not from a dependence on physicians and medicine, but by an observance of the rules of health. People are learning that no amount of treatment of any kind will avail for the regaining of health if the conditions which caused its loss remain unchanged. In his work Dr. Forest has ever kept this in mind. In each case the methods given look to the removal of the cause as the means for recovery. The reading of this book and following its teachings has proved of inestimable value to many physicians.

The following letter, just received as we are going to press with this new edition, while not sent

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J. H. M. Dunlap State

for publication, tells so clearly the experience of many that we take the liberty of using it.

BUCKHANNON, W. VA., February 7, 1901.

DEAR SIR:

Through Mrs. H. B. Carr I became interested and began the New Method treatment three months ago. I was then in very poor health with a severe cough, weighing only 103 pounds, now although my strength has increased my work has doubled three-fold, my cough is cured and I weigh 120 pounds of solid flesh, and have better health in every way than ever before. I have therefore become an ardent Health-Culture enthusiast. I follow the exercises given daily and consider your system very superior and helpful. I am,

Very truly yours, Mrs. E. L. W.

This new edition, enlarged and containing many new illustrations, is sent forth with the hope that it may reach many additional thousands who would be through its teachings led from weakness to strength.

ALBERT TURNER.

PREFACE

To the Fifteenth Edition.

This book is a *prescription* for our patients.

If you came into the office and consulted us for any of the conditions set forth in this work, we should advise you much as we have advised in these pages, and charge you accordingly.

As we cannot talk to you face to face, we shall give you suggestions in writing.

Our object is to tell you how much, how very much you can do at home without drugs in the cure of most chronic complaints.

We hold that the physician should be something more than a dispenser of pills, powders and plasters, and that his highest aim should be to teach the patient to cure himself by simple and natural means.

We have tried to set forth these natural, simple, but most powerful means of curing disease, in a clear and common sense manner, so that any one can understand and apply them.

The methods of treatment here given are such as can do no harm. They will not interfere with medical treatment of any kind if the patient is under the physician's care, but on the contrary, will be a decided help to any rational system of practice. If not under medical advice the sufferer will find permanent relief in most cases by following the suggestions here laid down.

Do not suppose, however, that a disease of long standing can be cured in a few days by any method of treatment. One does not get wealth in a day or a week usually, but by continued work and the practice of self-denial. So the cure of a chronic disease will require patience, perseverance and a determination to succeed. There is no royal road back to health when once it is lost. It is easier to take a pill than to change the habit that has caused your infirmity, but the former only palliates the trouble and leaves the system weaker than before, the latter leads steadily though slowly back to health.

Do not suppose, either, that the "New Method" is a single principle, a simple procedure, that shall be a "cure-all" for every infirmity. It is a *system*, the bringing together of a number of principles, and applying them all to the cure of the common diseases.

The words of praise and thankfulness that have come from sufferers who have been restored to health by practicing the principles laid down in this work have been exceedingly pleasant to read.

That the influence of the good work suggested in the "New Method" may go on in ever broadening circles like ripples on still water, is the sincere wish of

THE AUTHOR.

Synopsis and Working Index of the New Method.

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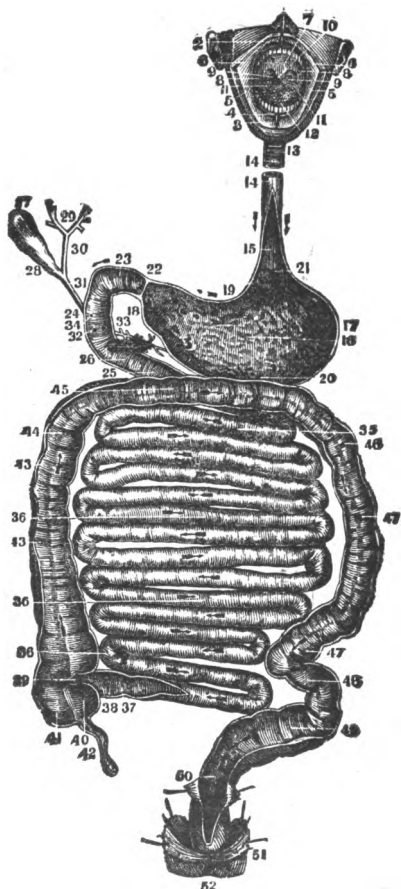
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The Alimentary Canal.

THE NEW METHOD.

THE ALIMENTARY CANAL.

Gentle reader, did you ever consider the importance of the stomach and intestines (in other words the alimentary canal) in the animal economy? If you have a first-class stomach, you probably have not given the subject any thought, for it has been wisely said that "he who has a healthy stomach does not know that he has a stomach at all;" while, when one becomes conscious that he has a stomach it is already a diseased one. Most probably, however, the readers of these pages, for the most part, have become sadly conscious that they possess stomachs, and have realized how important this organ is in its influence on their feelings and dispositions, and their consequent happiness or unhappiness.

Let us consider this matter a little in detail. As you are to be your own physician—the attending physician—while we are merely the consultants, it is important that you should not only know *what* to do, but *why* you do it.

The stomach is a bag, with a capacity of a quart or more, into which we put the food after it has been well

ground by the teeth. (We say "after it has been well ground by the teeth." This, of course, is the license of fiction, for the fact is that in forty-nine cases out of fifty we put the food into the stomach when it has been very badly ground.) The stomach is not only a receptacle, but it is a laboratory as well, where certain classes of foods are changed into forms which can be easily taken up and carried to the blood, and thus nourish the body.

If the stomach does this properly we have nothing to do to it. We are not considering that kind of a digestive organ. But, suppose it does not do its work properly, what then? Why, the food has been placed in a warm, moist receptacle, where everything favors fermentation and putrefaction, and if this food is not promptly and properly digested the stomach soon becomes a "*fermenting yeast-pot*." We presume you never examined the inside of a bilious or a dyspeptic person's stomach shortly after eating a hearty meal. If you have, you found a festering mass that would disgrace a sewer.

It has recently become the fashion among physicians to wash out their patients' stomachs. It has been our lot to do this frequently, and the revelations made by the stomach tube as to the condition of that organ in the dyspeptic are almost past belief. If our mother had ever found her "yeast-pot" in the condition some stomachs—yours, perchance—are, most of the time, she would have ordered it down to the kitchen straightway, to be thoroughly boiled and scoured. These fermenting substances are in the stomach not only shortly after eating, but they remain for hours, in fact until the next meal is taken, and thus new

supplies are brought to the "yeast-pot" and the ferment continued.

The result of this condition is the inducing of a more or less marked catarrh of the stomach with all that implies. The coats of the stomach become in time thinned, soft and shiny, the gastric glands are obstructed and cannot give out their supplies of gastric juice, while the absorbents are prevented from taking up the nutritive substance, if they exist. We are aware that this is not a very cheerful picture of the state of things in your laboratory, but you may as well face the truth, especially as we shall tell you how to remedy the evil.

The contents of the stomach finally pass into a tube, some thirty feet in length, called the small intestine. If the stomach has properly done its work, all will be well in this organ. Here certain juices are poured out, notably the bile, which are intended to prevent fermentation and favor the further digestion and more rapid absorption of the food. But when the stomach has only half done its work, and the food enters the intestine undigested, the glands there soon become overburdened and fermentation and decay go on with increased rapidity. Here the absorbents are at work in earnest, and, as they must absorb something, they take what is given them and carry these poisonous and fermenting matters into the blood. The blood takes them to the brain, the lungs, the liver, the kidneys and the skin.

The result is headache, irritability, fatigue, sallow skin, etc., etc. You can enumerate the symptoms if you are a sufferer. Now you know why the dyspeptic or the bilious person is so hard to get along with. When the blood in his

brain is loaded with the acid matters his poor stomach has given to the absorbents, you may expect his temper to be "all on edge."

People little realize how much one's happiness or unhappiness depends on the proper action of the organs within the abdominal cavity. A person with *real* heart disease or consumption, is usually hopeful and expects to be better next month, or next season, or next year. The dyspeptic or bilious person, on the other hand, has no courage, takes a gloomy view of everything, feels that death may come at any time, and the sooner the better. In the first case, the disease, a fatal one, is *above* the diaphragm, and there is no fear; in the latter case, the disease, never fatal or dangerous even, is *below* the diaphragm, and there is no hope.

It is nearly or quite impossible to feel cheerful and pleasant or see anything worth living for when the stomach is sour or the liver sluggish.

The ancients recognized this, and called depression of spirits "*melancholia*," which means literally "black bile," or bile in the blood.

The answer to the question "Is life worth living?" should be, "that depends on the liver—and stomach."

Fothergill tells of one of his patients, a highly cultured, correct and conscientious lady, who felt sure that she had committed the unpardonable sin, and that there was no hope for her in this world, or the next; but who became a very cheerful Christian as soon as the liver and intestines became active under treatment.

Carlyle's unhappy married life was more due to his dyspepsia than to anything else.

Insanity is not seldom caused by a loaded colon. (See article on Nervousness).

But to return to the alimentary canal. The small intestine terminates in the large intestine or colon. This is only about six feet in length and is almost entirely a simple receptacle for waste matters. The absorbents here are not so active as in the small intestine. Everything moves slowly. By far the larger part of the nutritive material has been extracted from the substances in the intestines before they reach the colon. Thus we see the colon is mainly a reservoir to hold excrementitious matters until they are discharged.

Now, dear reader, if you have patiently followed the foregoing explanation you are ready to appreciate one of the most important principles in what we call the "New Method of Treatment."

The excrementitious matters have reached the colon or large intestine. From this they should be quickly discharged. Are they? By no means. In civilized life, and especially among people of sedentary habits, constipation is the rule. The colon is loaded with waste and poisonous matters from one year's end to the other. There may be a discharge every day, even more than one, and yet the person may be badly constipated. Bear in mind that, accurately speaking, constipation means a loaded colon. Now, if from one end of this packed organ a small portion is discharged daily, the colon still remains full by the addition at the other end, and thus *constipation is present and continuous even though there be a daily discharge*. The discharge is from the lower end of the colon only.

Do you see now what constipation means, and how it may be present and very marked, even though the person himself is entirely unaware of it?

The amount of excrementitious matter that may be collected and retained in the colon is almost incredible. We could give cases in our own practice that, had not many similar cases been reported, would make us eligible for any office in the "Ananias Club." One of our most striking cases came under our observation lately: A young lady, nineteen years of age, came to our office with her mother. The young woman was stylishly dressed and appeared fairly well, though she was thin and had a sallow complexion. The mother stated that her daughter was a "sales-lady," and was habitually constipated. We told her that this was not uncommon and could be quickly cured.

"Ah! But this is no common case. My daughter is *very* constipated. Why, sir, you would hardly believe it, but she has had no discharge in more than *eight weeks*."

(A little mental arithmetic will show that this is about six times a year.)

"But my dear madam, is it usual with her to go so long as this?"

"Yes, sir; just about. She can take no medicine and she will not attend to herself."

There was good reason for the sallow complexion and thin features of the patient. Of course this was an exceptional case and is given merely to illustrate how excrementitious substances may be retained for a long time in the colon.

There are many cases as bad as this, where the sufferer

has no idea that he or she is of the constipated habit at all. Cases, in fact, where there is a daily movement of the bowels.

A recent medical writer says on this subject: "Daily movements of the bowels is no sort of a sign that the colon is not impacted; in fact, the worst cases of costiveness that we ever saw are those in which daily movements of the bowels occur."

What is the danger or the harm if these substances are retained a long time in the colon? If this organ were simply a receptacle—a reservoir and *nothing more*, there could be no harm from a constipated habit. *But the colon is richly endowed with absorbent glands, and these glands are capable of taking up and carrying to the blood the foods or poisons contained in it.* What is the evidence in support of this statement? Patients with cancer in the throat, who are not able to swallow even a drop of water, may be supported for weeks or months by properly prepared and digested food and drink injected into the colon. The colon, in fact, is a secondary stomach. And, further, if a teaspoonful of laudanum be injected into the colon it will manifest its effects in the brain as quickly as if it had been taken into the stomach. Numberless facts like these could be given to show that anything of a solvent nature in this organ can be quickly absorbed and taken into the blood.

This explains the sallow complexion and ill health of the young lady mentioned. She was daily poisoned by the fecal matters *absorbed from the colon* and carried to the skin, the lungs, the brain, and into every organ of the body. That this is the correct explanation appears from the fact

that she completely regained her health, and her skin became clear and rosy when the colon was cleaned out and kept clean.

The symptoms induced by such a condition of the colon are numerous and distressing. The writer quoted above says on this subject:

“Absorption of the feces from the colon leads to a great many different symptoms, among others, anemia with its results; sallow or yellow complexion, with its chlorasmic spots; furred tongue; foul breath, and muddy secretions. Such patients have digestive fermentations to trouble them, resulting in flatulent distention, which, in excessive cases, may cause short and rapid breathing, irregular heart action, disturbed circulation in the brain, with vertigo and headache. An over distended colon may produce dropsy, or pain in the side, with swelling and cramp in the right or left leg.”

Now, then, we have the case in full. We trace the badly digested, fermenting foods from the stomach along the intestines to the colon. All the way the stream has been a foul one, from which poisons are being taken up and carried to the blood. At length the stream discharges into the colon, and here becomes obstructed and slowed, spreading out into a festering, stagnant morass that poisons the whole body. What permanent good is a violent cathartic, which simply stirs up this mass for an hour and then leaves it to accumulate again for days and weeks?

We have dwelt at some length upon the subject of the processes that go on in the stomach and intestines, for the alimentary canal is the foundation of the whole body. We

stand, as it were, upon our stomach. Our physical, our intellectual, and we had almost said our moral well-being depends on a healthy alimentary canal. All the chronic diseases of the body spring from this source. Diseases of the lungs, liver, skin and kidneys arise from it in two ways.

I. The absorption of poisons from the alimentary canal throws an over amount of work on the kidneys, skin, lungs and liver in trying to eliminate these poisons from the system.

II. The diseased or sluggish alimentary canal not only gives the blood poisons and excrementitious matters, but it fails to give the organs the proper nourishment, and thus they become weak.

They are poisoned on the one hand and starved on the other, and they might with justice say to the alimentary canal, "We asked for bread, and you gave us a stone."

Now, dear reader, do you *begin* to see how much depends on the stomach and intestines? "What," you will say, "all the chronic diseases arise from this cause? What about consumption,—is that not due to weak lungs and colds and the consumption bacillus?" There is not space to go into the matter fully, but we will make the statement simply that consumption is not due to colds, but to poor nutrition. If you breathe a million consumption microbes a day they will do you no harm so long as your nutrition is good. You may contract a hundred colds but they will all pass off until one finds you run down and debilitated from deficient nourishment.

We drop the argument here, for fear of fatiguing the reader, although the half has not been told.

TREATMENT BY INTERNAL MECHANICO-HYDROSTATICS.

If the absorption of poisonous matters from the alimentary canal and defective nutrition are the causes of chronic diseases, we must commence the treatment of these diseases by striking at the causes.

The principles of the "*New Method*," or the home treatment without medicines, for all of these are, in brief, diet, exercise, and the washing or *flushing of the alimentary canal*, and "massotherapy." (This latter is a large and mysterious looking word, but I shall make it a very simple one on a later page.) The particular application of the treatment to each class of disease will be given later.

We shall consider these principles in a general way at first.

Flushing the alimentary canal is one of the most important principles of treatment and the first to be put in practice. It should be used in all chronic diseases, because in all such there is poor nutrition and a perverted, sluggish action of the stomach and intestines.

As has been shown, the direct cause of nearly all the chronic diseases is in the alimentary canal, hence by treating this we strike at the fountain head of all the trouble. If, at the same time that we eradicate the cause of disease, we increase the nutrition of the body by the treatment, we are taking the direct steps toward health.

It would be impossible to exaggerate the importance of flushing or washing part, at least, of the alimentary canal in the treatment of disease. In dyspepsia and con-

stipation of course the advantages of this treatment will be apparent at once. In these diseases there is a slimy, catarrhal condition of the mucus membranes or lining coats of the stomach, accompanied by fermentation of the contents. The slime or catarrh prevents the action of the peptic glands and thus allows fermentation, instead of normal digestion, to take place. Now if this slime can be washed out with the poisonous matters present, there will be an opportunity for new and healthy action.

There need be no argument to show that such treatment, if it can be carried out easily and with safety, is radical, direct and common-sense, and is infinitely better than the use of drugs.

This method of treatment is important and should be used in all the chronic diseases. By it the diseases of the nervous system, of the skin, the liver, and kidneys are quickly benefited. The nervous system is soothed by it; the kidneys are stimulated to increased action; the skin becomes clear, and strength and flesh are rapidly increased if emaciation be present. In short, there is no measure so important in increasing the nutrition of every organ of the diseased body as the flushing of the alimentary canal in those parts of it within reach. This measure lies at the foundation of the "*New Method*" of treatment, and should be resorted to by every one and continued until health is restored.

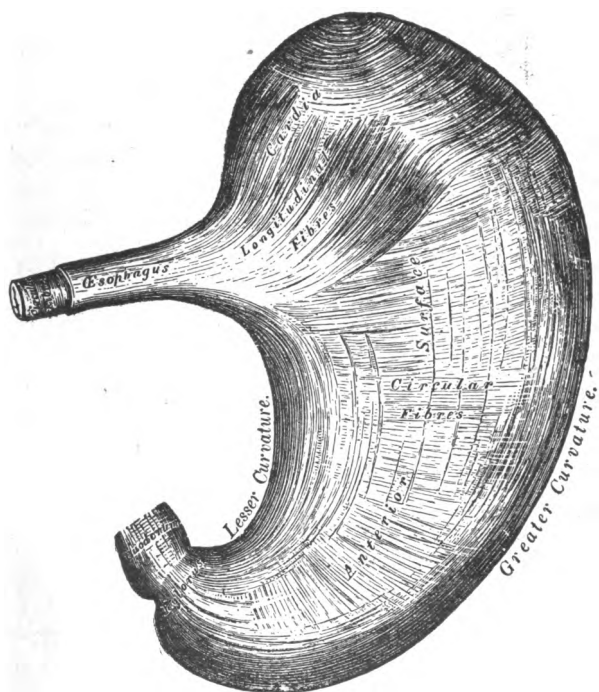
We hear our readers exclaim, "Do you mean to say that one should wash or bathe the inside of the body as well as the outside?" We mean just that, and we shall show you presently how it can be accomplished with ease

and safety. The benefits of the flushings are not due to the cleansing of the canal alone. Indeed we doubt whether this is its principal benefit. The introduction of hot water (the remedy used) has a direct and powerful effect on the nerves of the stomach, liver and kidneys, and all the organs, stimulating them to vigorous and healthy action. The evidence of this is, the increased appetite which follows the flushing; the increased flow of bile from the liver, where but little, if any, flowed before; the decided increase in the amount of urine eliminated by the kidneys; and the general increase in strength. Now the kidneys, liver and other organs, which are not directly touched by the hot water, must be influenced by the stimulation of their nerves. It is only in this way that the beneficial effects on jaundice of large draughts of hot water, as recommended by the celebrated Dr. Prout, can be accounted for; and also the benefit of large injections of water into the colon for the same trouble, as spoken of by several well known medical writers. Without taking further time for argument, we must ask the reader to accept what common sense teaches as reasonable and what experience has abundantly proven, namely, that the flushing of the alimentary canal is a measure of immense importance in the treatment of chronic diseases and in warding off and lessening the severity of attacks of many forms of acute diseases, Colds, *La Grippe*, Pneumonia and all forms of fevers. Frequently when the first symptoms appear a prompt resort to a thorough flushing of the Colon will check all progress of the disease.

TREATMENT OF THE STOMACH. HOW SHALL IT BE DONE.

In the first place the stomach should be so treated as to require no treatment. There should be no trouble in the stomach and there would be none if only proper food is taken at proper intervals and in a proper manner. The stomach is a receptacle for that which has been properly prepared for food by selection, preservation, cooking, etc.; this should on taking be properly masticated and mixed with the secretions of the mouth, saliva, as the first preparation for digestion. The stomach is composed of muscular tissues running lengthwise and crosswise, the food on being taken into this pouch is macerated and mixed with the secretions from the walls of the stomach and becomes a mass called chyme when it passes through the duodenum into the small intestines where further digestion and absorption take place by which the system is nourished.

If improper foods and purgatives are taken or other conditions violated there is trouble in the stomach. If too much food is taken the stomach is distended, the muscular activity can not take place, fermentation sets in, the acids which are generated by decomposition become irritants and the stomach becomes diseased and can not do its work, If the second meal is taken before the first has left the stomach, digestion of the first is suspended, and before the new supply is reduced to the same condition as the first fermentation again sets in and these partly digested products are retained instead of being passed on. This condition sometimes requires help, in the first place there should



Stomach Showing Outer Muscular Coat.

be fasting, giving nature a chance to make matters right, and as an assistance the stomach should be cleansed. In the opinion of physicians emergencies sometimes call for the use of a stomach pump which is resorted to, but this is only for extreme cases which are likely to be in the hands of doctors, ordinarily we recommend the drinking copiously of pure water, cool but not too cold, and thoroughly massage the stomach either with the hands or with the roller referred to in the following pages, which is better; this will tend to wash the walls of the stomach, and by finishing the treatment by movements from left side to right over the stomach, the water and the catarrhal mucous, the undigested food, etc., which may have accumulated, is carried into the intestines where it passes into the colon and is discharged. This may be done an hour before each meal and good results will follow.

In carrying out the flushing of the alimentary canal we have to skip the middle part, as the small intestines, lying between the stomach and the colon, cannot be directly reached. But, indeed, there is no necessity of reaching this directly if only the stomach and colon are kept in order. The small intestine receives at its upper end the bile from the liver. Now the bile is a decided anti-ferment, and if the stomach and liver can be made to do their work properly, the small intestine will protect itself against undue fermentation and poisonous absorption. But when we come to the larger intestine or colon, we have a portion of the alimentary canal again within reach, and a part that *more than any other* needs to be thoroughly cleansed.

FLUSHING THE COLON.

We have already said something on a previous page as to the size and functions of the colon and the danger of absorption into the system from this reservoir. The flushing of this organ has most important influences on the health. When you consider the course of the colon in the body for an instant you will see what an influence "flushing" may have on all the abdominal organs, stomach, liver, spleen, kidneys, etc.

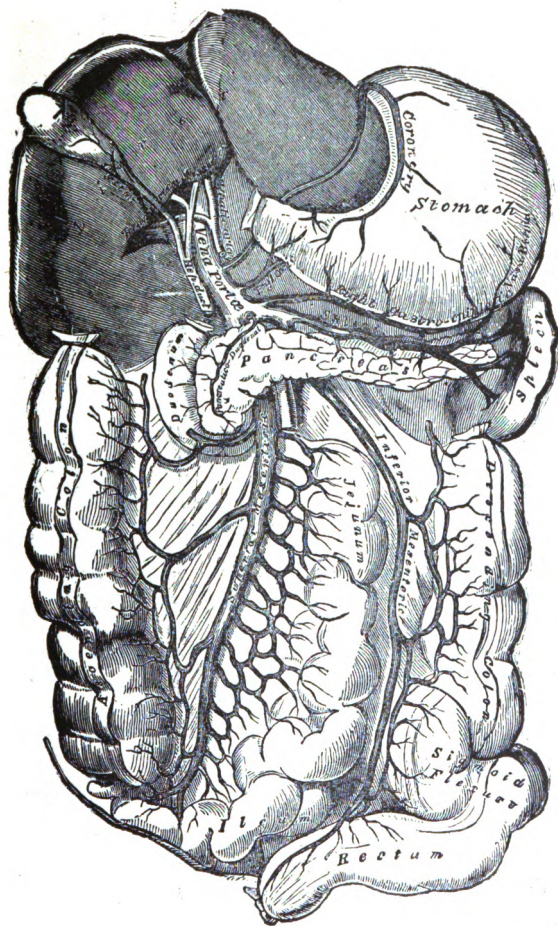
The colon starting from its outlet passes up in front of the left kidney to the spleen, then across the body just beneath and behind the stomach, pancreas and liver, and then down in front of the right kidney. In females it is just behind and in contact with the womb and ovaries.

Thus it is in immediate relations with all the important internal organs below the diaphragm.

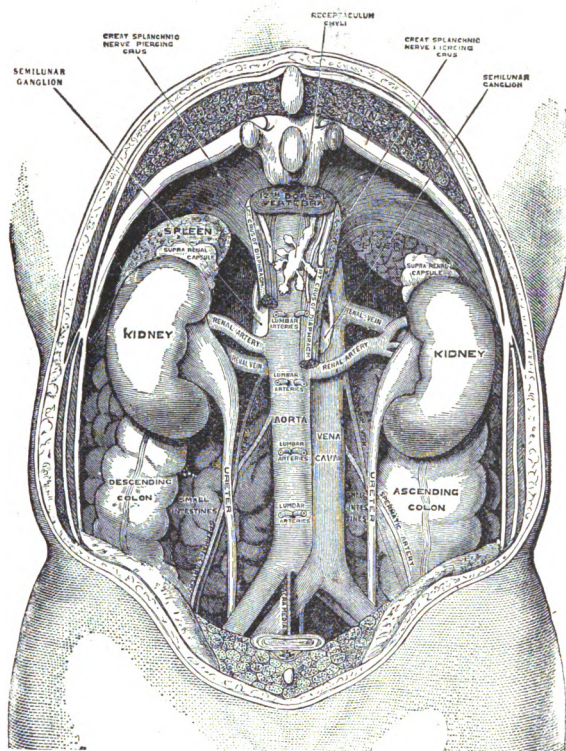
More important than the contact with the organs is its relation to the nerve centers in the abdomen, the centers that preside over nutrition, the great coeliac plexus as it is called.

From the above you may see how, if the colon be obstructed, all the important glands may be affected. You can also see how, when we introduce a large quantity of hot water into the colon, we not only cleanse that, but we *stimulate by the heat the function of all the organs and nerve centers in contact with the colon.*

It is because of the influence on nutrition that "flushing the colon" is by far the most important curative procedure that can be resorted to in chronic diseases of all



THE GREAT PORTAL CIRCULATION.



SECTION OF BACK SHOWING ORGANS OF RENAL
CIRCULATION.

kinds, and is a measure that should be used in all, at first, whether constipation be present or not.

When you take drugs to stimulate nutrition and the internal organs, call these drugs what you will, tonics, stimulants, cathartics, regulators, can you *hope* to do one-half as much by these substances, foreign as they are to the system, as common sense shows can be done safely and directly by "flushing the colon" and stomach with hot water.

HOW TO FLUSH THE COLON.

Remember that "flushing the colon" is a very different procedure from "taking an injection," as this is ordinarily practised. In taking an injection a cup or two of water is thrown into the lower part of the colon up some six or eight inches and almost immediately expelled. If there are any offending matters at the outlet they may be discharged.

The object in "flushing the colon," on the other hand, is to carry the heated liquid far up the colon, to have it retained as long as possible, and then to cause a thorough cleansing of the whole canal.

The difference in principle between the two procedures may be best explained by a homely illustration.

When your coal stove has been run continuously for a long time the grate becomes clogged with cinders and ashes. As a consequence the fire burns dully. You poke and rake at the cinders and get a few out, but their place is taken by others from above and the fire still smoulders. In desperation you at length "dump the grate" and com-

mence the fire anew. Then you have a roaring, cheerful blaze that does one good to see.

Now, "flushing the colon," is similar to "dumping the grate" in your furnace. It is a radical treatment, and all the functions of the body take a new start.

To flush the colon properly a fountain syringe should be used holding four quarts. Much has been accomplished by the ordinary rectal tube, but in many cases the result has not been fully satisfactory, for the reason that the water was discharged into the rectum; this is overcome by using Dr. Wright's Anatomical Syringe which has long flexible tubes by which the water is carried into the sigmoid flexure, and when necessary it can be carried directly to the transverse colon where frequently the trouble is found.

There are various positions that may be taken in flushing the colon; the simplest is to lie on the right side with the right arm behind and so turning the body some what. If this causes pain or the water is not retained, lie on the back with the lips elevated, or take the knee-chest position, resting the body on the knees and the chest.

Usually after a little water has been introduced into the colon a strong desire to pass it out will be experienced.

The flow into the colon should be checked and the feeling resisted. In a minute or two it will have passed over. Then the injection should be continued. If, however, the desire be very strong and continuous it is well to suspend the flushing and discharge the liquid with the fecal matters that may be present at the outlet. Then after a minute or two commence the flushing again.

After all has been introduced the patient still lies

quietly if he can, and causes gentle contractions or drawing up and relaxing of the muscles of the stomach. This movement forces the water along the colon and loosens up its contents. The abdomen may also be gently rubbed and kneaded with the hands.

After a few minutes the patient will rise and discharge the water a little at a time.

Of course the first or even the second time, one tries to "flush the colon" there may be some difficulty in carrying it out as laid down here. Some patients cannot use more than a quart of hot water at first, others not even so much; but the large majority can from the first use from two to two and a half quarts at a single injection. Even those who do not succeed at first will become experts.

The treatment should be resorted to at night just before retiring. One is apt to feel fatigue and exhaustion immediately after the treatment. This will pass off in a short time and the subject will wake up refreshed and hungry in the morning. If the patient is quite feeble it would be well for him or her to take a glass of wine before receiving the treatment.

If there is marked constipation, with hardened and packed feces in the colon, a cup of molasses or syrup and two tablespoonfuls of glycerine should be added to the water. This will have a striking effect in softening the hardened excrements and will cause a more thorough cleansing than the most powerful cathartic.

QUESTIONS WE ARE ASKED.

1st. "Is flushing the colon debilitating?"

Not at all; we have had patients carry it out for months and even years with a steady gain in strength and flesh all the time. The most delicate may use it without fear and with a decided advantage.

As has been said, delicate persons should commence treatment with a small injection, say a pint of hot water. Increase gradually a pint each time to five or even six pints.

2nd. "Isn't this treatment contrary to nature, and does it not cause the intestines to become weakened and dependent on these unnatural methods?"

In answering the first part of this question let us ask another. Is sickness "natural?" Did Providence intend that you should be constipated and bilious or dyspeptic? Is it "natural" to take castor oil or calomel, or drugs of any kind to relieve the condition you have brought yourself to. You have broken nature's laws and are a sufferer. Something must be done to restore the equilibrium. What shall it be? Nature unaided has failed.

We come to her assistance then with a measure that is the most direct and helpful, and yet simple and harmless.

Flushing is not any more "contrary to nature" than is sickness, and it is a most common sense measure to restore "natural" conditions of the body.

In answer to the second part of the question, we can say, after long experience, that "flushing the colon" does *not* cause a weakening of the intestines. When this pro-

cedure is no longer necessary, owing to restored health, the intestines have also been restored and improved in tone and will carry on their functions unaided. If the flushings be accompanied with daily massotherapy, as laid down in a later page, the intestines will grow stronger from day to day.

3d. "How often should 'flushing the colon' be resorted to?"

At first every night; then after the first week every other night; then once or twice a week until health is restored.

4th. "After flushing the colon, I have no natural movement the next day, sometimes not for two days. Does not that prove that the treatment is constipating?"

Not at all. If you have flushed the colon thoroughly, and there is no movement next day, it simply proves that there is nothing ready to be discharged as yet. It will be 24, perhaps 36 hours before more feces will reach the point where they should be discharged.

We shall say no more about this measure except to give a few cases.

Later we shall speak of its use in certain diseases.

CASES.

Jennie C., 19 years of age was brought to us complaining of pains in the left side, half way between the ribs and groin. This pain was present much of the time. Every now and then it would become so severe as to confine her to bed for several days.

The young lady was a student, preparing for college, and very ambitious. She had, however, been compelled to leave school twice during the last two years on account of

this pain and general debility, and thus had been kept back in her studies.

Within the last three years she had taken courses of treatment under five different physicians, including one clairvoyant, and all to no permanent good. While visiting relations in St. Louis she had been taken to a prominent specialist in diseases of women, who had promptly decided that the trouble was due to the ovary, and had treated her locally, much to her shame and disgust, and without any benefit.

She was *slightly* constipated, the mother said.

In general appearance the patient was pale, rather sallow, in fact what would be called a very delicate looking girl. She had almost no appetite. Her general bill of fare was as follows :

Breakfast—Cup of coffee and half a hot roll.

Lunch—Tea and bread.

Dinner—Bread and tea and cake, with occasionally a little meat, eaten under protest.

On this diet she was studying about ten hours a day. It would have been interesting to have recorded the names of the many diseases for which she had been treated. The mother was sure it was "malaria" that ailed her daughter, and from the obstinacy of the trouble it was evidently the most malarious kind of malaria.

We examined the abdomen externally and found impaction of feces within the colon. Prescribed—a flushing of the colon each night for one week with hot water, molasses and glycerine.

Before rising in the morning she was to drink a cup of

For her breakfast, fruit and a little zwiebach or toasted bread. A glass of water an hour before dinner and supper and a regulated diet at these meals.

"But what medicine is she to take?" was the mother's anxious inquiry.

"None this week. Wait a few days."

At the end of the week the mother reported that the flushings were still bringing away dark, or black, hard feces, nothing natural. Pain much better. Rather enjoyed the steak for breakfast now.

This line of treatment was continued for a month, the flushings being reduced to three times per week. During the last week she had only felt the pain once, and then very slightly. A striking change in her general appearance, better color, fleshier and more animated. We need hardly say that in less than three months the case was entirely cured. She loses no more time from her studies, and her mother has almost ceased to look upon her as delicate.

The success in this case was due to the firmness with which the mother carried out our suggestions as to her whole manner of living, but especially to her faithful treatment of the colon by flushings.

To show that others get as good results from "colon flushings" as we do, we give the following cases of treatment, reported in substance before The Chicago Medical Society:

CASE 1.—Miss O., age 27, has almost continuous headache; pain over the angle of the transverse and descending colon, nausea, functional eye disturbances coming on sud-

denly and often in the day, frequent dizzy blind spells, vague muscular pain in the arms, face yellow, is green around the mouth and nose, a greenish yellow all over the head and neck. On the 21st of May, 1886, first treatment by "colon flushing." The appetite at once appeared; her spirits immediately improved. Daily treatment until the 7th day of July. Face almost entirely clear; color coming to her cheeks; lips red, digestion perfect; and her general health totally changed.

CASE 2.—Mrs. G., aged 32, has very yellow cheeks, both covered with chloasmic spots, which extended down to the neck; is costive. Conjoined palpitation indicates both ascending and descending colon filled. Is losing strength, is anæmic, emaciating. Her husband's poverty is causing the most distressing anticipations, and her mental suffering almost drives her insane. A daily treatment was ordered on the 10th of August, 1887, and continued until November 2d. After that they were taken every other day. On the 25th of February, 1888, she reported that the treatment had completely revolutionized her health; they made her feel light and strong; they relieved the pressure in the abdomen; their presence caused eructations always. Sleeps better after taking one. In fact, if she find that insomnia be upon her, she takes a flushing and is sure to sleep soundly thereafter. Eating when fatigued will be followed by great tympanites, which a flushing is sure to relieve. Formerly had great acidity of the stomach; now she never has it. Formerly she used to have a headache, with vomiting and prostration, lasting thirty-six hours every two or three weeks; since August she has not had one. Urinates

very freely after using the flushing, which lightens her very much.

CASE 3.—Mrs. R., age 29, has had chronic digestive disturbances; a poor breakfaster for years; has gastric dyspepsia, characterised by pain; load, weight, gas, acid and bitter pyrosis; could eat but few things, but especially distressing her; constipated and costive since girlhood; for years had a sense of pressure in the rectum; at times, of late, has had it all the time. Treatment first given the 17th of May, 1887, twice per week, at bedtime. These adverse symptoms were relieved when the water passed. The discharges from her bowels were simply enormous. They were continued until she passed yellow feces. On the 28th of June she was eating everything. She has become a good breakfaster. On the first of August she was doing all her own housework, the first time in three years.

CASE 4.—Miss C., age 30, always constipated. Very muddy complexion, chloasmic spots all over her face, capricious appetite, seeks relief for a progressively increasing nervousness, which has been upon her for the past three years, and is very much worse in the past three months and threatens to lead her to a suicide's grave. She experiences sudden misgivings; she has nervous prostration, colon filled to an enormous extent. Treatment was used and continued daily for a period of one month, when she reported that she was better in every way; does not give out any more; is stronger in all things; her complexion is clearing out; the chloasmic spots are unchanged; the appetite decidedly vigorous. In this case the fæcal reliefs were enormous, and

the improvement so rapid that there was no question of there being cause and effect.

CASE 5.—Miss O., has been having chills daily, has a constant bad taste in the mouth, has vertigo, scalding urine, has eczema extensively on the right hand and fingers. Examination reveals a loaded colon, although her bowels move nearly every day. In a week, under the new treatment, the chills ceased entirely, the vertigo had disappeared, the urine was improving. Continued for a period of six weeks daily. The surprising thing is that at the end of six weeks the hand was entirely well. The question comes up, was not the eczematous condition of the hand a thing permitted to supervene from fecal absorption?

NOTE.—In all cases after the thorough flushing of the colon with warm or hot water and the discharge of the contents of the colon, the treatment should end with the injection into the colon of a pint of cold water. This water should be as cold as can be borne without causing pain. Usually the water as drawn from the well or hydrant will be of the proper temperature. In summer a small piece of ice may be put in the water. This is the tonic treatment that ends the internal bath, and answers the same purpose as the cold shower bath to the body after the sojourn in the hot room of the Turiksh bath. I would advise this internal cold douche invariably as an ending to the treatment by flushing the colon.

FROM WEAKNESS TO STRENGTH.

In the following chapter we bring to our readers, our patients, if we may be allowed the use of so near and sacred a name, important supplementary means of cure. We have told them how to clean the reservoirs of the body—the stomach and intestines—of poisonous material. We now propose to show them how to act on the hundreds upon hundreds of miles of minute blood vessels, sweat tubes, lymph channels, and absorbents, along which flow subtle life-giving fluids; upon the cellular structures that make up all the soft tissues of the body, muscle, adipose and connective tissue, on whose constant and rapid changes, as we have said, physical and mental health depends.

Thus it will be seen that the principle of treatment we shall now give is the complement to what has been given, and together they make up a rational system of cure.

The measures we shall offer are so simple that any one may understand them; so easy of application that they may be carried out in every home with little or no expense; and so potent that the most powerful drugs are weak in comparison.

In how many a house is there to-day a delicate and feeble invalid, who for months, perhaps years, makes no permanent gain. Doctors of all kinds come and go, and try this and that, and there is no restoration to health. Friends and relatives, husband or father or mother, brothers and sisters, those who would almost lay down a part of their own lives to bring the glow of health to the sufferer's cheek, stand helplessly by and accept as a decree of inscru-

table Providence that the loved one must suffer and pine, and become a chronic invalid. ' A chronic invalid ! How much that means ! Think of all the pain, all the disappointment, all the deprivation of the beautiful things of life.

The chronic invalid is not alone the sufferer ; the disease, whatever it may be, is a cannibal that consumes not only the patient, but, in many cases, the time and the energies, and the patience of the whole family.

Suppose, now, that the friends were assured that in their own strong arms and loving hearts was one of the most potent means imaginable for bringing life back to the sufferer ; that they might administer daily draughts of their own abundant strength and vitality to the weakened one. Suppose that the blood could be set bounding through the invalid's pulses to the same beat that comes from the hearts of those around him or her ; would that be a " consummation devoutly to be wished ? "

You have heard, perchance, of the transfusion of blood ; how the vital fluid is carried from the veins of the well to those of the sick. This is one of the most striking experiments we have ever seen. Imagine the scene : a blanched and exsanguinated sufferer, stretched on a couch ; the pulse at the wrist not perceptible ; the flutter of the heart at the chest, and the faint gasping breath the only signs of life. Beside the couch stands the embodiment of life and strength, a man with sleeve rolled up to the shoulder, showing a brawny arm, ribbed and marked with great veins.

The surgeon quickly makes an incision, and slips one end of a glass-tipped rubber tube into the collapsed vein

on the arm of the dying woman, the other end into the swollen vein of the large bared arm. Now watch the result on the one at the threshold of eternity; the emptied blood-vessels begin to fill, the heart to beat slower and stronger, the pulse at the wrist becomes perceptible, and a faint tinge of color steals into the pale cheeks. Death gives way to life because a life-giving fluid, drawn from the strong man, is now coursing in fuller streams throughout the sufferer's body.

This is transfusion.

We do not claim that invalids, as a rule, can be treated in this manner, and receive directly the vital fluid from the heart of a friend, but we can show how a strong and willing friend can transfer part of his or her strength to a sufferer, and that, too, without loss to the donor.

Not only the invalid may be benefitted by the strength of others, but the person who may be weak in a certain point may equally benefit himself by this means. How many a man or woman knows that from some part of the body, from liver or intestines, or painful nerves, or weak joints, comes all the trouble! "Let that be right, and I can hold my own with all the world." We propose to show just how these troubled persons may act upon the weakened part until it has come up to the level of the other organs in activity and strength.

What is this wonderful process?



MASSOTHERAPY.

That is a large and formidable word. And yet it is something quite simple. Massage is from *masso*, I rub, and means manipulation by the hands. Massotherapy means simply treatment by rubbing or manipulations. We shall use the word to mean treatment by manipulations with the hands directly, (massage), or by indirect manipulations with muscle-rollers and beaters. Massotherapy means any or all three methods of treatment.

Time was, and not many years ago, when the word "massage" was almost unknown in medical writing, especially in America. But year by year it has grown in frequency, and the thing it represents has become a more and more important medical factor.

In Europe it has long been one of the most prized of therapeutic or curative measures, and in a few years the medical profession of this country will more fully recognize the great value of this method of treatment.

It is our aim to popularize it among the laity, so that this really wonderful method of treatment may be understood and its beneficial influences felt wherever sickness and suffering is found throughout the land.

HISTORY.

This treatment has a history, and at the risk of being prolix, we shall venture to give a brief extract from Professor Dujardin Beaumetz's lectures that illustrates the important points of this history.

After dwelling upon the fact that it is instinctive in man to rub a bruised, weak, or cold, or painful part of the body, and thus to restore the natural circulation, he shows that massotherapy has been a valuable means of cure among all nations of antiquity, among many rude people, especially among the Orientals, who often reduced this to a system. He says:

"It can easily be shown that the Greeks and Romans were also in the habit of employing massage. Among a thousand equally pertinent examples I may cite this observation of Hippocrates: 'At Elis the wife of a gardener was seized with a continuous fever; she took evacuant remedies without any relief. In the belly, below the umbilicus, there was a hard swelling protruding above the level of the surrounding parts; this swelling caused violent pain. *The attendants were set to rubbing and kneading this tumor with all their might, their hands being well smeared with oil.* Soon blood in abundance was passed by stool. The patient experienced marked relief, and got well.' Here, you see, was a case of intestinal obstruction, and massage overcame the obstruction and effected a cure. Oribasus, also in his compilation, indicates all the practices of massage, giving the minutest details.

"The RENAISSANCE, it must be admitted, added little to what the ancients knew respecting massage. I ought, however, to mention a curious tract by Paullini, which appeared about the end of the seventeenth century, and was entitled "*Flagellum Salutis.*"

"It is only within a few years that massage has obtained the right of domain in medicine. This movement of scientific renovation took place almost simultaneously in France, in Holland, and in Germany.

"In France, in 1837, Martin represented to the Medical Society of Lyons the marvellous results which he had obtained from massage in the treatment of lame back and lumbago. Lebatard and Ellaume in 1860, Rizet in 1862, showed the advantage which may be obtained from massage in sprains; but we must come down to the thesis of Estradère in 1863 before we find a comprehensive treatise on the effect of massage. Works on this subject have since multiplied, and I cannot even give you a full list of their titles, but I cannot refrain from indicating the great value which I ascribe to the brilliant work of Estradère, who was the first to put in clear light the physiological effects of massage, and the therapeutic benefits to be derived therefrom. Nevertheless, it is not France alone that derived all the benefits of this work. Holland has reaped advantages from it under the influence of Mezger and his pupils, and we see even now patients flocking from all parts of Europe to Mezger's clinic to essay the effects of massage under the direction of that celebrated masseur.

"Mezger has written but little. • The only treatise of his which we possess (and it is of very modest dimensions) was published in 1868 at Amsterdam. He says in this work that it is his intention to devote himself particularly to those special applications of gymnastics which are called *frictions*, or, better still, *massage*. He adds that in 1853 he began at Amsterdam the treatment of sprains by this means; that little by little he improved his system, and that since 1861 he has occupied himself exclusively with massage. Mezger has gathered around him numerous pupils.

"In Sweden, it is under the influence of Berghmann, of Helledag, and especially of Amström, that the method of Mezger has spread. In Russia, Berglind has been the

pioneer in this direction. Lastly, in France, we owe to Norström, of Stockholm, a complete exposition of Mezger's method.

"In Germany, it is under the influence of Rosbach, of Busch, and particularly of Schreiber and of Reibmayr, that massage has taken a truly scientific development. The work of Schreiber has been translated into French, and more recently still into English; Reibmayr's has been translated into French and annotated by one of my pupils, who has made a specialty of massage."

"LOMI-LOMI."

Nordhoff, in his book on "Northern California, Oregon and the Sandwich Islands," published in 1874, gives the following graphic description of *lomi-lomi*:

"Wherever you stop for lunch or for the night, if there are native people near, you will be greatly refreshed by the application of *lomi-lomi*. Almost everywhere you will find some one skilled in this peculiar, and, to tired muscles, delightful and refreshing treatment. To be *lomi-lomied* you lie down upon a mat or undress for the night. The less clothing you have on, the more perfectly the operation can be performed. To you thereupon comes a stout native with soft, fleshy hands, but a strong grip, and beginning with your head and working down slowly over the whole body, seizes and squeezes with a quite peculiar art every tired muscle, working and kneading with indefatigable patience, until in half an hour, whereas you were weary and worn out, you find yourself fresh, all soreness and weariness absolutely and entirely gone, and mind and body soothed to a healthful and refreshing sleep. The *lomi-lomi* is used not only by the natives, but among almost all the foreign residents; and not merely to procure relief from weariness consequent on over-exertion, but to cure headaches, to

relieve the aching of neuralgic and rheumatic pains, and by the luxurious as one of the pleasures of life. I have known it to relieve violent headache in a very short time. The chiefs keep skilful *lomi-lomi* men and women in their retinues, and the late king, who was for some years too stout to take exercise, and yet was a gross feeder, had himself *lomi lomied* after every meal as a means of helping his digestion. It is a device for relieving pain and weariness which seems to have no injurious reaction and no drawback but one—it is said to fatten the subjects of it.”

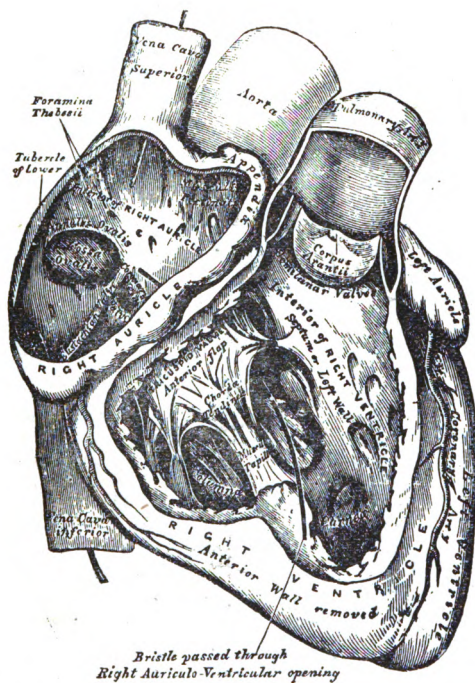
This latter fault will not be considered an objection by most Americans. The dry irritating climate of this country inclines the race to leanness of body, and as *lomi-lomi* or massage, or muscle rolling, counteracts this tendency it will be of particular benefit to this race.

Even in obesity this treatment is effective, as when used over the abdomen, it does away with the unsightly protuberance in that region. Muscle-rolling, we know, will do this, and in a month's treatment the relaxed, fat-infiltrated, bowed-out abdominal walls become hard and straight. This is due to the rapid development of muscular tissue here.

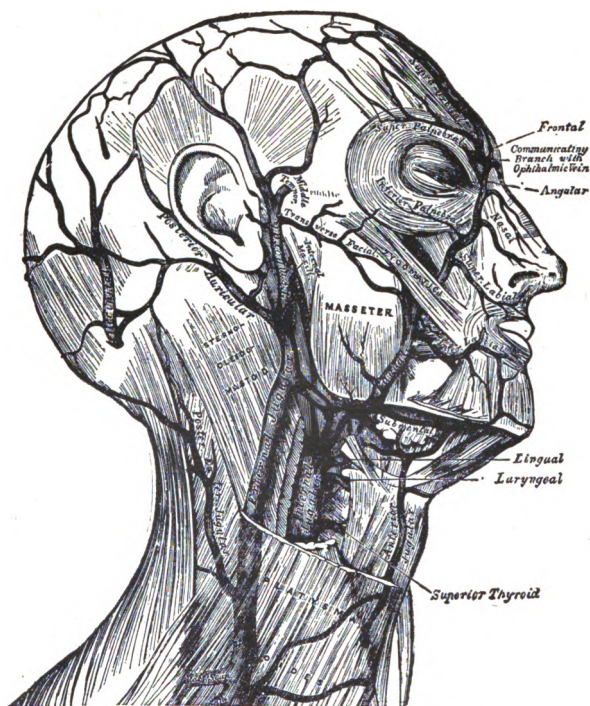
A THOUSAND MILES OF TUBING.

We shall now try to tell in plain language what massotherapy can do, and then tell how to do it.

First, a few anatomical facts. Perhaps you know, dear reader, that in the skin of a grown person there is more than thirty miles of tubes, sweat tubes, whose work it is to carry worn out and useless material from the body. Possibly you know that in the skin, surrounding these sweat



Section of Left Side of Heart, Showing Blood Vessels
that lead into and out of it.



SHOWING LARGE VEINS OF THE HEAD.

tubes, are many hundred miles of smaller tubes filled with blood. These are the capillaries, the smallest blood vessels, those that distribute the blood directly to the tissues.

All this is within that very thin covering of the body, the skin.

Now go to the deeper tissues. These same wonderful blood carriers, the capillaries, exist here. They penetrate and permeate the structures of the body in every direction; every nerve is filled with them; every minute fibre of every muscle in the body is honey-combed with them; the fatty tissues and the bones have them in abundance. If the length of the tubes and vessels of the skin are computed in hundreds of miles, what shall we say about the length of the capillaries throughout the body? We should have to use the figures that astronomers use in measuring the distances to the fixed stars.

But we have not done with the small vessels of the body yet. There are the lymph channels and the absorbents, making a system of tubes, less important than the capillary system, but still of immense extent.

These are dry anatomical facts, you exclaim. Are they uninteresting? To us such facts are as wonderful, as awe inspiring, as the wonders of the starry heavens. But these facts have a most important bearing on the method of treatment by massage, and by manipulation, *i. e.*, by massotherapy.

Along these infinitesimal tubes course the life-giving fluids of the body. The capillaries enter the tissues of the body making channels for the food taken from the alimentary canal, and oxygen taken from the lungs. These sup-

plies are to build up the body. The capillaries emerge from a structure and through them retreat the blood cells loaded down with waste and poisonous debris.

Motion! motion! motion! constant movement through these little vessels is the law of life. Let these currents cease in a part for a minute, and death and decay takes supremacy. Let this movement through the capillaries throughout the body be slowed beyond natural rates, and that moment weakness and disease commence.

The object of massotherapy is to stimulate movement, the flow of life-giving currents through the infinitesimal tubes that permeate all the structures of the living body. Thus more active life will be inaugurated.

A simple experiment will show how great is the influence of this treatment on tissues. According to Bernè, if a certain part of the body, the arm for instance, be thoroughly massaged for a few minutes, the temperature of that part will be found to be 5° centigrade higher than the rest.

Why is the temperature of the part thus quickly raised? Simply because the treatment has sent more blood to the part, chemical and vital changes have commenced to take place more rapidly, old things are passing away, new life is coming in. Now suppose these increased changes can be brought about in time, not in a small part of the invalid's body, but in a large part. Suppose the cold, pale skin can be made warm and red, the flabby muscles harder, the weak stomach stimulated to more rapid digestion, and the torpid liver and intestines to quicker

action. Well, it can be done. What is possible in a part, is possible throughout the body.

Not only may the measure be used to cure disease, but it may also be made a most important means of preventing sickness, and thus preserving health. It is easier to keep out the enemy than to expel him after he has obtained a foot-hold in the citadel; and the prudent man like a wise ruler, looks well to the defences against sickness.

The best possible safeguard against ill health is right habits, habits of eating and sleeping properly, and especially taking a proper amount of exercise. Now the majority of the readers of this book have not the time nor the energy to enter the foot-ball field or the gymnasium, but should have some means of exercising all the five hundred muscles of the body, right at hand, in the office, or bedroom, or study. This can be done with the Exerciser, and it can be accomplished, almost as well, with the muscle-roller and beater and the hand manipulations in a massage treatment. The effect of massotherapy on muscular tissue is almost identical with the result of active use of a muscle:

In a self-treatment massotherapy is a sort of double-benefit exercise, where one not only gets good as a result of the muscular effort put forth, but the tissues acted upon receive a second and greater benefit from the direct effect of the massage. The effort thus yields the highest rate of compound interest.

Where the treatment is applied to others the recipient gets all the benefit obtained from active exercise without any of the exhaustion and loss of vital energy that must come from great physical efforts, especially if made by an

individual not very robust. The one who administers the treatment is also benefited by the use of his own muscles.

Thus it must be clear that massotherapy must be as useful in preserving health as in curing disease.

We are nothing if not practical, and we shall take the liberty accorded physicians, to here give a practical hint to husbands with over-worked and tired wives.

Try this experiment.

Get up in the morning early. Bring your invalid wife, before she rises, a glass of hot water, with a teaspoonful of fresh lemon juice, without sugar. Then when your loved one has drank this, and thanked you for your kindness, while she is still covered with a sheet or thin blanket, give her a ten to twenty minutes treatment with the muscle-roller or the hands (see later page), until every strained nerve and tired muscle in her body is in a glow. If this treatment is inspired by pure affection, and accompanied with kind words, we are certain that it will wonderfully lessen the wife's daily burden of work and worry.

So much for massotherapy as a means of preserving good health.



DISEASES FOR WHICH IT IS USED.

What we have said as to the use of massotherapy in the cure of diseases may seem like the talk of an enthusiast, and it may be said that in actual practice the results of this method of treatment will not be as striking as we have intimated.

We shall summon very high authority to prove our position, and incidentally to show in what affections massotherapy is useful.

Dujardin-Beaumetz is one of the leading teachers and lecturers in the Paris Medical Schools. He is a brilliant writer and a popular teacher; a member of the regular, or old school of medicine, and a thoroughly scientific physician. No one will think of him as liable to give more prominence to a certain curative method than the facts will warrant. Listen to his views as given in the lecture before referred to. The notes we shall give from this lecture will be somewhat disconnected, but give a fair idea of his position on this subject. We have taken the liberty of changing a few medical terms into plain English, otherwise the extracts are in his own language.

After speaking of the beneficial action of massotherapy on the skin, in opening its pores and making it soft and clear, he continues :

“The action on the muscles is quite as marked, and by kneadings or strokings of the muscles we arouse and augment their contractility. Strike with the inner border of

your hand the triceps or biceps muscle of the arm, and you will see produced on the parts of the muscle thus stroked a peculiar hard swelling, which results from its limited contraction.

"**Massage** has an undoubted action on nutrition. It has, in fact, been demonstrated that the quantity of urea in the urine augments under the influence of general massage.

"Chpolinski, who, in his inaugural thesis, published last year, "*On the Length of Time that Aliments ordinarily Sojourn in the Stomach,*" has shown that the massage of the stomachal region, practised for ten minutes at a time, *will diminish the length of the sojourn of food in the stomach.*

"The first case on which he experimented was that of a medical student, in whom a meal consisting of five hundred grammes of meat was five hours and twenty-five minutes in completely disappearing from the stomach. The days when massage was performed the duration of gastric digestion was only four hours and thirty minutes.

"In another subject, where a meal composed of two eggs and a gramme of salt required three hours and fifteen minutes for its disappearance from the stomach, massage reduced this period to two hours and forty-five minutes.

"As you see, gentlemen, massage notably promotes the gastric digestion, or at least the passage of alimentary substances from the stomach into the intestines.

"These experiments have, moreover, brought to view a fact which physiologists who have taken up the subject of massage have touched lightly, and which at the same time seems to me to have capital importance in these applications of massotherapy: I refer to the augmentation of diuresis under the influence of abdominal massage. All our patients on whom abdominal massage has been practised have testified to a notable augmentation in the urine, which sometimes amounts to double the normal quantity,

and this is an important point, to which I propose to return when we come to study the indications for massotherapy.

"The treatment of **SPRAINS** by massage has been attended with excellent results. First practised by the bone-setters, gray nuns, "sprain-blowers" (*soffleurs d'entorses*), etc., massage is to-day employed in the treatment of sprain by all surgeons, and the works of Ellaume, of Lebatard, of Mervy, of Estradère, of Rizet, etc., show us the importance of this method.

"All cases of sprain, simple or complicated, except, of course, those where there exists a fracture of the joints (and we have seen that even this is not now regarded as a contra-indication), are tributary to massage. The beneficial effects are the more speedy and the more certain the sooner massage is applied after the accident, and you will often see patients, who at first could not stand on their feet get up and walk and even return to their homes on foot, after their first seance of massage.

"In the Prussian army, where massage is obligatory in a certain number of affections, and, in particular, in sprains, the military surgeons, in their half-yearly reports, do not fail to communicate the results obtained by this method. By referring to the reports of Starke, Gassner, Brurberger, Gerst, and Korner, you will see that the average duration of the disability entailed by sprains, where massage has not been employed, is 27.3 days, and where massage has been used 8.9 days, so that you see there is a difference of 14.7 days in favor of the treatment of sprains by massage. It is to be wished that the same practice might be obligatory on the military surgeons of our army.

"I come now to the medical applications of massage. These are very numerous, and we will, if you please, divide them into several groups. I will speak, first, of massage in the treatment of pain, then in articular and muscular affections, then in neuroses, and lastly, in certain visceral affections.

"As I have before told you, it is by an instinctive movement that man seeks to relieve pain by frictions, and I have often seen patients in the agonies of *tic-douloureux* rub the skin till abrasion and bleeding were produced. Experts have given regularity and system to these practices, and what I have to say on this head shall pertain particularly to sciatica and migraine.

"It is Schreiber who has given us the most precise rules as to the treatment of sciatica by massage. The treatment of sciatica, according to Schreiber, consists in massage, the application of certain apparatuses, and in passive movements.

"This practice of massage is applicable to all the other neuralgias, but the manœuvres are valuable, according to the seat of pain, and among these painful affections I must point out to you in particular the good effects of massage in the treatment of migraine, or neuralgic headache.

"Lucas Pardington has, moreover, quite recently taken up the subject of treatment of migraine by massage, and he has reported a case of a man, 26 years of age, suffering from hemicrania of grave form and rebellious to all the means of treatment, which was cured in three days by séances of massage of twenty minutes' duration made over all points of the head and neck which were affected.

"I will add that for the symptom cramp, whatever may be its cause, massage is a sovereign remedy, and you should here employ principally kneading of the muscles and the strokes or taps (*tapotement*).

"*Paralysis agitans* or shaking palsy is also believed to be amenable to treatment by massage, and Berbès has recently reported to the Society of Therapeutics the favorable results which he has obtained by this means in a case of Parkinson's disease.

"As for the *neuroses*, i. e. nerve troubles, I shall not repeat what I have said *à propos* of the treatment of

chorea or St. Vitus dance, by gymnastics, where in truth, massage is oftener employed than gymnastics properly so called, but I must call your especial attention to massage in hysteria, because serving as the basis of a kind of treatment of this disease which has become very popular of late years under the name of S. Weir Mitchell's method.

"Dr. S. Weir Mitchell begins by completely isolating his hysterical patients from their family and usual surroundings, and putting them under the care of a trained nurse, who never leaves them; then he subjects them to absolute repose and a special diet system of which milk and eggs form the basis. Then he insists on the daily thorough application of general massage. Under this system flesh and blood are rapidly made and the patient becomes strong. This treatment has but few advocates in France and is applicable only to extreme cases of hysteria. Nothing shows that it is superior to the system we employ in such cases—namely isolation, massage, water cure and exercise in the open air."

"It remains for me to say a few words concerning massage in general affections. In diseases of the heart, massage will render you service in combating œdema, and the same may be said of œdema due to renal affections; and I remember to have seen a remarkable example of this. The patient was the wife of a medical *confrère*, who was suffering from albuminous nephritis, with considerable anasarca (swelling) of the lower limbs, which doomed her to absolute rest. Massage removed the œdema (dropsy), which did not return, although the quantity of albumen in the urine remained unchanged.

"Here the effects of massage are two-fold. It acts, first of all, locally, and favors the resorption of effused liquids; then it has a general action, promoting nutrition, augmenting the excretion of urea, and thus combating one of the effects of chronic alterations of the kidneys.

"Furthermore, I showed you, while speaking of the

physiological action of massage, that the practice of abdominal massage notably augments the excretion of urine. This is an effect which ought to be taken account of in explaining the favorable effects of massage in cardiac and renal affections.

"Lastly, in abdominal affections, constipation, and, dilatation of the stomach, massage has been found to give excellent results.

"As for constipation, everybody is agreed in acknowledging the good results obtained by massage. Berné who has so urged the importance of abdominal massage, recommends the following mode of procedure: After having kneaded the abdominal teguments, then the abdominal muscles, the operator makes gentle pressure over the right side of abdomen with the palmar extremities of the last four fingers; then, with the closed fists, he performs massage over the whole extent of the colon.

"Besides insisting on the mechanical action of massage Berné gives account of the property which these exercises possess in promoting the secretions of bile. Hence he advises to associate with the above manœuvres gentle pressure over the gall bladder.

"As for the affections of the stomach, massage in these cases gives excellent results. You have been enabled in the past month to witness in this hospital the marked benefit which such cases have derived from massage: their digestion has improved, their weight increased, and all the distressing symptoms are alleviated. It is a practice which you ought to resort to in such cases."

Such are the views of Professor Dujardin-Beaumetz. We have quoted him in preference to teachers who make a specialty of massotherapy because we wished an unbiased statement.

We hold that massotherapy is applicable and should be used in all chronic troubles, and in all affections not

accompanied with much fever. In general debility it is a grand tonic, starting the sluggish forces into renewed life.

It is really astonishing how quickly this treatment will increase the appetite and quicken the power to assimilate food. It is not how much one eats but how much one absorbs into the blood, and assimilates into the tissues that is of value.

"As well try to fat a fanning-mill running corn through it" as expect to gain strength and flesh by eating more food than the system can absorb. In cases of debility and anæmia we must increase the powers of assimilation by massotherapy and exercise, and then appetite will call for more food to meet the want.

How many a poor invalid is literally stuffed with all kinds of delicacies that he doesn't crave, and can't assimilate, all to no purpose; while if half the time spent in preparing these "goodies" was employed in setting the sluggish blood into more rapid circulation and increasing life action in all the tissues by massotherapy with hand or muscle roller there would be a demand for good nourishment.

In such cases give massotherapy, feeding with easily assimilated foods, and the treatment of the stomach and intestines, after the manner indicated in a preceding chapter, a month's trial. First, get your patient weighed; then at the end of the month when you find an increase of five or ten pounds in weight, you will feel sure you are on

the right track. For constipation, dyspepsia and biliousness, massotherapy should always supplement flushings and diet. Flushing goes first, as the sappers and miners precede the regular troops, but sappers and miners should not constitute the whole army. We must not only tear down but we must build up. In constipation especially we should not be satisfied with simply cleansing the colon by flushing, but should strive to so strengthen its nerve and muscular forces by massotherapy of the abdomen as to make this naturally sluggish organ the most active and vigorous in the body.

That massotherapy will do this we have the testimony of many writers, of Berné in particular, endorsed by Dujardin-Beaumetz; of Schreiber, of Dowse, and almost numberless others. You can test the matter for yourself. Give a daily treatment to the abdomen for one month by kneading and the muscle-roller, and see if at the end of that time, you have not done more towards the cure of your constipation than by the years of cathartic treatment with drugs. Massotherapy, we repeat, should *always* supplement "flushing," in the treatment of obstinate constipation.

We must not dwell longer here on this phase of our subject, but proceed at once to tell how massotherapy is to be carried out.

HOW TO APPLY IT.

In doing this we shall give, in plain language, our own views and methods.

You must know in the first place that massage treatment is carried out usually by professionals, by men and women who have studied the art, and who make a business of applying it. These professionals usually charge \$2 an hour for their services.

When one can afford it, and the masseurs can be obtained handily, it may be well to employ one of these professional manipulators.

But this book is written, for the most part, for people who do not find it convenient to employ professional masseurs at \$2 per hour. It will be our aim, then, to make this art so clear and simple that any one can understand and apply it, and thus it can be brought into every house.

Mr. Thomas S. Dowse, M. D., a teacher of massage, gives three modes of applying massage, namely :—

(1), Effleurage ; (2), Petrissage ; (3), Tapotement.

The plain English of these three modes is :

1st. *Rubbing.* 2d. *Kneading or rolling and pinching gently.* And 3d. *Pounding softly or tapping with the ends of the fingers.*

This is the sum of the whole matter. Now how is this to be applied? Let us take the case of a patient suffering from dyspepsia and constipation with great debility. The friend, relative, or nurse who is to apply the massage stands or sits at the side of the couch, upon which the

patient is lying, with the head and shoulders slightly raised. The attendant commences by gently tapping over the pit of the stomach with the ends of the fingers, making these movements rapidly and softly. Usually there is great tenderness and soreness here in cases of dyspepsia, and care must be taken not to cause pain. After continuing the treatment here a minute, apply the tapping movements over the whole abdomen, always commencing at the right side and finishing at the left. This movement may be made while the patient is dressed in a thin cotton garment, or covered with a sheet.

Now take some warm palm oil or white vaseline in the palm of the hand, and anoint the skin of the abdomen and stomach well, and then slipping the hands under the sheet, gently press the tips of the fingers of both hands against the patient's right side, and then draw them across the abdomen towards the left. Keep these movements up for five minutes, gradually increasing the force used, and the rapidity of the movements. The next step is to act directly on the colon.

It must be borne in mind that the colon forms an arch in the abdomen. It commences in the right groin, low down, runs up towards the ribs, bows across just below the stomach to the left side, and then down. To act on this organ and force its contents along, place the tips of all the fingers at about the origin of the colon and press in with a little force ; then slip the fingers upward for an inch or less and press once or twice again. Then move the fingers a little further and press again. Proceed in this manner over the length of the colon. Then repeat twenty times.

All these movements have to be made very carefully at first, but, day by day, if the treatment is persisted in, the soreness and tenderness disappears, and then more force can be employed.

Does not the above explanation make the method of treatment plain and clear? Yet, in applying it, the attendant really employs *effleurage*, *petrissage* and *tapotement*.

French phrases and words sometimes sound very formidable to English ears, but their meaning is simple.

Huckleberry Finn says to his companion on the raft, the runaway negro:

"Jim, what'd you say if any one should say to you 'Parly-vous-franzy'?"

"Would'nt say nufin. I'd just bust him over de ear; leasways if he wasn't a wite man. Wouldn' low no nigger to call me dat."

Huckleberry tells Jim that the words don't mean anything but

"Do you speak French?"

Whereat Jim inquires, very pertinently we think, if they mean that why don't they *say* that.

We might with equal pertinence make similar inquiries of the professors of massotherapy.

The attendant having rested a few minutes after the treatment of the abdomen, should give the patient a general treatment. This should be done by commencing with one of the arms; the rest of the body covered warmly with a blanket. Rub the arm smoothly with both hands, having applied the white vaseline or palm oil; rub until the skin is warm and reddened. Then commence a rolling motion

with the arm held between the two palms, much the same motion as cooks use in shaping a biscuit for the pan. Finally end the work on the arm by pressing the pulps of the fingers in between the muscles so as to stimulate the deep muscular fibres and stretch the nerves.

If this has been done thoroughly, yet carefully, there will be more life, more glow and strength in that arm than there has been perhaps in many months.

Now give the same treatment to the other arm and shoulder, and then in succession to the thighs, legs, and feet.

Now the patient turns on the face and the back is well rubbed; then percussed or tapped lightly and very rapidly with the tips or pulps of the fingers, the hand held so as to bring the ends of all the fingers and the thumb together, hand forming an inverted cup.

This ends the general tonic treatment.

How does the patient feel? He or she feels as if something unusual had happened. No dose of medicine ever taken has had such a striking effect. There has been a stirring up of the whole system; there is a pleasurable tingling in all the nerves, and the blood currents seem to be running quicker and fuller than before. Most patients find a massage treatment soothing and agreeable. Some find the first one or two treatments a little too stimulating; after that there is no trouble. All find an increase of appetite.

How does the attendant feel?

If not accustomed to this work, we venture to say that the nurse is more exhausted than ever before. Such a

treatment, if properly administered, is extremely fatiguing to the one who gives it. It is so fatiguing that many strong persons cannot at first continue the work for more than thirty minutes at a time.

This in fact is about the only drawback to a very general use of massage in the home treatment of all chronic and sub-acute troubles.

o On a later page we shall show how this difficulty may be overcome by the use of muscle-rollers and beaters, and thus the only real objection to massotherapy will be obviated.

We have briefly described in the foregoing a general tonic massage treatment with a special treatment for dyspepsia and constipation. This will be the most common method of using massage. But there are special troubles that need mention.

In neuralgias of all kinds this treatment is indicated and is usually applied by rapid tapplings with the pulps of the fingers over the painful nerves. The treatment should be used very lightly at first and the force gradually increased, but never so as to cause pain. After the tapping treatment a rubbing with hot oily preparations or a liniment is very soothing and quieting.

For rheumatism, sprains, stiff joints, etc., the treatment commences with rubbings with hot oily applications; then followed by deep pressure and kneadings; and finally ends by forcibly moving the weak and stiffened joints. This latter procedure must be done carefully at first and will be accompanied with the groans and protests of the patient. But, day by day, the natural lubricating fluids of the joints

and tendons will be brought back by the manipulations, and in a short time the bed-ridden patient will be the marvel of the community.

The wonderful cures made by magnetic physicians and rubbers are the result, it seems to us, of thorough massotherapy on the practitioner's part, and faith on the part of the patient. These two curative principles, faith and massotherapy, are a combination more powerful for good in many cases than the most potent curative measure ever known.

We shall venture to give a case in point to illustrate this statement.

About seven years ago we were requested by a city missionary to see a poor woman who had been bed-ridden for three years. She had been under treatment by many physicians but all to no avail.

We saw the patient, and after a long and careful examination, we assured her that on the first Thursday of the following month, *i. e.*, three weeks from the date of our examination, she would be up and dressed and take five steps across the floor. The patient was most incredulous. Many physicians had assured her that they could cure her but had failed.

Yes, we said, but had they tried a remedy that had been used in the hospitals in Paris in such cases, with never failing success?

The woman thought not; her medicines had always been procured at the neighboring drug store.

At our next visit we brought with us a certain wonder-

ful liniment that had been known to restore strength to limbs as weak as hers, and the woman's two strong daughters were instructed how to apply this liniment with the rubbing, kneading and pinching movements the professional masseur employs. The liniment was the simplest standard preparation we could get. We also brought a supply of the pills that had caused marvellous cures (composition — mucilage and flour) and gave careful instructions as to their administration.

And now the treatment of the case goes steadily forwards. Every day the daughters become more expert and vigorous manipulators, and they rub and squeeze the wasted muscles until the blood and fluids are set in motion as they have not been before in years. Every day we assure her confidently that on the certain Thursday at 3 P. M., she shall take five steps. At each visit we see the signs of growing faith in our prophecy and growing physical strength. Incredulity is giving place to hope, and there is no tonic superior to that. All the functions of the body become more active, the stomach calls for food instead of waiting to have food, like an unwelcome visitor, quartered upon it. The eye grows brighter and the cheek gets a tinge of color.

The looked for Thursday arrives. At the appointed hour we visit the patient and find her dressed and lying on the bed ready for the trial. Her courage is now as great as it was once weak. We cheer and encourage her and at length the trembling limbs, for the first time in three years, bear her body across the floor. From this time on the recovery was rapid, and there has never been a relapse. No

more hard-working woman can be found to-day than this long-time invalid.

What was the cause of the cure ?

Massotherapy and faith.

The patient was conscientious in her belief that she could not walk, and while she believed thus she was powerless. But a better circulation of blood, better nutrition of the muscles, and faith in a wonderful remedy (something that really is used in Paris hospitals in such cases) gave hope, courage and strength, and brought about a cure. What the original trouble may have been that confined this woman to bed, we never learned; this trouble had evidently vanished long before, and in its place was a trouble just as potent for harm, namely weak muscles and a fixed idea that she could not walk.

It is our opinion that there are thousands of similar cases in our broad land that might be cured by massotherapy alone.

SELF-TREATMENT.

We must now speak briefly of massage applied by the individual to himself, as this will be by far the largest class of cases that will employ it.

The same principles of treatment and methods of application as mentioned in the foregoing pages apply to the self-application of massage.

Practically, however, it will be rarely used in self-treatment, except for abdominal troubles. Here self-massage by the hands, or, very much better, by the muscle-roller, is simply indispensable. We know of nothing except a colon or stomach flushing that has so speedy and

powerful an effect on the functions of stomach and intestines as massotherapy.

While flushing the colon should be used only twice or three times a week, massotherapy of the abdomen in all cases of dyspepsia, constipation, jaundice, biliousness, etc., etc., should be practised each day, morning and night.

We have striven in all we have said, to make our suggestions in the "New Method" practical, so that they may be used at home without professional assistance. We have aimed to make our readers familiar with certain curative methods that may be used, either by themselves, or in conjunction with necessary medical treatment, and thus bring relief to suffering humanity. Now if massotherapy is to be made practical for the people who will read this book, we must speak of certain objections to the massage treatment and how to overcome them.

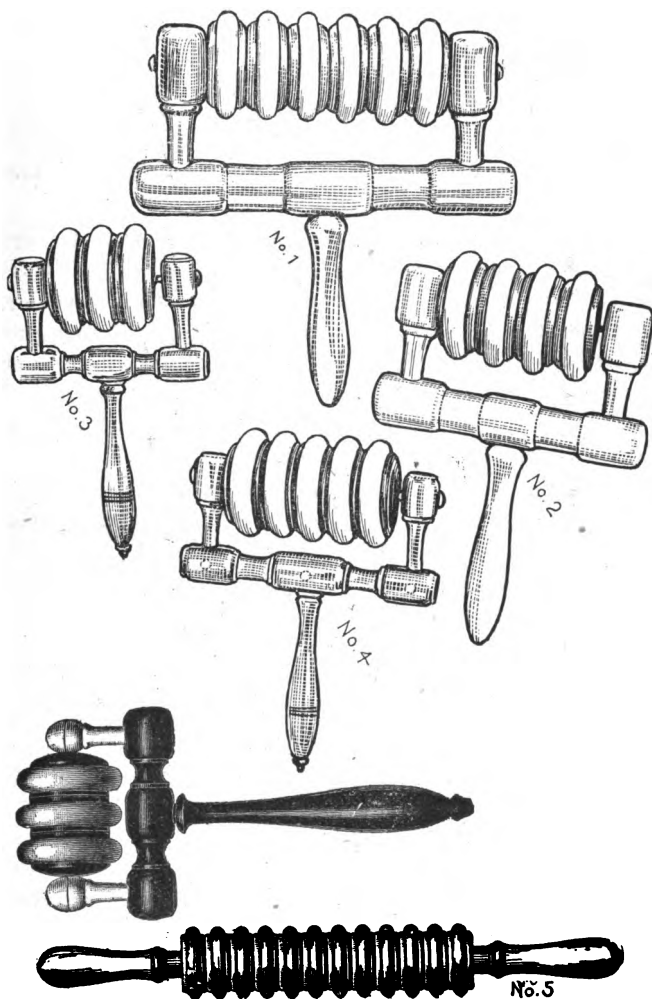
When we have recommended massage by hand manipulations, many of our patients have objected to the necessary exposure of the skin. The exposure is not great, only a small portion of the body at a time, but even this is disagreeable. Again, certain persons of a nervous temperament, find the direct friction of the skin that is necessary in hand massage, irritating, instead of soothing. In these cases the dislike grows from day to day instead of getting less.

Again, hand massage is extremely fatiguing to the one who administers it. We have never found any form of physical work more exhausting than to give a quick and thorough massage treatment. Those who make a business of this art, professional masseurs, do not expect to treat

more than two or three patients per day, for which, of course, they get well paid. The amateur, the novice, who wishes to apply this treatment to an invalid friend or to use it in self-treatment, will not long care to keep up the treatment, owing to the fatigue that results.

THE MESSAGE-ROLLER.

To meet these and other objections we have devised for our patients an instrument called a massage-roller or health-roller. This consists of a series of maple or boxwood wheels on a flexible axle. The wheels are an inch and a half in diameter, and six or eight in number. The peculiarity about each wheel, and the device that makes them so very beneficial, is that around the central rim of each wheel is a specially prepared solid rubber buffer. This buffer is made of pure gum, is elastic and yet very firm. Thus each wheel corresponds to the pulp end of one of the fingers. Now, with a series of these wheels on a flexible axle, set in a suitable handle, we have an instrument very similar in its effects upon the tissues to the fingers of the hands. It, however, has this great advantage over the hands; *the wheels roll, and thus avoid undue friction of the skin.* It is the avoidance of friction that makes the application of massotherapy so much easier for the attendant when the muscle-roller is used than when the hand is in contact with the skin. In the latter case much of the force is expended in overcoming the friction between the surfaces. But with the roller there is little friction of the skin, *and nearly all the force is expended in deep pressure on muscles, nerves and tissues generally.* A novice with the



roller can work for an hour, changing occasionally from hand to hand, with but little fatigue; while without the roller, fifteen to twenty minutes rapid and vigorous massage will be a fatiguing effort.

Then, too, the muscle-roller is used without any exposure of the patient, as it produces as much effect when applied over a sheet, or the patient's cotton or woollen undergarments, as when used on the bare skin. Owing to the elasticity of the rubber, the running of the wheels over bony parts of the body causes no pain, and the instrument can be used over joints, on the neck, head, or face, not **only** without discomfort, but with positive pleasure.

With the instrument we have devised there is an interval or space between each buffer. That allows the tissues to be crowded up between the buffers, and thus gives a slight lateral or pinching compression, as well as a direct perpendicular pressure, much as though the flesh had **been** gently squeezed between the fingers.

If we say more about the muscle-roller it will be thought that this is a hobby of ours. And so, indeed, it is, for we have found from long experience that the **amateur** with a good muscle-roller gets as good or better effect **than** the \$2 an hour professional masseur gets without it.

And we have also found that the amateur without a proper instrument soon loses enthusiasm and gives up the treatment. It occurs to us that if any one cannot procure a muscle-roller such as described, a passable one might be improvised out of a wringing-machine roller and a suitable handle.

USING THE MUSCLE-ROLLER.

As to the manner of using the muscle-roller little need be said. When used by an attendant upon another person it should be rolled back and forth over a certain part for a time, and then the direction changed so as to roll as nearly as possible at right angles to the former direction.

When it comes to the treatment of the abdominal organs, stomach, liver, intestines, etc., the instrument should be carried up and down for a time, then across from right to left and reverse. Then the treatment should end by an application over the colon, in the following manner. The roller is held in both hands, a hand at each end, and the treatment is commenced by pressing the outer three or four wheels firmly against the abdomen at the lower part on the right side, over the origin of the colon. The operator pushes the instrument upwards for two or three inches with a quick *digging* motion. Repeat this several times in one spot, and then move the instrument upwards for an inch, and give the same treatment. Continue this method over the whole course of the colon, ending on the left side with downward pushing motions.

If the operator is taking a self-treatment the same direction of force will be followed.

In all the self-treatments the operator will usually grasp the instrument with both hands, instead of by the handle, with a single hand.

It can be applied to any part of the body in a self-treatment except a space between the shoulders. This region may be reached by the muscle-beaters.

The muscle-roller is to be used in all those affections for which massotherapy has been advised on a preceding page.

In neuralgia it brings almost immediate relief from pain, and ultimately secures a cure. It acts by stretching the affected nerves slightly, and stimulating the circulation of blood through them. It may be used on the head, neck or face, along the back over the roots of the nerves and down the thigh when the sciatic nerve is affected.

In nervous headaches the instrument is invaluable.

For *constipation* this is the only practical manner in which massotherapy can be successfully used in self-treatment. We have spoken at some length on this phase of the subject and hardly need to dwell upon it longer. This trouble is a common one among a very large class of people who are not by any means invalids and yet who are not in perfect health. The intestines in these people will not act properly without a stimulant of some kind, either by drugs taken internally, or by fluids injected into the colon.

Now most people, and rightly too, object to having the colon and intestines *dependent* on any form of internal stimulation, for they realize that the trouble "grows by what it feeds upon," that the strength of the stimulant or the amount of irritation has to be increased, and at length the individual becomes a slave to the habit. To this numerous class of people we can offer assurance of a certain cure provided they have patience and perseverance. If dyspepsia is not present, fruit, apples and oranges, should be eaten, especially in the morning. Coarse cereals and milk for breakfast. Meat and vegetables at noon, and

bread and cereals at night. Then morning and night give the abdomen a treatment with the muscle-roller according to the directions already laid down; follow this with a short tonic treatment over the whole body and the result will be a certain cure. At the beginning of the treatment the colon should be thoroughly treated by flushing and this continued every other night, until the fæces are of a light color. Then a flushing once a week may be resorted to.

We shall not say more here on this subject as it will be referred to later.

In *dyspepsia* the muscle-roller is simply invaluable. A glass of water before rising in the morning, or as soon thereafter as possible, should be followed immediately by the use of the roller, which churns the water in the stomach so vigorously that all the sticky catarrh on the lining membrane of the stomach will be dislodged, and, together with every particle of undigested and fermenting food will be forced out of the stomach on its way to be excreted. The stomach will thus be left as fresh and rosy as a country school boy's morning face.

This treatment excels any form of bitters as an appetizer. Again, in the evening this treatment should be applied; and if possible during the day. You remember the experiments mentioned on a preceding page, which proved that massage of the abdomen lessens, even in healthy persons, the time of digestion nearly one-third. We need hardly remind you, dear dyspeptic, especially if you are an American, that your digestion is as much too slow as your manner of living is too fast, and that you might with advantage increase the former rate by massotherapy.

There is an old but good story on this subject. At a public dinner a gentleman was telling a friend what trouble he had with his digestion. An enthusiastic believer in massage sitting opposite breaks in:

"I beg your pardon, sir! but do you knead your stomach?"

"Do I need my stomach? I have always supposed I did; but if it can be dispensed with I shall be most happy to do without it."

The proper diet is of great importance in dyspepsia, and this matter is fully set forth in a later chapter.

All the troubles mentioned on a preceding page as curable by massage can be as well treated by the muscle-roller in the hands of the novice as by the professional masseur with hand manipulation.

Before leaving this subject we must speak of the greatest luxury and tonic combined that it has ever fallen to mortal man or woman to experience.

Suppose, dear reader, you wake up in the morning tired, too tired to rise and dress, perhaps lame and sore from unusual exertion (we all have such mornings). If, now, you can prevail upon some friend or companion to take the muscle-roller, and while you lie covered with a sheet, to go over you vigorously, up and down and across the back, then along the thighs, legs and arms, then the chest, and finally a thorough treatment of the abdomen, by that time there will not be a nerve in the body but tingles, and you will feel as vigorous as a well-groomed race horse.

This is a real tonic, not an irritant, to the system; a tonic well fitted to restore energy and life to many a sofa-bound invalid.

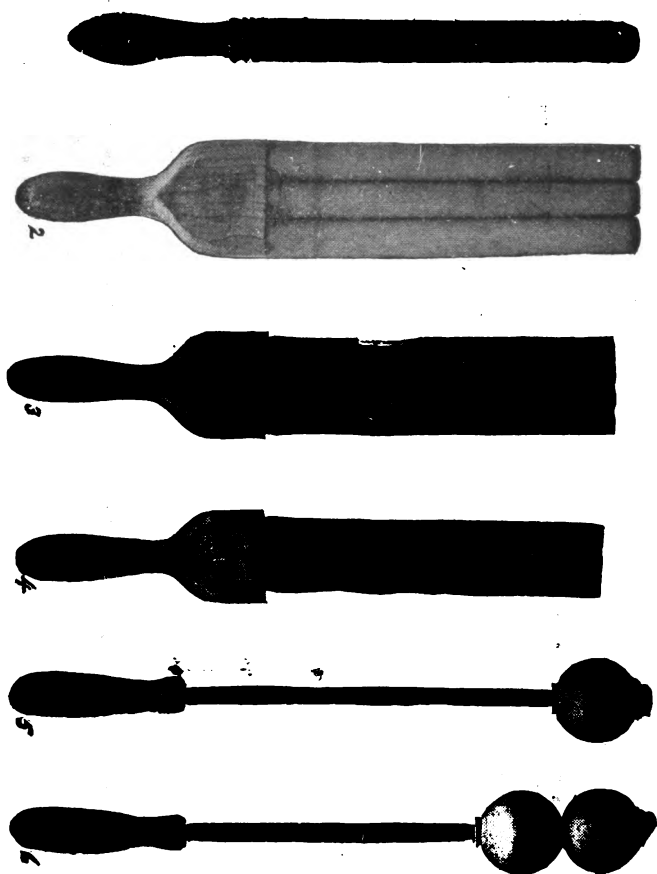
Muscle Beating.

This is one of the forms of applying massotherapy. It corresponds to tapotement, or pounding by the fingers and hands. It is used



ordinarily in self-treatment as a supplement to massage-rolling. To most people the beater is not so agreeable an instrument as the massage-roller, but it is rather more stimulating to the skin than the latter. It is also very useful to treat that part of the back between the shoulders, a part hard to reach with the roller. It is also very useful to treat the soles of the feet, to stimulate the circulation there. Thus it will cure a common

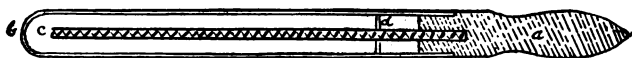
trouble. A treatment by the massage-roller may, with great advantage, be ended by a short, rapid and stimulating use of the beater.



As an instrument to stimulate circulation, etc., the Muscle Beater has been employed a long time. The best-known instrument is the one devised in recent years by Prof. Carl Klemm. Its uses and merits are described in his book, "Muscle Beating for the Sick and Well." (Price 30c.) Beaters made with hollow rubber balls attached to flexible handles were first suggested and used by Douglas Graham.

In the illustrations are shown six styles of Beaters, of different construction and suited for a variety of uses.

The Nos. 1 and 2—Pneumatic Beaters—are new, and we confidently believe to be superior to any heretofore made. They consist of a corrugated air-tight rubber tube,

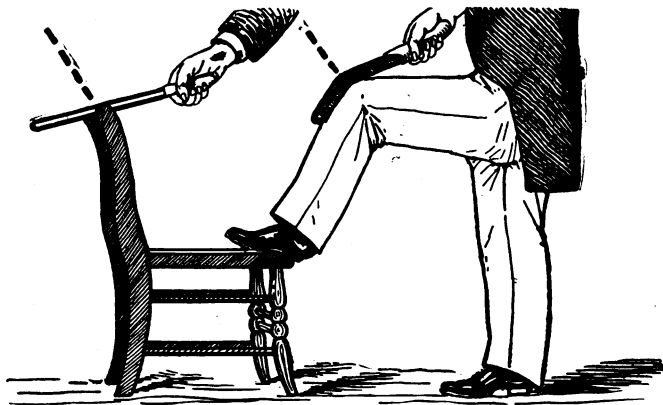


Section view of Pneumatic Beater.

one inch in diameter and ten inches long, secured on a handle which fits into the tube. Extending from the handle inside the tube is a flexible spring, considerably smaller in diameter than the inside of the tube, and covered with soft felt or elastic tubing. With the single instrument each stroke is doubled; and with three of these tubes on one handle and used edgewise, a series or wave of strokes is produced, approaching the "vibration" of massage. The contained air, the size of the tube and the elasticity of the rubber all combine to make this beater soft and agreeable as well as efficient in use.

Nos. 3 and 4 Beaters are made of light steel springs fastened to a handle and covered with elastic tubing,

nine-eighths of an inch in diameter. The four-finger Beater is suited for general use; the three-finger Beater is a lighter and cheaper instrument. While necessarily harder than the Pneumatic Beaters, they are preferred by some for some purposes. Length, including handle, 15 inches.



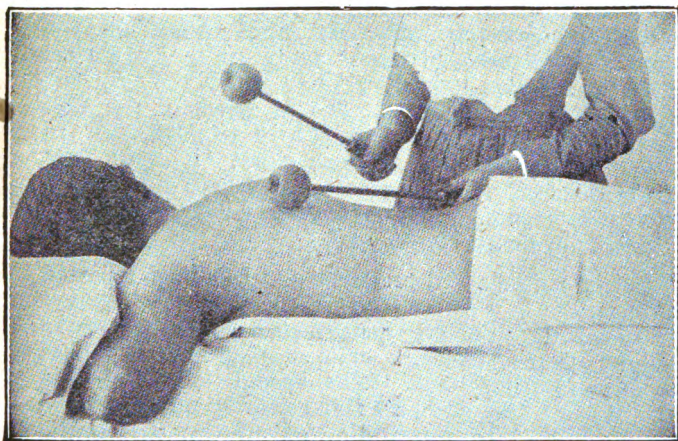
Beaters of the older style are decidedly unyielding; whereas the Pneumatic Beaters conform to the most irregular surface.

The Nos. 5 and 6 Beaters consist of thin, hollow rubber balls, about two and one-quarter inches in diameter, and secured upon a flexible rod. The two-ball Beater is adapted, when used by an attendant, for beating upon the spine. Length, 17 inches.

In his "Treatise on Massage," Dr. Graham gives the following directions for using the Ball Beaters:

"Very well suited for percussion are india-rubber balls secured to steel, whalebone or other elastic handles. With these one gets the spring of the handles together with the rebound of the balls, and

thus rapidity of motion with easily varying intensity may be gained if only the operator knows how to let his wrists play freely. The number of blows may vary from two hundred and fifty to six hundred per minute, with both hands. The blows should be smart, quick and springy, not solid and hard, and they should be transverse to the course of the muscles, except in the case of the back, which may not only be percussed with the hands at right angles to it while the patient is lying, but still more effectually when the patient



Method of Using Ball Beaters.*

is standing bent forward so as to put the dorsal muscles on the stretch. The operator's hands are then most easily parallel to the spine, and can rapidly strike the muscles on both sides of it, causing a vibratory effect which is communicated to the nerves as they emerge from the intervertebral space, and the effect is usually perceived in a peculiar and agreeable thrill."

* This illustration is from "The Art of Massage, its Physiological Effects and Therapeutic Application," by J. H. Kellogg, M.D. Octavo, 281 pages, bound in cloth, price \$2.25.

CASES.

In a report of the treatment by massage without medicine of chorea, or St. Vitus Dance in children, made by Children's Hospital in Paris, this is the summary:

"One hundred and eight (108) cases have been submitted to the treatment by massage. Of these 100 were in the first attack, at the beginning of the affection and severely afflicted; eight were on the decline. These were divided again into categories: 34 cases of medium intensity; 74 in which the agitation was as violent as could be. The 34 cases of the first class were all cured on an average of 28 days with 18 *séances*. Of the 74 more serious cases, 68 cases were cured in 55 days with 31 massages. There remained 6 cases, without success, chronic cases which finally got well in 122 days with 73 *séances*."

Case of muscular Rheumatism and Lumbago reported by Graham:

"Rev. E. B., an elderly gentleman, had been exposed to a draught of air on his back while sleeping in a steamboat berth on the Pacific Ocean. This brought on severe lumbago. When I first saw him, three months afterwards, he complained of a constant dull, tired ache in the lumbar region which made him prefer sitting to standing, and lying down to sitting up. Sleep was disturbed by the backache. His muscles were of the kind that rapidly respond to massage, neither too hard nor too soft, nor deeply imbedded in adipose. After twenty minutes of deep malaxation with percussion the patient enjoyed a good night's sleep, and next day stood up for three hours and wrote thirteen pages of a sermon. A few more applications of massage were given to confirm and improve on what had been done, and the patient made an excellent recovery."

Case of sprain and injury to tendon on front of left thigh reported by same observer :

"Mr. J. was a moderately corpulent, hale and hearty old gentleman about seventy years of age. Nearly three years after rupturing the tendon of his left rectus femoris he called to see me, and I gathered from him the following history relative to his case: In getting off a horse-car thinking it had stopped when it had not, he fell down, and, as it was with difficulty he could stand when he got up, he was taken home in a carriage. The tissues around the left knee-joint were swollen and ecchymosed. As he bore with impatience the restraint of rest which his physician put him under, at the end of a week he attempted to walk, but falling down two or three times somewhat deterred him from further attempts at this means of locomotion. Immediately following this came a *merciful* (?) illness of gastric origin, which kept him in bed for a couple of weeks. - At the end of this time the extravasation had been absorbed, leaving a depression above the patella, into which two fingers could be placed. Since then he had only been able to walk short distances, two or three squares or so, very awkwardly, and with his mind concentrated on the lame leg, for when he was off guard, which was quite frequently, he would fall.

"About this time he consulted me, and after three applications of massage he walked from his house around the Common and Public Garden—about a mile and a half. The following week he had three more séances, when he again tried his pedestrian powers more than his business gave him any occasion to do, and this time extended his walk considerably beyond that of the previous week, "with greater ease and comfort," he said, "than he ever believed he would, and without scarcely thinking of the lame leg." After three more *massages* he went out of town to look at a country residence for the summer, and being seated in a ~~rear~~ car, he thought they had not quite reached the ~~dépôt~~ he

wished to get out at. But when they started he discovered his mistake, and pulled the bell-rope, got out when the cars stopped and walked back to the depôt on the track a distance of over a mile. The carriage he had engaged was by that time gone and could not be had, for it was only a small country station. So off he started on foot, and walked from and to the depôt, over a hilly country, in all about five or six miles, enough to tire almost any one, he thought, and yet the lame leg felt no worse than the other next day. He continued to have such good use of the limb without any more trouble for four months longer, when he was taken with a severe illness, which kept him prostrate for a long time."

"Mr. C. A., had the structures on the anterior aspect of the left shoulder-joint severely stretched by the sail of his yacht changing position, so that the whole weight of his body came suddenly upon them, while the arm was jerked upwards and backwards. Prof. David W. Cheever sent him to me three months after the injury. The patient stated that pain and limitation of motion had been increasing ever since the accident. Under massage and vigorous passive motion, he made a good recovery."

Case of obstinate constipation:

"Seventeen years ago the writer *masséed* a patient who suffered from emphysema of the lungs, together with obstinate constipation. Besides general massage there was given special massage of the abdomen and liver, with percussion over the latter and pressure upon the chest-walls during expiration. Under this treatment alone, the stools, from being of a pale color, became natural and occurred twice daily, respiration was easier, sleep and appetite improved, and the general condition was much better."

The above cases are given as examples of what may be accomplished by *massotherapy*.

EXERCISE.

A celebrated French physician, Dumoulin, the acknowledged head of the profession in Paris, lay dying. His colleagues were sorrowfully gathered about his bed.

"Messieurs," he said, "I leave behind me three great physicians."

Each of his confrères, thinking he might be one of the three, leaned eagerly forward to hear the names of those upon whom Dumoulin's mantle would fall.

"They are Water, Exercise and Diet," said the dying savant.

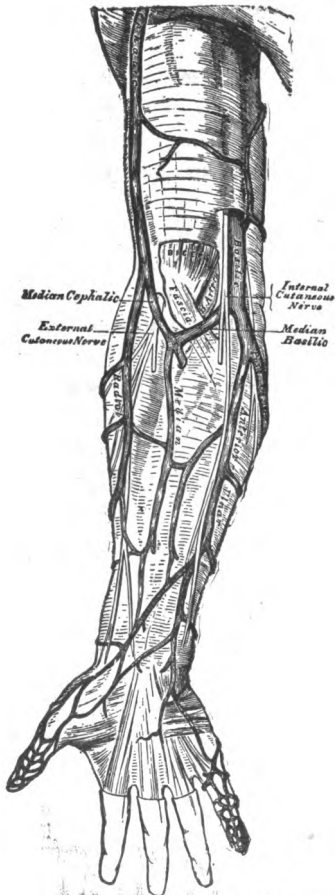
We have considered water in the foregoing pages to some extent. We shall now speak of *exercise as a curative measure*. We shall speak of it here only briefly and in a general way, laying down the *principles* that should govern the use of exercise in ill health.

In the vast majority of cases the first step in the production of chronic disease is local congestion.

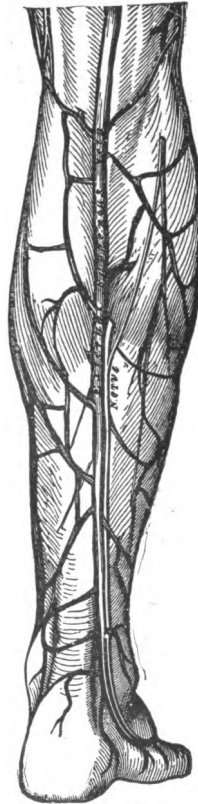
Take kidney disease for instance. At first the kidneys are irritated by the presence in the blood of poisonous material that must be carried out of the system through this organ. The irritation at once causes congestion of the kidney. In time, if this continues, the result is organic disease.

The same progress of events takes place in the production of disease in the liver, stomach, and most of the organs.

Now, by exercise we can bring the blood to the skin and lungs and other parts of the body used, and away from



SHOWING LARGE VEINS
OF THE ARM,



SHOWING LARGE VEINS
OF THE LEG.

the affected organ, thus relieving the congestion and thwarting the most important factor in the production of disease.

Again the human body, like a great city, must have drains and sewers through which to dispose of its waste. The sewers of the body are, in general, the skin, kidneys and intestines; if for any cause they become obstructed disease results. Now exercise of the right kind stimulates the work of these organs, by hastening the circulation of blood through them. It also introduces more oxygen into the system, which burns up the waste matters and purifies the blood. Thus exercise prevents and cures disease.

Notice, also, the fact that proper exercise will send fresh blood with new material to restore the diseased and weakened organs of the body.

It must be seen on the least reflection that the influence of exercise that can relieve local congestions, hasten the general circulation of the blood, carry poisonous matters out of the system, and stimulate the secretion of healthful natural juices, such as the gastric juice and bile, is of no little importance.

Drugs can be taken into the blood and carried to the nerve centres and stimulate them by irritation for a time, but, after all, are they not acting like the whip to the tired horse?

However this may be, **proper exercise** will always assist, not retard, the curative process.

What exercises are best for delicate people?

The one exercise that is almost universally recommended for delicate people, the one that is supposed to be

a panacea for all troubles is walking. "Take a walk in the fresh air," is the ready remedy that is offered to all ailing persons.

Dr. Pye-Smith, the editor of *Fagges Practice of Medicine*, says: "A long walk only makes them" (the bilious, dyspeptic persons) "more tired and unable to digest the heavy meal which their sense of exhaustion prompts them to eat." He favors exercise in these cases, but not that so commonly recommended.

And why is there such a peculiar prejudice for walking as a panacea for all troubles? It brings strongly into play but a portion of the body, and that the part most remote from the vital centres. It can be, and usually is, carried on with but the most limited movements of the chest and upper extremities, without causing deep inspiration or stimulating the flow of blood, as it should, through liver, stomach, and lungs. At the best, the muscles used in ordinary walking are about the only muscles exercised in the daily avocations of life. What the invalid and delicate person, what the sedentary man and woman needs, above all things, is more **arm, chest and trunk exercise**.

The first essential is that the exercise **shall not exhaust** the small stock of vital force the invalid or delicate person possesses. To suggest to such persons the gymnasium, the cricket-field or boat-rowing, is like suggesting to the laboring man, when he falls sick, a diet of turtle soup, quail on toast, and "Champagne Sec." The invalid lacks the vital capital to engage in such work as much as the poor man lacks the means to indulge in the diet mentioned.

Again: *Exercises for delicate or weakly persons should not be complicated.*

The object should be the exercise of the muscles, not mind. The less will power used in exercises with delicate persons the better, as nothing exhausts the strength quicker than fixing the attention and exerting the will to certain movements.

It is for the above reason that calisthenics, supposed to be the lightest and safest of all exercise, is really most dangerous for invalids.

The complicated movements and attitudes of the body in calisthenics require constant supervision of the mind and thus quickly fatigue the weakly person.

Dr. Geo. H. Taylor says of the calisthenics and body movement exercises:

"This kind of exercise chiefly tasks the nerves, especially the cerebro-spinal axis upon which all motive power depends. No wonder that feeble ladies, who are directed to use this kind of exercise, experiment with reluctance, and soon give over, conscious of their injurious effect on their already morbidly active nervous systems."

What is needed is the automatic swinging, gliding movements that can be carried on with hardly an effort of the will. These exercises are obtained on the pulley-weight, or home exerciser machines better than in any other manner.

Again the exercise for delicate people should be rather **slow and rythmical** instead of rapid. When one runs up a long flight of steps he uses no more muscular force than if he had walked up slowly. Yet, in the first case, he

reaches the top breathless and fatigued, and may not recover for hours. In the latter case muscular effort and recuperation go almost hand in hand. The heart contracts sixty times every minute from one year's end to another, but each and every contraction is followed by an interval of rest. This same principle should be applied in the use of exercise for the class under consideration. Fatigue of a few muscles used will be quickly recovered from, but that of the whole body not so quickly. It is for this reason that we recommend that the subject should rest upon a reclining chair or sofa, as far as possible, while making the prescribed movements.

Light-weights should be used. It should be borne in mind that it is not gymnastics (so called) that we want, but movements of the body, or parts of the body. The object of these movements is to strengthen the vital processes, such as respiration, digestion, and assimilation. It is not a large arm or shoulder that the weak person aims at, but sound lungs and a healthy stomach.

The preceding are the general principles that should govern the use of exercise and movements in the treatment of disease.

If these principles be adhered to no possible harm can be done, but on the contrary the greatest good.

Under the head of particular disease special exercise will be given.

GENERAL EXERCISES.

So much we have said in a general way in regard to exercise in the cure of disease. Now let us come down to the specific use of exercise, not alone in the cure of disease, but also in the preservation of health.

What shall ordinary, every-day men and women do about exercise? It is evident that busy people cannot spend the time, even had they the opportunity, to practice in gymnasiums. If such people are to take systematic exercise at all it must be in the home, with but little, if any, apparatus, and at odd moments, so as not to interfere with the daily tasks.

There are about five hundred muscles in the body, and we hold that each one of these muscles should be daily exercised. This is a necessity, if one is to retain a healthy body. It is Nature's inexorable law, that any part of the muscular system that is not used must degenerate. When a person allows the muscular system to degenerate, he, to that extent, becomes deformed, and departs from God's plan.

On the proper and harmonious relation between the muscular and the nervous system depends, to a great extent, the health of the individual. He must be a reckless man who would dare to disturb this God-given harmony by neglecting one part and over-developing another.

The theory that underlies all our educational systems is that the development of the brain is everything; that of the body nothing. Never was there a greater mistake. "It is not a soul, it is not a body we are training up," says

Montaigne, "it is a man; and we ought not to divide him into two parts." This idea should be carried all through life, that the body is as important as the mind; and that the muscular system is of the utmost importance in preserving the harmony between the nervous and vegetative systems, and thus is the conservator of health in body and mind.

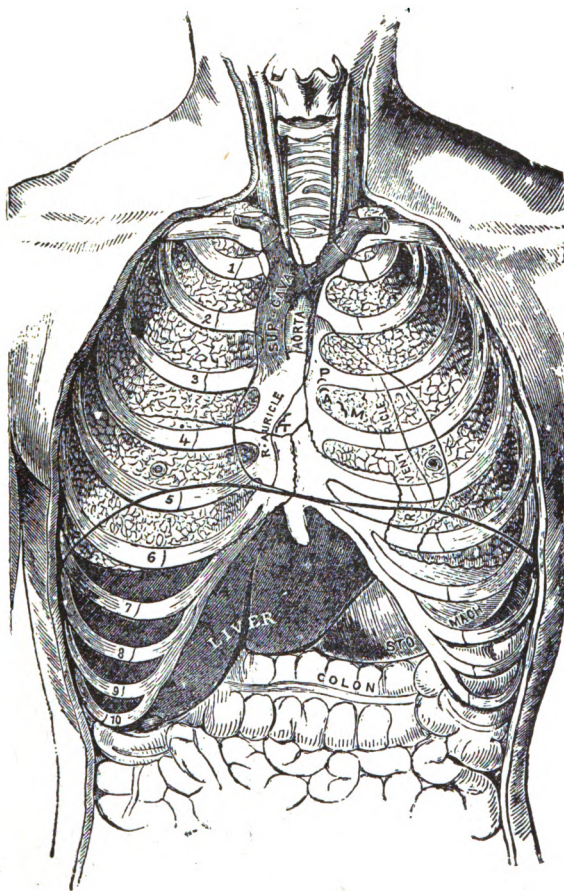
As we have said, there are about five hundred muscles in the body, and each one should be thoroughly exercised each day. How shall we do it?

How many muscles do you suppose you bring into use when you take a deep breath—a very deep breath—and then expel it with all your force? No less than *one hundred and forty-seven muscles*. Thus, by this simple act, you can exercise thoroughly more than one-fourth of all the muscles of the body. The muscles used in this exercise are mostly those of the neck, extending from the head and neck to the ribs—those of the upper part of the back and sides; and the muscles between the ribs. All of these are of great importance as regards one's health, and they are the very ones that are often neglected by the majority of men and women, especially those who lead a sedentary life.

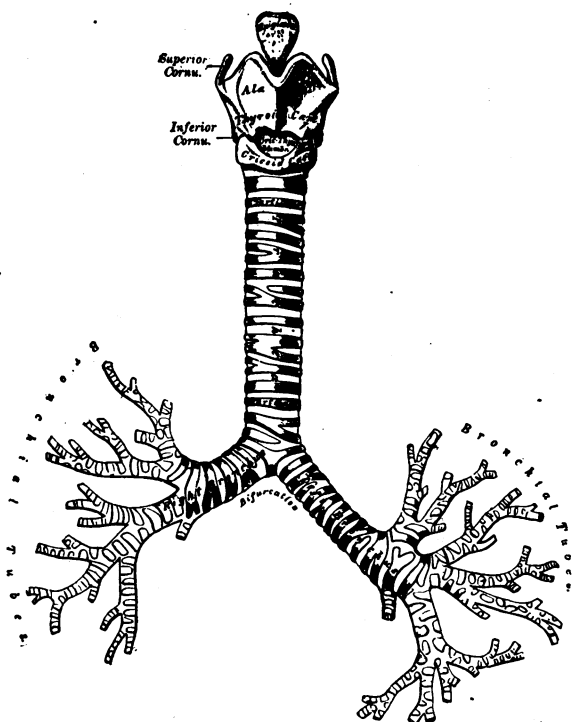
How shall we exercise these muscles? Let us give you some practical suggestions:

"FORCED RESPIRATION EXERCISE."

When you get up in the morning, before you are dressed, while your clothes are loose, stand erect, put the heels together, hands on the hips, and shoulders thrown back; now, while in this position, inhale slowly through



Lungs and Portion of Digestive Viscera.



TRACHEA AND BRONCHI.

the nose as deep a breath as possible; then expel every particle of air you can; now take five ordinary breaths, and then repeat what we call the "forced respiration." This will certainly make you feel dizzy for a minute when you first commence to practice deep breathing, but after a time you will become accustomed to it, and the uncomfortable sensations in the head will not appear. After resting a few minutes, or practising the other exercises we shall give, repeat the "forced respiration" exercise as given above. This should be repeated about five times during the morning.

But the morning exercise in forced respiration is not enough. Practice it frequently while about your work during the day. About once in five minutes, while walking, take a very deep breath and hold it while you walk ten steps; then expel it all. After a while you will have no difficulty in holding a breath while you walk thirty or forty steps. Remember to take in as much air as possible, and, with an effort, to slowly expel as much as possible. The muscular effort in expelling and inhaling, and the distension of all the air-cells, is the important part of this exercise. The mere act of holding the breath is of little value.

It would be almost impossible to over-estimate the importance of this one exercise alone, in preserving health and curing disease. In the first place, it calls into play and thoroughly exercises, as we have said, more than one-fourth of the muscles of the body. The continued practice of this exercise will at last lead to a full development of the one hundred and forty-seven muscles used in "forced respiration." Of as much importance as the muscle development is the influence of this exercise on the lungs themselves. It

tends to open the ribs; to bring fresh air into the remotest air-cells; to fully distend them and help to expel the mucus that collects there, and thus, by cleaning the air-cells and keeping them strong and healthy, forced respiration tends to prevent consumption, bronchitis and asthma. We say, in all deliberation, that if this exercise that we have set forth above were universally practised, consumption, that scourge of humanity,—that Moloch to which we sacrifice the lives of nearly one out of every four of our brothers and sisters,—would disappear from the face of the earth within the next fifty years. Let a family whose ancestors died of this dread disease, and who are doomed themselves to the same fate one after another, as they reach maturity,—let the members of such a family habitually practise this “forced respiration” exercise, and the enemy will be forever kept a bay.

Dr. G. W. Hambleton says, in his little book on the “Suppression of Consumption”: “Whatever condition of man’s habits, mode of life, and surroundings, has a tendency to reduce the breathing capacity, is a potential cause of consumption; and it is an active cause unless its action is counteracted.”

We know of no habit so easy to acquire and to practice better calculated to counteract this tendency than the habit of forced respiration.

Not only will the practice of forced respiration develop the muscles and strengthen the lungs, but it most decidedly increases the grace and beauty of the human form. This is of no little importance. It is every man’s, and especially every woman’s, duty to be as beautiful as possible. We do

not claim that this is man's or woman's only duty, or the first duty, but *one* of the duties. Now, a high, full chest is a very important element in making up the beauty of the human form. The full chest all can have by making the effort for it; the chest walls are as capable of being molded into the proper shape as is the clay in the hands of the potter. We have seen a person above thirty-five years of age make such a marked change in the shape of the chest in three months, by practising the "forced respiration" exercise, as to attract the notice of all her friends, and to make an alteration in all her dresses necessary. We claim that a flat chest and stooping shoulders are due, first and foremost, to slovenliness, and then to weakness. Pulling the shoulders back by braces does no good, but harm, in these cases, as this weakens the muscles that should of themselves hold the shoulders in place. In such cases the chest needs to be brought up in front by "forced respiration" exercises, and kept up by voluntary efforts, until it becomes a settled habit to carry the chest high. Then the chin must be brought into the proper position, not pointing upward and outward as it is usually carried, but pointing a little downwards, and brought in towards the neck.

It is interesting, in this connection, to refer to a habit that is said, by Blakely Hall, to be universal among that singularly healthy race--the Gypsies. This habit is what they call "eating the air." On rising in the morning, the men all go outside the camp to a neighboring stream, where they perform their morning ablutions; there they stand in a row, and each one gulps in as deep a breath as possible, and then gently pummels his chest with his fists for a moment. They

continue this exercise for perhaps five minutes, and then wash and return to camp. Such a habit, practised universally and persistently for many generations, has undoubtedly been an important factor in giving the Gypsy race that superabundant vitality and physical beauty that makes it the marvel of the age.

In a recent cutting from a medical journal appeared the statement that a physician of this city had practiced taking a deep breath and holding it every time he crossed the street. As a result of this habit, his chest measurement had increased several inches.

Walking for Health.

But enough on this part of the subject. There are other muscles of the body that need attention besides the one hundred and forty-seven used in taking a deep respiration. What shall be done for the three hundred and fifty, more or less, remaining muscles? If we are to keep the God-given instrument, the body, in as good order as it was when delivered to us, nearly every one of these muscles must be thoroughly exercised daily.

Well, more than a hundred muscles are concerned in locomotion, walking and running, and, as nearly every one walks more or less each day, these muscles get tolerably well exercised. We say tolerably well, and we mean just this. If one walks in a proper manner all these muscles can be sufficiently exercised while attending to each day's duties, and thus valuable time need not be wasted (?) in carrying on gymnastic exercises. Unfortunately, most people walk in a manner that does

them more harm than good, a manner that fatigues the person without giving any beneficial exercise to the hundred muscles concerned in locomotion. "Dawdling" is not walking, considered simply as an exercise. Dragging the feet along as if they were made of lead, and tied to the body with strings, is not a beneficial exercise. If one is to walk for exercise, he must walk with force and vigor ; there must be a spring and elasticity to the step, and a certain amount of will-power put into the walking ; the head must be erect, chest well up, and deep inspirations should be frequently taken. Such walking as this really exercises and develops the muscles of the lower extremities. Better walk half-a-mile in this manner, than five miles in the usual slouchy method. Of course, if one has to walk a long distance, he takes the easiest possible way of getting over the ground. But we are not writing for those who are fond of long walks, or have the time to take them. The majority of Americans walk as little as possible ; they walk only when they cannot ride. To all sedentary people we say, walk ; walk as much as you have time and strength for ; but, be it little or much, walk with a vigorous, elastic step ; with head erect, and lungs fully expanded. Let the ball of the foot come to the ground before or at the same time with the heel. Do not let the heel strike the ground first with a jar, as if you were walking on wooden stilts. As the foot leaves the ground let there be a *slight* spring, as if the muscles and tendons had rubber in them. Walking in this manner gives one an easy, graceful motion, that, when it becomes habitual, will enable one to walk many miles without fatigue.

So much for the manner of walking. How much shall we walk? This depends on the person. If one is a semi-invalid, the distance walked should not be great at first. Always stop this side of fatigue, that is, fatigue that cannot be recovered from in an hour's rest. Very gradually increase the distance walked, always taking care to walk in the manner mentioned above.

To all other Americans, men and women, we say, walk all you can; walk, instead of riding in cabs and cars; walk to business, or at least part of the way; walk while shopping or making calls; walk to church; and then throw in an extra walk of a mile or two for fear you have not given the muscles all the work they need. In all this walking cultivate a vigorous step, and pay attention to deep breathing.

The Other Muscles.

Next come the muscles of the upper part of the body, the arms and shoulders. To these we must give special attention, for these muscles, about one hundred and twenty in number, are almost wholly neglected by the majority of sedentary people. We most of us walk and climb stairs more or less, and thus exercise the muscles of the thighs and legs, but how few, aside from the manual laborer, give any vigorous exercise to the muscles of the upper extremities. ~ Sewing, reading, writing, all our work keeps us bent forward, with contracted chest, and muscles of the arms, shoulders, back and chest unused. This is not treating these muscles fairly and with justice. € They demand daily stretching; otherwise they must degenerate. In order to keep them in good condition, special exercises

must be practiced for a few minutes each day. These need not be fatiguing or difficult, and no special apparatus is needed. Bear in mind that we are not laying out a system for developing an athlete, but a plan by which the ordinary busy man or woman may, without fatigue or loss of time, do much to preserve health, or to regain it when lost. This system, or order of exercises, will bring into play all the muscles of the arms, shoulders, neck, back, chest and abdomen, and those muscles that are not properly exercised in ordinary walking. These exercises are designed for every one, for men and women, the strong and the weak, (even those confined to bed can take some of them). The time spent at them must be regulated for the individual, according to his or her strength.

It is well to have a certain time for exercising, and a certain system of exercises, to be followed in order. After a time, if the work be carried on faithfully, going through the prescribed exercises comes to be a matter-of-course, a habit that requires but little effort of the will, and hence is not fatiguing. The difficulty is in getting the habit formed. We have in mind an ingenious plan followed by a clergyman of our acquaintance. His health threatened to give warning, and he determined to check the trouble by taking systematic exercise each morning. He laid out his plan of work, and then, recognizing that the spirit, not the flesh, is weak, he devised a plan for forcing himself to keep up his system. He wrote out a contract and had it properly witnessed, whereby he agreed to forfeit one dollar each morning that he failed to take his regular exercises. These fines were to be given to the cause of foreign missions. At first the

finer were rather frequent, and as his salary was not large, the heathen derived more benefit from our clergyman's health exercises than did the originator of them. Gradually, however, the habit of morning exercises became fixed, and then it was no longer a hardship, but a positive pleasure. How great a thing is habit! It is the conservator of energy and will-power; the chisel of the sculptor that may gradually mold the life into forms of beauty and strength! How important are proper *health habits* to one's happiness and one's work!

Make haste very slowly in all these exercises. Do not take too many at the beginning. Then increase according to your strength. If you are a very busy man or woman, the only practical time to take the exercises is in the morning, immediately on rising. If delicate, and you can spare the time, the middle of the forenoon and the middle of the afternoon are the best hours.

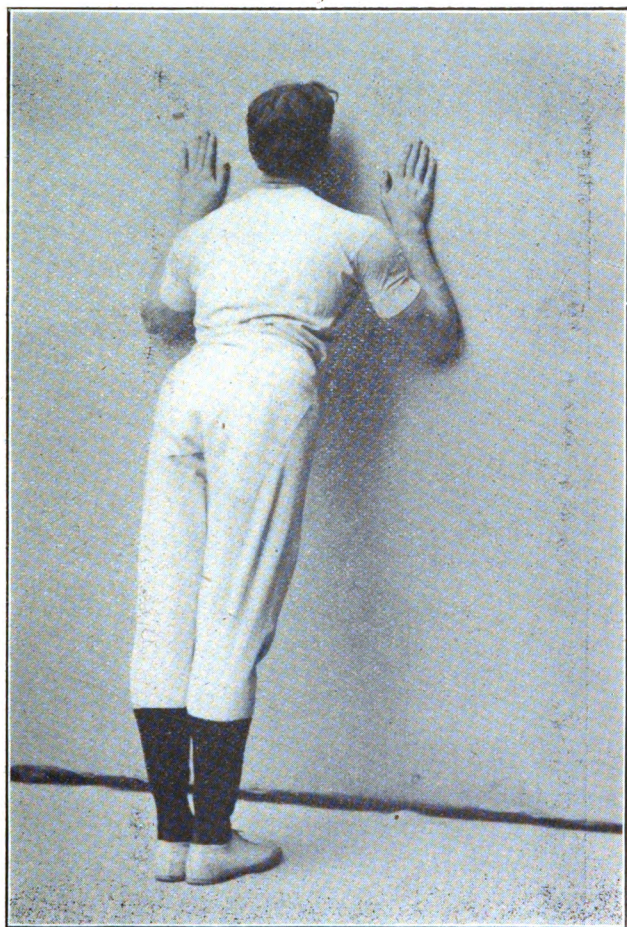
THE SYSTEM.

Exercise No. 1.

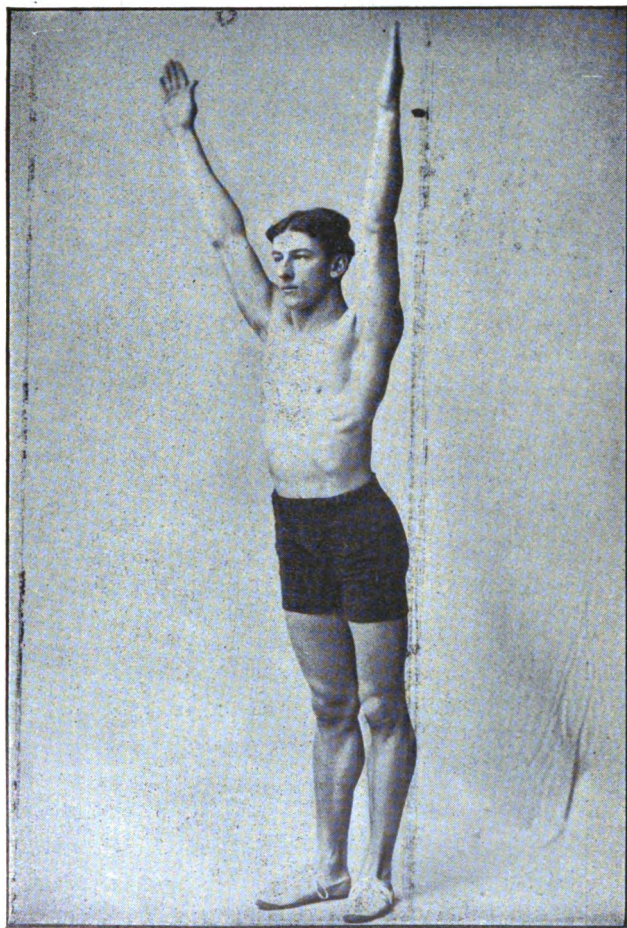
Stand erect, with heels together and hands on hips, the body loosely clothed. Take a deep breath, drawing in through the nose as much air as possible. Then slowly expel it. Repeat this three times. Walk about the room for a minute and then take

Exercise No. 2.

Approach the wall with the arms held horizontal and parallel in front of the body. As soon as the tips of the fingers touch the wall stop; put the heels together. Now



EXERCISE No. 2.



EXERCISE No. 3.

place the hands against the wall, and, with the knees unbent, lean forward, bending the elbows until the breast touches the wall. As the body goes forward take a deep breath. Push the body back to the upright position by straightening the arms, and as the body goes back expel the air from the lungs. Repeat three times at first. After a week, gradually increase the number of times, and also the distance you stand from the wall.

This is an admirable exercise. It tends to develop the large muscles on the front of the chest; to improve the shape of the chest in front; and to strengthen the back of the upper arms. This exercise is good for every one, but especially good for ladies, and any one with a tendency to weak lungs.

Exercise No. 3.

This might be called the "engine exercise," as it is somewhat the motion that is made in working a hand fire-engine.

Stand erect, arms straight, and held horizontal in front. Now move the arms up and down with vigor, keeping the elbows unbent. As the up and down motions continue gradually separate the arms until they are moving up and down at the sides. Then gradually bring them together again. Separate and bring them together in this manner three times. This work exercises the muscles on the top of the shoulders and tends to make one broad-shouldered.

Now, having exercised the muscles on the front of the chest, the top of the shoulders, and back of the arms and the hands, you can walk about your room a few minutes taking deep breaths, and at the same time you can exercise the muscles of the forearm by practicing

Exercise No. 4.

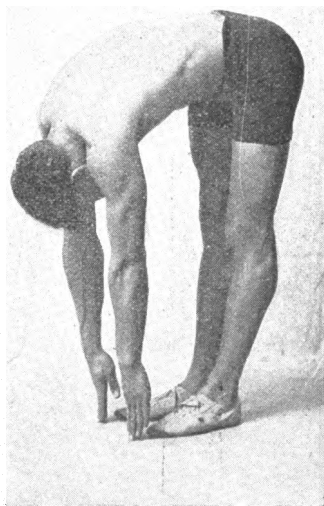
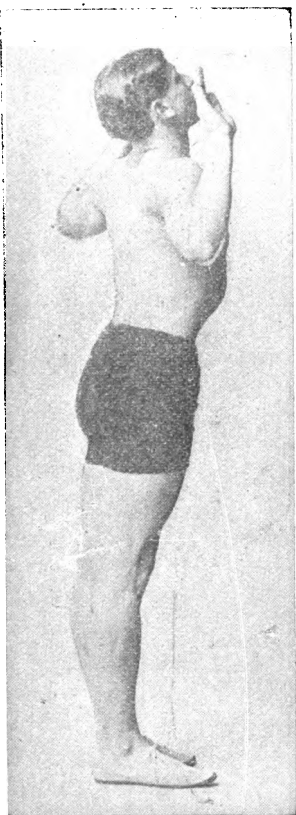
While walking, put the elbows close to the sides, with the forearms held horizontal in front; hands loosely closed; fingers up. Now shut the hands tightly and try by a voluntary effort to bend the hand on the wrist so as to bring the fingers as near as possible to the forearm. Then bend the hand backwards as far as possible. During these movements the arms themselves are held quiet. This exercise will make the muscles on the forearm ache a little, and will gradually strengthen the wrists.

There is still one more region of the arm that needs to be exercised, and then the hundred muscles of the arms and shoulders are finished: The muscles on the front of the upper arm, notably the large muscle called the biceps, or two-headed muscle, needs attention.

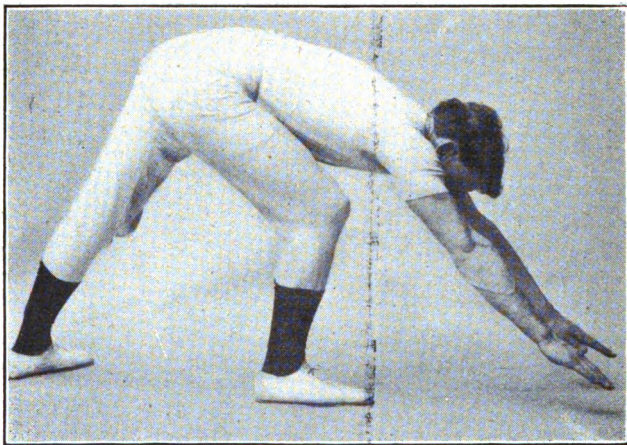
Exercise No. 5.

Stand erect; shoulders back; elbows close to the sides; hands clenched. Bring the closed hands quickly and strongly up towards the shoulders, as far as possible. Let this be done with a sharp jerk, and the arm held flexed for an instant. Then, keeping the elbows still rigid at the sides of the body, straighten the arm as forcibly as you flexed it. Repeat these movements ten times each day for the first week, and then slowly increase the number and force of the movements, up to fifty or one hundred times.

Having rested a minute, by walking about the room and taking deep respirations, commence on a very pretty compound exercise designed to use the muscles of the back and loins, and the lower part of the back of the neck.



EXERCISES FROM "HEALTH-CULTURE."



EXERCISE No. 6.

Exercise No. 6.

Stand erect, with hands on hips. Now step forward one long pace with the left foot; bend the left knee so that the left leg from the knee down will be perpendicular; the right knee remains unbent. Now, while in this position, throw the hands up over the head with arms straight, then bend the body forward and touch the tips of the fingers to the floor. Next, moving the trunk of the body as little as possible, the body still inclined forward, throw the hands as high as possible over the head again, and then again touch the floor. Then resume position. Repeat the manoeuvre, starting with the right foot in front.

During the exercise take in a deep breath as the arms go up; expel it as the arms go down.

Repeat this exercise five times with each foot.

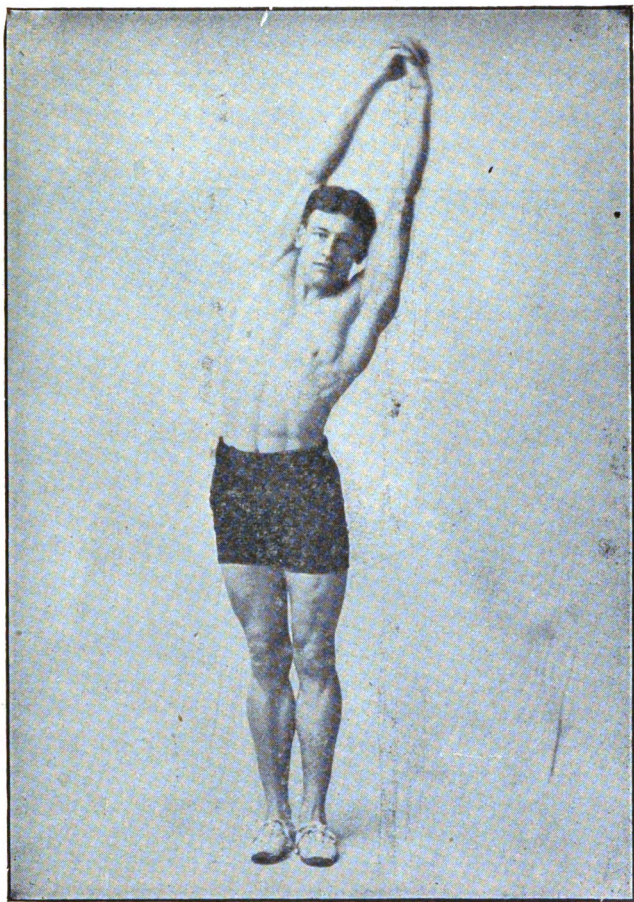
However complicated this exercise may seem on reading a description of it, five minutes' practice will make one expert in doing it. This will be found a most invigorating exercise, and will put the body into a glow. It has stirred up and set the blood to rushing through the hundred muscles of the back.

There is a very important set of muscles that have not yet been worked at all. In fact, we think they are the most important muscles in the body, and we are sure they are the muscles that are most neglected in all our daily occupations and in every system of physical culture. These are the large muscles of the abdomen, the muscles that enclose all the important organs engaged in the digestion and assimilation of food. Our belief is that man stands on his stomach, figuratively speaking; that vitality is meas-

ured by the digestive and assimilative capacity (not digestive alone), and if these functions are well performed a man or woman is in that happy state described by the philosopher Locke, in his famous "Sound Mind in a Sound Body" phrase. Paraphrasing it a little, we would say of digestive and assimilative powers, that "He that has these two has little more to wish for; and *he that wants either of them will be but little the better for anything else.*" The last part of the sentence, at least, is correct, as every dyspeptic can testify.

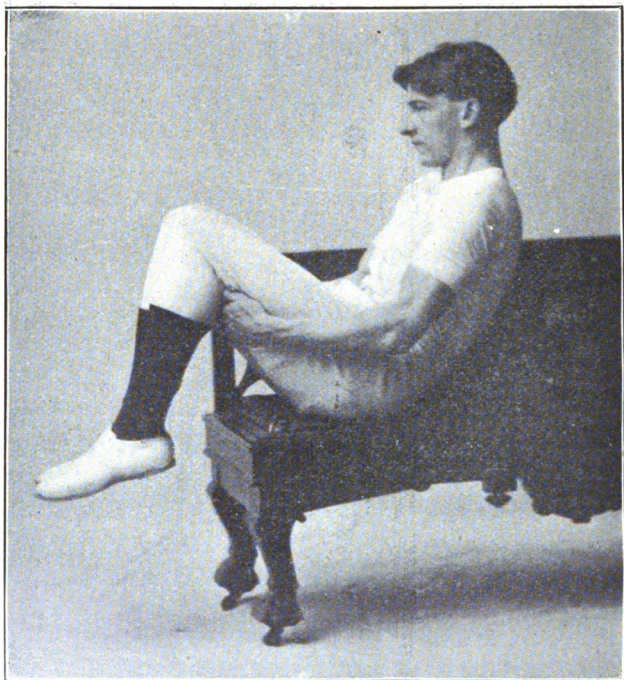
Now, weak abdominal muscles are always found with poor digestion, and *vice versa*. The abdominal muscles in dyspeptics are thin and tender. On attempting to press the hand over the stomach, or lightly pummel in this region, in such cases much pain is caused. This would not be the case if these muscles were firm and thick. Hartelius, the Swede, made the same observations. He says: "It is known by experience that strong abdominal muscles are found where there is good digestion; and that, on the contrary, weakness in these muscles is accompanied by weakness in digestion. It has also been established that movements which bring the abdominal muscles to contract strongly have a strengthening influence on the digestive organs."

Whether or not one has good digestion, he has no business to neglect the twelve large muscles that enclose the abdominal organs. In the following exercises we give an easy method for exercising and developing these muscles. It is what might be called the "rocking chair exercise," although the rocking is done without a chair.



STRETCHING EXERCISE.

From Health-Culture.



EXERCISE No. 7.

Exercise No. 7.

Sit on the edge of the bed, leaning a little forward so that the body forms a right angle with the thighs; clasp the hands across the abdomen, or over the hips, with fingers on the abdomen, so that they may feel the hardening of the abdominal muscles during the exercise. Now let the trunk of the body go back upon the bed rather slowly, and, as the trunk goes back, the thighs are to be drawn up so that the right angle between trunk and thighs is maintained. Now, by a little spring of the shoulders and a swing of the legs, come into the original sitting posture again. As you come into this position, bend the body quite forward towards the knees. This puts the liver and stomach "in chancery," and they get thoroughly squeezed. Rock back and forth in this manner twenty times at the start. In the beginning, if a person is not strong, a number of pillows may be placed behind the subject, so that he need not go too far back, and thus less effort will be required in regaining the upright position.

The abdominal muscles are exercised here in holding the trunk of the body at an angle with the thighs: the more obtuse the angle the greater the work put on these muscles; the slower the motion is executed the greater the muscular effort required. Now, by regulating the angle of trunk to thighs; the distance which the trunk is allowed to go back; and the velocity of the movement; one can regulate the exercise according to one's strength. It may thus be employed to advantage by the athlete or the invalid, either man or woman. It will be particularly useful to dyspeptics and bilious people, especially if in the

morning, just before taking this exercise, one drinks a glass of hot water. This exercise will then churn up the water in stomach and thoroughly wash its walls. Let dyspeptics and the invalid practice the exercise with great moderation at first. This exercise will also be of particular use to the "fat person" who has that unsightly deformity, a protuberant abdomen. In such cases the abdominal muscles in front are flabby and relaxed, like over-stretched India-rubber, and thus they bow out into a balloon shape, allowing the abdominal organs to fall forward. As these muscles become strong they grow thick, hard, and are shortened, and run in a straighter line from the ribs to the pelvis, and thus do away with the deformity.

This exercise is very beneficial for people suffering from constipation, and for ladies with pelvic trouble. (See note on later page).

But space forbids us to dwell further upon the advantage of the "rocking-chair exercise." To sum up it should be practiced by everyone. It preserves health if you have it, and restores it if you have it not. Practice it daily, for, as the conscientious mother was wont to say when she gave the boys their nightly treatment with the raw-hide, "if you don't need it now you will to-morrow, so my work is not wasted."

Exercise No. 8.

The muscles beneath the shoulder-blades now need a little work. Stand with the left side towards the wall; the feet twelve inches apart, right hand on the hip; left arm horizontal and straight out from the side; fingers just touching the wall. Now, placing the hand against the wall, lean



EXERCISE No. 8.



EXERCISE No. 10.

over towards it as far as possible, without, however, bending the body from a straight line. The elbow bends backwards and upwards so as to be as high as the head as the body approaches the wall; then push the body back into the perpendicular position. Take in a breath as the body goes towards the wall, and expel as the upright position is resumed. Repeat this movement three times with each arm.

Another exercise for the muscles beneath the shoulder-blades and many muscles of the arm, especially the back of the arm, is the striking motion.

Exercise No. 9.

Stand erect, with the closed fists at the shoulders. Strike forward strongly with one fist, reaching out as far as possible. Do this five or ten times. Now repeat these movements with the other. Then repeat them, alternating first one and then the other. When you grow quite strong strike with both at the same time.

Some of the deep muscles of the thigh need attention as the walking exercise will not bring these strongly enough into play.

Exercise No. 10.

Stand erect and kick each foot, alternately, up behind as high as possible, keeping the thigh vertical and bending the leg at the knee. Do this twenty times with each foot; this is for the muscles on the back of the thigh. For the muscles on the front of the thigh, stand erect with hands on hips and with knees unbent; slowly carry the left foot up in front as high as possible. Hold it there a second and

then repeat the motion with right foot. Do this five times with each foot.

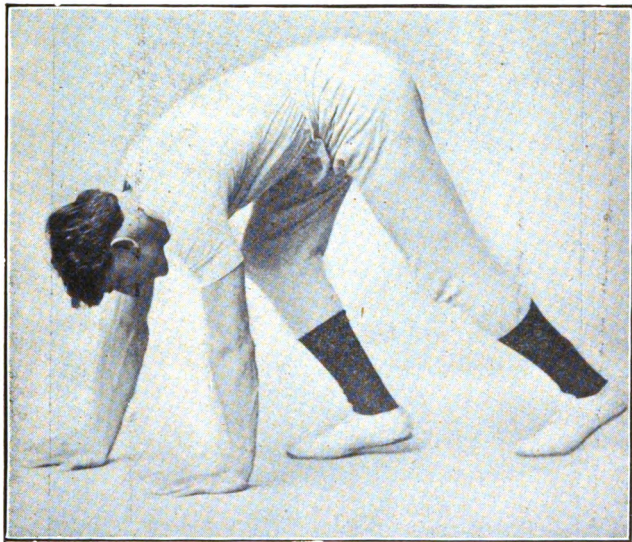
Exercise No. 11.

This is the final exercise, and a most important one. It is our favorite. It might be called the "Nebuchadnezzar Exercise," for although, in this, one does not "eat grass like an ox," he takes the ox position. It is recorded that Nebuchadnezzar was a better man morally after he had been turned out to pasture for a time, and we are sure he was a better man physically, for there is no exercise that uses so many muscles and so stimulates the lungs, liver, and heart as does the "all fours" exercise. It is not a dignified exercise, and yet it is simply coming back to first principles. Man crept before he walked. Dignified or not, it is highly beneficial, and we heartily recommend it. It must be taken with great moderation at first. Going once around the room would be sufficient for a weakly person, and for a quite strong one ten circuits of the room would be sufficient. It is highly commended for bilious people.

"What is this wonderful exercise?" you ask.

It is simply walking on hands and feet--nothing more. Try it!

This completes our list of exercises. There are a dozen more that we might have given, but we are sure that if the ten exercises given above are practiced that very few of the five hundred muscles of the body will have escaped a stirring up. We are sure that if these exercises are practiced for twenty minutes each day for three months, together



EXERCISE No. 11.



USING EXERCISER.

with the treatment laid down in this little book, no invalid or semi-invalid, or delicate person, or any one else, will fail to get a great benefit.

“But, it is so much trouble to exercise,” you say.

True, it is a little trouble; it requires some self-denial, and the giving up of certain things.

But it is so much trouble to live at all.

Look at the number of hours you spend in simply taking care of this body; eight hours more or less in sleep besides several hours resting on chairs or sofa; two or three hours at table; an hour or two in dressing; and how many hours are spent in *providing* and preparing food and clothing and warmth and a habitation for this poor body. Now if so much time *must* be spent daily in caring for the body is it too much trouble to spend twenty minutes more to make it a healthy body?

Health is the normal condition. God intended all men and women to be healthy. Every new discovery of science, every disease germ or cause brought to light, be it bacteria, microbe, or seed of any kind, tells that sickness is not due to a “mysterious dispensation of Providence,” but to the disregard or breakings of natural laws by oneself or one’s ancestors. Even the “pestilence that walketh in darkness” is now seen to have its regular laws for its growth and spread, and it can be checked and banished by sanitary measures.

As for the minor ailments, those thousand and one physical troubles that keep one from being at his best, we can but admit, if candid, that we or our ancestors are to blame for them,

DYSPEPSIA.

This is the American disease. It is, comparatively speaking, almost unknown in some of the European countries, while here it is all but universal.

The causes of the disease are due partly to the American mode of life. We are a restless, hurrying people; we can't take time to eat. We can't spare the stomach time to digest the food, or start the digestion, before the blood is drawn away from the stomach to the brain by the demands of business or mental work. A dog when he has had a good dinner lies down quietly and gives the stomach a chance to digest it. Not so with the American.

Now, if you propose to *cure* your dyspepsia you must strike at the cause or causes of it, whatever has brought it on. Simply removing the results by treatment will not prevent the reappearance of the disease again if the same causes are at work. Like causes produce like results every time. This law is inexorable, and you cannot afford to try to change it in your case. You will find it hard to kick against the pricks.

So, gentle reader, if you have been in the habit of "bolting" your food, and then rushing back to business, you must change all that. Habit is everything. To the habitual bolter it will seem all but impossible to eat slowly. The throat will seem to seize the food before the teeth are through with it. There will be an irresistible desire for a swallow of tea or coffee or water, anything to wash down the mouthful of food. You can't understand how others can be so slow, and sit and chat and laugh while eating.

My dear sir, or madam, your haste in swallowing, and the desire for fluids with every mouthful, is simply *habit*. By a continued effort you can change these habits, and then it will become second nature for you to enjoy your meals, and to properly masticate them.

Gladstone, whose brain carries as much care and work as that of twenty ordinary men, overcame the tendency to form a habit of bolting food by determining that each mouthful of food should be chewed, masticated, thirty two times, and then counting to see that it was done. In a short time the habit of thorough mastication was formed.

You can't bother with such trifles as this you say. Let us see: You are a nervous dyspeptic at forty-five years of age, and spend about half your life fighting your stomach.

Gladstone, by paying attention to trifles, and forming good habits of eating and exercise, had thirty to forty years more of hard work than you have had.

Does it pay to attend to trifles and thus have the proper health habits?

We shall say no more on the subject. You know as well, or better than we do, what the habits are that have caused your dyspepsia, and it lies in your hands to correct them.

But the confirmed dyspeptic will not be cured by a simple change of the habits that caused the disease. In fact the more carefully he tries to arrange his diet and habits the worse his dyspepsia seems to be. Something more must be done.

Confirmed dyspepsia ends in more or less marked

catarrh of the stomach. The coats of the stomach become coated with a slimy mucuous that prevents the glands from properly acting, and that coats over the food and prevents the gastric juice from acting on it.

You complain that your mouth is sticky and foul in the morning, that you have a bad taste, and that your tongue is thickly coated.

My friend, your stomach is probably ten times more foul than your mouth, and they both need cleansing. Give them a bath.

The first step then is *to flush the stomach* and dilute the fermenting mucous. Do it with pure, cool water; to use hot water is to paralyze the gastric glands and destroy the solvent power of the gastric juice. Drink slowly a tumbler full of cool water an hour before breakfast.

Having commenced the cleansing process in the upper part of the alimentary canal, continue the good work by cleansing below, namely by "flushing the colon." This is of as much importance as the other.

When you thoroughly cleanse the colon it does not remain empty, but is filled with the debris from above, and thus the stomach is relieved of its burdens.

Now, then, having cleansed and purified the stomach by the means mentioned above, take care that you put proper food into it.

The danger the dyspeptic has to guard against is fermentation in the stomach and intestines. This it is that makes him feel bloated, causes the heart to palpitate, brings on dizziness in the head, and faintness, and the thousand and one symptoms that make the dyspeptic's life a burden.

As far as possible you must avoid foods that ferment easily.

Sugar and starch are the two classes of foods that ferment. Avoid them—avoid sweets and vegetables and fruits—don't eat potatoes above all other vegetables. Leave cake, pastry, ice cream, and sweetened tea and coffee alone. Good lean meat, boiled or baked, does not ferment; toasted bread does not ferment easily. Live on these exclusively for two weeks. They contain everything necessary to support the waste taking place in the system. Within three days your mind will be clearer, and you will begin to have more "vim" and strength than you have had in months.

After two weeks of this diet, add salads to your dinner bill of fare. If a drink be needed at meals, hot milk and water, one cup, may be taken.

If hungry and faint between meals, take a glass of hot milk, beaten with an egg-beater or well-shaken.

This system, if carried out steadily, together with the restorative influence of systematic exercise and massotherapy (see page 67), will cure dyspepsia.

We recommend twice cooked bread, that is, toast, or the German Zwieback, as the second cooking changes much of the starch of the bread into dextrine, and advances digestion by so much.

One hour before eating the patient is to slowly sip a large goblet of cool water. After taking the cool water churn the stomach five minutes with the muscle-roller. This will loosen up the mucous and cleanse the stomach glands. Then the water carries it off.

Let us remind you again that massage lessens the time

of stomach digestion from one-third to one-half.

This plan of treatment has cured thousands of desperate cases of dyspepsia.

After a month or two, according to the severity of the case, a little more liberal diet is allowed, salads and coarse vegetables being the first to be added. At all times avoid sweets. Be sparing of starchy foods, especially potatoes.

Above all things avoid thinking and worrying about your stomach. Lay out your plan of diet for a week and then give no more thought as to what you shall eat and what you shall drink.

The time will certainly come, if these plans be carried out, when you can eat and digest nearly everything.

Exercise of the right kind is of immense importance in the cure of dyspepsia. The principles that should govern its use in this disease are given on a preceding page. Particular exercises suited for dyspeptics are given under the head of biliousness and jaundice.

Note:—In catarrh special care must be given to the excretory functions of the skin, the lungs, the bowels and the kidneys, for the system must be kept clean and free from impurities. Bathe daily and take a sweat bath once or twice a week. Breathe deeply, the use of the Wilhide's exhaler will be found very helpful in securing deep and curative breathing. Keep the bowels open, drink freely of pure cold water, which will have a favorable effect on both the bowels and the kidneys. It will also be well two or three times a week to thoroughly flush the colon, and this way remove the impurities.

CASE—Man, aged 37, banker's clerk. One of the worst cases of nervous dyspepsia we have ever seen. He informs us that for the past six years he has been under almost continuous treatment, some of the time at the hospital, and part of the time by one of the highest-priced physicians in this city. But he is absolutely worse to-day than when he commenced.

In appearance he is sallow, dark and emaciated; his countenance has a drawn and anxious look, as if he had not a hope or a friend in the world, a look that is characteristic of stomach diseases. Symptoms too numerous to mention. Pain about the heart, with marked palpitation at times. Immense eructations of gas from the stomach, accompanied with a suffocating sensation, pain and fear of dying unless the gas can be raised. Vomiting of sour food some time after eating. Constipation, sleeplessness at night, with drowsiness during the day. The most despondent man we ever saw outside of an asylum.

Treatment.—For months we treated this patient at intervals with every known medicine reputed as a cure for dyspepsia. In addition, we put him on the strictest diet, avoiding foods, as far as possible, that would ferment in the stomach. We tried the "hot water and meat cure," the peptonized milk diet, the whey cure.

At times he improved for a short time, and would then relapse. Then we tried washing out the stomach by a stomach tube. This was a revelation. Such a mass of catarrh and fermenting food as we would obtain from that man's stomach by the tube, hours after eating, we never saw before nor since,

We can truthfully say that the first time we ever saw this patient with a hopeful countenance was after a week's trial of the *new method*. He had stopped all medicine, and was a little more free in his diet. He reported his constipation as relieved, less pain and gas in stomach, better appetite, and his skin, as every one could see, was clearer, and his eye brighter.

Had he been willing to use massage or the muscle roller, we are sure his relief would have been more rapid.

From this time on he steadily improved and was finally cured. He gained *very decidedly in weight and strength*, and was a wonder to all his friends. He now, after three years, remains in good health.

The following letter from a patient who had taken the treatment speaks for itself :

Auburn, N. Y., October 21, 1897.

The Roller has been in use every day since I received it, and is simply invaluable. It is used for rolling the stomach after drinking water according to your instructions for indigestion, and was of great service. It was also very beneficial in rolling the bowels for constipation. I am sure its use has helped me very much. The Roller is certainly a wonderful little invention, and I congratulate myself every day that I am fortunate enough to possess one. Very truly yours,

W. P. WRIGHT,

JAUNDICE AND BILIOUSNESS.

The treatment of these troubles should be by "flushing the colon" and exercise. "Flushing the colon" has a decidedly stimulating effect on the liver. This fact has been recognized by some of the leaders of the medical profession, and injections of water have been recommended by them as a cure for jaundice.

The measure recommended above is a step in advance of simple injections of cold water, and is a specific in biliousness and jaundice. Carry this out faithfully as you value good health.

Diet is a matter of importance in these complaints. *Don't eat too much.* A little fasting won't kill you. Biliousness is often accompanied by a ravenous, morbid appetite, the "poison-hunger," induced by the presence of bile in the stomach. Resist this appetite and unload the colon and a natural appetite will take its place.

Do not eat meat more than once a day during the attack, sometimes it may be omitted altogether for a few days.

Bread and milk, the latter slightly salted and hot if you can take it so, will do very well for a time. Then in a few days add solid food with fruits and coarse vegetables.

Exercise is of immense importance in these troubles, especially exercise that stimulates the flow of blood through the liver.

The best out-door exercise is moderate boat rowing, (not racing); next, horse-back riding.

For the house nothing equals the work on the exerciser, especially those movements that bring into use the muscles of the stomach; those that cause the body to fall forward in stooping positions; and those that cause deep breathing. Every deep breath forces the liver down, presses the blood out of it and invites new blood to come in. Now if you bend the body forward strongly at *the same time that you take a deep breath*, you have the liver "in chancery," crowded from above and below, from front and rear, and you squeeze it like a sponge. That is what your liver needs, my bilious friend. Better stir it up this way than with calomel. We know of no way that this can be done so well as we have said as by boat rowing or the use of the "exerciser."

There is one exercise that is particularly good for biliousness that may be carried out at home without apparatus. That is walking on all fours, on the hands and feet. This is not difficult to do but very fatiguing. It is prescribed for the fashionable ladies of New York by a lady physician, who has charge of the best known ladies' gymnasium. We can certify from experience that it is an excellent exercise, but must be taken with moderation at first.

CONSTIPATION.

We hardly need to speak about this after all that has been said. You should know by this time that "flushing the colon" relieves the effects of the constipation at once. Now, when this is done, diet, exercise, muscle-rolling of the abdomen (see page 66) and regular habits, remove the cause and cure the disease. And first as to habit, *make it a religious duty to try at least to get a natural evacuation every day at the same hour.* Persevere. Remember that habit becomes second nature.

If you are not a dyspeptic eat ripe fruits and coarse vegetables and cracked wheat and similar cereals.

Then exercise. The work that we have recommended for biliousness is equally good for constipation.

This trouble can never be *cured* by drugs; it can always be cured by carrying out the suggestions given above.

The cure is in your own hands: Have you the courage and perseverance to carry it out?

THE HYGIENIC TREATMENT OF CONSTIPATION.

The instructions which Sir A. Clark asks his pupils to give to their patients for the management of simple constipation are as follows: 1. On first waking in the morning, and also on going to bed at night, sip slowly from a quarter to a half pint of water, cold or hot. 2. On rising, take a cold or tepid sponge bath, followed by a brisk general toweling. 3. Clothe warmly and loosely; see that there is no constriction about the waist. 4. Take three 'simple

but liberal meals daily, and, if desired, and it does not disagree, take a slice of bread and butter in the afternoon. When tea is used, it should not be hot or strong, or infused over five minutes. Avoid pickles, spices, curries, salted or otherwise preserved provisions, pies, pastries, cheese, jams, dried fruits, nuts, all coarse, hard and indigestible foods, with a view of moving the bowels, strong tea and much hot liquid of any kinds, with meals. 5. Exercise at least half an hour twice daily. 6. Avoid sitting and working long in such a position as will compress or constrict the bowels. 7. Solicit the action of the bowels every day after breakfast, and be patient in soliciting. If you fail in procuring relief in one day, wait until the following day, when you will renew the solicitation at the appointed time. And if you fail the second day, you may, continuing the daily solicitation, wait until the fourth day, when assistance should be taken. 8. If by the use of all these means you fail in establishing the habit of daily or alternate daily action of the bowels, you may try, on waking in the morning, massage of the abdomen, practiced from right to left along the course of the colon; and you may take at the two greater meals of the day a dessert spoonful or more of the best olive oil. It is rather a pleasant addition to potatoes or to green vegetables.

Treated upon physiological considerations, Sir Andrew believes that in the vast majority of cases simple constipation may be successfully overcome without recourse to medicine.--*New York Medical Times*.

We would emphasize the fifth, seventh and eighth points in the above statement as being particularly valuable.

KIDNEY DISEASE.

What is *the* cause of kidney disease? In one word—*irritation*.

Irritation of the kidneys may be brought about by anything that puts either improper work or any undue amount of it on these organs.

The dram-drinker loads his blood with alcohol, and the poor kidneys have to eliminate the poison. The liver fails to do its work properly, and the blood is charged with uric acid and bile poisons, which the kidneys try to get out of the system.

The stomach or colon is at fault, and the blood is charged with poisonous ferment. Again the kidneys are called upon to do overwork.

You catch cold and the millions of pores of the skin are closed up; the kidneys, the "scape-goats" of all the other organs, bear the burden of sins. What is the result of all the overwork of the kidneys, due to the elimination of unnatural matters?

Irritation, we have said, produces congestion. Congestion is the first step of chronic or acute inflammation. The second step is degeneration of the kidney cells.

Then chronic Brights, or kidney disease, is established. How else can you get it? You don't inherit this disease. It does not come as a mysterious dispensation, without fault on your part. It is not caused by a microbe, a germ; it is not due to contagion. You, you alone, are responsible for the disease, though, of course, you have brought it on through ignorance.

If the disease is established, and the degeneration of kidney cells has passed a certain point there is nothing to be done except to set your worldly affairs in order. But kind Providence has originally given us three times as many kidney cells as we actually need, so that when even the majority of them are hopelessly degenerated, we may yet have enough sound cells left to carry on the functions of life.

What's to be done in case the kidneys are affected?

1st. Get the liver, stomach and intestines into working order, and thus cease to make the kidneys do their work.

We have already indicated in the previous pages how this may be accomplished, and we need not repeat the remarks here.

2nd. Get the skin actively at work, and in this manner relieve the kidneys.

The functions of the skin may be stimulated by bathing and frictions. Warm baths should be frequently employed. Better still is the Turkish bath. This may be improvised at home, or a very fine home Turkish bath may be purchased for a reasonable sum. In the home Turkish baths the patient's head is not in the bath, and thus he or she does not take the hot air into the lungs. This is the only form of Turkish bath that is permissible for the patient with advanced kidney disease.

Next, curative measures, directed to the kidneys, must be resorted to.

In "flushing the colon" with hot water, the liquid passes directly in front of both kidneys, so that the influ-

ence of the heat on the kidneys is direct. It cannot fail to stimulate them to action, without, at the same time, irritating them. This is an important measure. Again, the kidneys can be thoroughly washed out by means of the colon. (See appendix on this point).

In kidney diseases the cells of the organ degenerate, and the kidney tubes become clogged by the debris. Thus the functions of the kidneys are interfered with, and the fluids that should pass off are retained in the system and cause dropsy and other troubles. Now, if we can wash out the kidney tubes, the organ, as a whole, can resume work and relieve the system of the retained poisons.

We know of no better means of doing this than to first flush the colon at night to cleanse it out; then inject a pint of warm water and *retain it*, and immediately lie down. Before morning this water will all have been absorbed from the colon and carried through the kidneys. Thus they, the kidneys, will have been cleansed by a non-irritating substance, and stimulated to increased action without being irritated.

This plan of treatment should be followed up for weeks or months if necessary.

In chronic kidney diseases diet is of great importance.

Skim milk, butter milk, and whey should be used freely, often to the exclusion for a time of all other food. We have had patients live on these latter three articles exclusively for several weeks at a time, with the utmost benefit. The kidneys were thoroughly washed out by the amount of fluid passed through them.

NERVOUSNESS OR NERVOUS EXHAUSTION.

Bear in mind that nervousness, as it is commonly called, is not a sign of too much nerve force, but of too little. The battery (that is, the nerve centers), is not too strongly charged, but too easily touched off—too quickly discharged. There is a disproportion between the nervous system, on one hand, and the muscular and vegetable system, on the other. As a consequence of this, too much of the bodily attention is directed to the nervous system.

Remember then, that in treating nervousness we have to treat *nerve irritability*.

This will give us the clue to the proper course to pursue, in order to bring about a cure.

The causes of American nervousness are many.

The first is our dry stimulating climate.

We are descendants of European races that are phlegmatic rather than nervous, good feeders, and inclined to embonpoint, rather than to leanness. Yet in a generation or two the descendants of these people have become thin-faced, sharp, eager, nervous—in fact, typical American.

It is not the restless, pushing life incident to a new and rapidly growing country that is the main cause of this change in type, but, as we have said, the dry, irritating climate. Another cause is the neglect of physical training, the neglect to keep the muscular and vegetative system on a par with the nervous system. Instead of giving less attention, in this country, to the training of the body, to sports, to exercise, than is given in Germany and England,

we ought to give more. In this manner we might overcome the climatic influences on the nervous system. School children in this country should have more play and less study than in Europe, and should have greater attention given to their proper physical culture.

Without dwelling longer upon the causes of the trouble, we must try to offer practical relief to the sufferer.

What shall you do, you say, to overcome your nervous troubles, your neuralgias, your irritability, your insomnia, your fears, your depression?

These are practical questions, and shall be answered in a practical common-sense manner.

In the first place you must sleep more.

"Oh, but I can't; that is just the trouble. I don't sleep well at all."

Drop the idea that you can't sleep, and be convinced that you can; this is essential. Then cultivate the sleeping habit. There is everything in habit. "Habit is second nature." Your principal business at first should be to try to become a "sleepy-head." Instead of sleeping five or six hours, learn to sleep eight or nine. Go to bed early and get up as late as you can. Remember that it is the early worm that gets caught.

Take a "nap" after every meal, if you can't before eating. It is a little better to sleep just before eating, but most nervous people cannot do that. A "nap" after eating does no harm, but on the contrary, a great amount of good, if you take it in the right manner.

One should not sleep lying down flat after a hearty

meal, as this causes a congestion of the brain, and makes one feel heavy and stupid for hours.

Sit in a reclining chair, or with half a dozen pillows prop yourself up on the bed so that the shoulders and head will be high. Then doze off for fifteen minutes or half an hour. You will wake up as refreshed as if you had had a night's sleep.

"You can't get to sleep," you say. Well, try—then try again—then keep trying until you form the habit. After the habit is formed you will feel dozy before you are quite through your dinner.

One of the best means to bring sleep after you are properly fixed is to go through the following mental exercise :

Count to yourself, not aloud, "one;" then "one-two;" then "one-two-three;" then "one-two-three-four;" and so on, commencing at one on each addition. You will not be able to get as far as sixteen before you are in the state where "sleep knits up the raveled sleeve of care."

If you can't sleep then *rizzle*—this is the next thing to it. Here is what is said of it :

"Do you rizzle every day? Do you know how to rizzle? One of the swell doctors in town says that it is the most wonderful aid to perfect health. 'I masticate my food very thoroughly,' he says, 'and make sure to have my family or friends entertain me with bright talk and plenty of fun. After dinner it is understood that I am going to rizzle. How do I do it? I retire to my study, and having darkened the room, I light a cigar, sit down and perform the operation. How to describe it I don't know, but it is a

condition as nearly like sleep as sleep is like death. It consists in doing absolutely nothing. I close my eyes and try to stop all action of the brain. I think of nothing. It only takes a little practice to be able to stifle the brain. In that delightful condition I remain at least ten minutes, sometimes twenty. That is the condition most hopeful to digestion, and it is that which accounts for the habit animals have of sleeping after eating. I would rather miss a fat fee than ten minutes rizzle every day.'"

In the majority of cases the "Rizzle" after a time will develop into a "nap."

Then sleep at night more. If you are subject to insomnia or sleeplessness this is the way to do it.

In the first place you should have taken exercise during the day or in the evening sometime (not just before going to bed). It has been shown by the physiologists that the waste products of muscular work enter the blood and cause sleep when carried to the brain. This "muscle waste" in the blood is Nature's morphine, so to speak, and it is the only safe narcotic to take. Then a half hour before retiring take a *tepid* bath, neither hot nor cold.

Try a Massage Roller treatment following the bath. After you have gone to bed relax the mind and all the muscles, then over a light blanket, if you can, let some person give you a good rolling and often before you know it you will be in a quiet sleep.

If you have had an early dinner you may find your night restful by taking a light supper before retiring, eating only that which your experience shows to be easily digested, and never highly seasoned or stimulating foods.

If you have a nervous stomach, avoid heavy foods, and avoid any food, however light, that contains sugar or starch. In short, avoid always and especially at night, food that will ferment in the stomach.

Before eating, and in place of the bath, "flush the colon." This in many cases has a remarkable effect. It seems to lessen the nerve irritability and cause sleep. It brings the blood from the head down to the trunk of the body, a very desirable thing in insomnia. To assist in keeping the blood from the brain a piece of ice wrapped in a handkerchief should be held to the lower part of the spine a few minutes. This reduces brain congestion and favors sleep. Use several pillows so as to raise the head and shoulders, or sleep in a reclining chair. Many subjects of insomnia are sleepy when sitting up but wide awake when lying down. This trouble is met by learning to sleep while sitting up.

By assiduously practicing the above, you can conquer insomnia, and in time become a famous sleeper. Don't give up until you sleep ten hours a day.

This is the first thing to do to restore your shattered nervous system and cure your nervous troubles.

The next thing is food. People with nerve troubles both sleep and eat too little.

The most important class of foods for nervous troubles is fatty foods. Unfortunately it is just this class of foods that people with nerve troubles have an antipathy for.

The nervous system contains in health a very large amount of fat—phosphorized fat. Fat or oil is a nerve food.



USING THE EXERCISER.

The next thing is *exercise*. We have already said something on that score.

Exercise without fatigue is the indication in nerve troubles. Don't exhaust the already exhausted nervous system.

Avoid *long, exhausting* walks. Avoid exercises that call for much use of the will or make drafts upon the attention. These exhaust one quicker than hard muscle work. Avoid dumb-bells, calisthenics, fencing, and boxing. Practice gentle walking, deep breathing, slow rowing, and the exercise on pulley-weights or exerciser. The latter can be used lying down if necessary. This is by far the best, in fact, it is the only form of house exercise suitable for the nervous person. The movements on it are nearly as automatic and easy as rowing. Use the muscle-roller or massage at night, an hour before bed time. This discharges the nerve irritability and draws the blood from the brain.

To sum up then—For all nervous troubles, whether organic or functional,

Flush the colon,

Sleep,

Regulated Diet.

Exercise.

CASE 1.—Mrs. N., 35 years of age. Suffers from almost constant pain in the head. Is very nervous, sleeps but little, and is really afraid that she will become crazy unless she gets relief. Carries on a very large boarding-house, and has great care and much mental anxiety. Thinks she must give it up.

Commenced the *new method*, "flushing the colon" at

night, and then sleeping with the head and shoulders high. Saw her twice after that. She reported herself as sleeping well and feeling better in every way. She still carries on the boarding-house, and is enlarging its capacity.

CASE 2.—Mr. C., age 39, gold-beater by occupation. Formerly addicted to the excessive use of alcoholic drink. Has given it up for past four years. Has given up tobacco for the last five months. For more than five years he has been troubled with nervousness; sleeps badly, gets easily excited, then blood rushes to his head, and has blue lights flash before his eyes; gets dizzy and hands tremble and are unsteady. He feels weak and greatly depressed in spirits; has no courage or vim; bowels constipated. The most marked symptom is a morbid fear. He will start to go somewhere and then turn back because of an indefinable fear. Often stands on the curbing afraid to cross the street. Cannot reason himself out of this state as an attempt to do so makes him dizzy and confused, and causes the spots before his eyes. He is afraid to go into society and avoids strangers. His appetite is capricious, tongue coated and bad taste in the mouth, breath offensive. Has taken bromide by the ounce and other drugs innumerable.

This is a brief outline of his case. It would take pages to describe all his symptoms. He was treated by the *new method* at his home. He was ordered to use the flushings at night—ice to the back of the head, and to sleep in a semi-reclining posture. Diet and exercise were both arranged.

He was extremely sceptical of this plan of treatment at first. He could not see how he was to be cured without

taking medicine. We told him that as he had taken drugs for five years with no relief, his system evidently did not respond to medicine, and another plan must be tried. His first improvement was in the relief of his constipation and in sleeping. This gave him courage to persevere. In a week he was enthusiastic. He became more cheerful, appetite and strength returned. His nervousness became gradually lessened. The morbid fear was the last symptom to disappear, but at length he became free from it, and in his own words "felt like a man again."

The following is from an editorial from the N. Y. *Medical Record* of July 26th, 1890. The italics are ours. The cases reported show that not only may the milder nervous diseases have their origin in the colon and be relieved by "colon flushing," but even insanity in some cases may be thus cured.

"It will be readily admitted that many of the milder affections of the nervous system may be caused by excessive and long-continued accumulation of feces in the large intestine, or rather by the abnormal state of the system which permits or arises from such an accumulation. Since the discovery of the nature and poisonous influence of ptomaines, and kindred bodies, and of their formation in certain abnormal conditions of the digestive tract, the dangers of accumulation of fecal matters in the large intestine have been more generally understood. That insanity could be due to such a cause could not be admitted without direct proof.

In the *Alienist and Neurologist*, January, 1890, Dr. Moyer relates three cases in which grave mental disturbance

seemed to be due to disorder of the colon, with accumulation of feces in it, and was cured by emptying of this organ.

In the first case, a married woman, without inherited or acquired neurotic tendency, and in every way healthy, had, eighteen months before, begun to suffer from obstinate constipation, loss of appetite, general debility, and loss of flesh. At the end of six months occasional attacks of fainting were observed, the attacks beginning with pain in the left hypochondrium and a sense of suffocation. During the last six months the attacks became more frequent, and were attended by vomiting. There was tenderness in the region mentioned, but there was no fever. The patient gradually developed marked symptoms of insanity, restlessness, sleeplessness, incoherence, confusional hallucinations, and non-systematic delusions of a depressed and melancholic character. Upon examination there was found great wasting of muscles and fatty tissues, contraction of flexor tendons of the thigh, weakness and irregularity of the pulse. The skin was dirty-brown, and covered with branny scales. The eyes, heart, lungs, kidneys, and sexual organs seemed normal after careful examination. There was no fever. The mental symptoms were as described. Upon the abdomen a line of superficial dullness extended transversely across on a level with the umbilicus, and in the left inguinal region a lobulated mass could be felt, indistinctly outlined. A copious rectal injection of water, containing two ounces of listerine and one drachm of common salt to the pint, was given by means of a tube passed well beyond the sigmoid flexure. Upon removal of the tube it was found to be coated at the end with dark, waxy,

adhesive fecal matter, unlike that which had been washed away. After ten daily injections, which brought away each time portions of this hardened mass, the bowels had begun to move easily, the mind had become clear, the appetite had greatly improved, and the patient had, in every way, entered upon convalescence.

In the second case, a constipated, debilitated, panophobic melancholic, with suicidal tendencies, who had refused food for months, and had required artificial feeding, was treated with a large injection, which relieved him of an immense quantity of stored-up feces. He ran away, and shortly afterward wrote an intelligent letter for his clothing.

A third case is related in which a young man of neurotic tendency, who had become morose, suspicious, and quarrelsome, was completely restored to health by a course of copious rectal injections, or flushings, which brought away a large mass of dark, tarry, offensive feces.

"Two important suggestions are made: that accumulation of feces is not disproved by the occurrence of frequent passages; and that treatment should be by large, repeated, high injections, purgatives doing only harm."

PELVIC TROUBLES IN FEMALES.

"Fools rush in where angels fear to tread," will not be the verdict, we trust, on what we have to say on this subject. Indeed we could not lightly or rashly speak upon a matter so important, in a sense, so sacred, as this.

When we consider, for a moment, the influence of the mother upon the family, the responsibilities that rest upon her, and the importance of her having good health, not only that she may be comfortable in body, but that her mind may be clear and her temper sweet and helpful; when we consider, in addition, that the large majority of pelvic diseases are in those who have been mothers, and, directly or indirectly, are a consequence of maternity, we begin to see how important the subject is.

How many American women suffer from these troubles it would be hard to estimate. Perfect health here is almost as rare as unfilled teeth. A very large number we know about, because they overcome their natural modesty after a time and seek the physician's aid. A very much larger number "suffer and give no sign," except to those who, with practiced eye, can read in the tired, depressed countenances the evidence of an inward drain upon vitality.

We hold that it is a woman's duty to be cheerful, strong, and as beautiful as possible. She is, or she should be, the light of the household. But how can we expect her to be cheerful and beautiful if not well?

It is to this class of sufferers, the women who have not been sick enough to seek the physician's aid, or, having sought it, failed to find relief, that we address the following

remarks. We propose to tell her how to help herself. The measures we suggest can do no possible harm, will *cure* the large majority of milder uterine diseases, and will benefit all. If you are already under a physician's care, he will tell you, if he is intelligent and conscientious, that these measures are an important aid to his efforts.

In order that you may intelligently assist in the treatment of your difficulty, it will be well for you to know something about the conditions that are invariably present and the causes of this class of diseases.

There is one condition that, practically speaking, is present in every uterine trouble, and that is

CONGESTION.

Whether the trouble be tumors, or displacement, or enlargements, or morbid discharges, congestion will always be present. Sometimes it is a cause of the troubles, sometimes it is an effect, but in the large majority of cases it is both.

Another condition that is almost, if not quite, as common in these troubles, is

DISPLACEMENT.

The displacement may vary in direction and in degree but it is sure sooner or later to be present. There is always displacement downwards, at least a sinking or dragging down of the organs. Next in frequency, and associated with this, is *displacement backwards*.

These two conditions, congestion and displacement, are the important ones to overcome. When these are cured the other troubles will for the most part fade away.

Now why should women be thus troubled? Did you ever stop to think that woman is the only female animal that walks upright, and hence the only female where the pelvic organs tend to sink down into the pelvis?

The natural position of the four footed animal prevents descent of the organs; while the natural position of the woman tends to cause it. Hence women ought to have stronger natural supports for the pelvic organs than any other female.

We believe that naturally she has, but that by bad habits of living these supports become weakened and disease results.

"What are these habits," you ask?

Let us take the most common one, the habit of constricting the waist by lacing and by suspending the skirts from a line just above the hips. "Oh! but I never lace tightly! see here!" and the indignant fair one draws in her abdominal muscles with an effort and shows that the hand can be slipped in between the corset and the abdomen.

Well, my dear Madam, we will admit that *you* are not trying to cut yourself in two exactly, as Mrs. Jones does, but you must admit, on your part, that your corsets and your skirt bands prevent the free movement of the abdominal muscles back and forth with every respiration. You would appreciate the importance of this free movement of the abdominal muscles if you knew that, with each movement of these muscles in breathing, the pelvic organs in natural conditions rise and fall. Every time the abdominal muscles move outwards the pelvic organs rise; every time these muscles are drawn in in expelling the breath the

organs fall. This natural rise and fall takes place twenty times per minute, twelve hundred times per hour, all day long.

But when you put your constricting bands around the waist, and hold the muscles of the abdomen still, the organs fall and stay fallen; there is no more rise until night, when the clothes are removed. So you see that your habits of dress, even though you don't lace, tend to cause displacement of the pelvic organs.

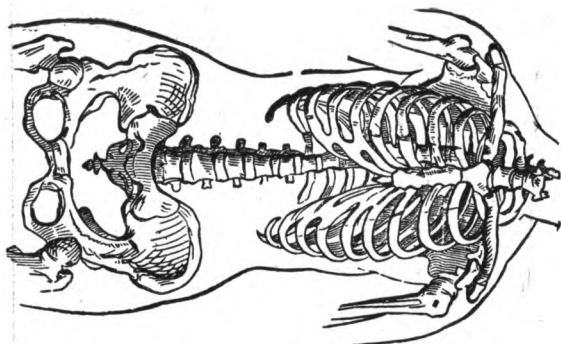
Not only does constricting the waist force these organs down, and keep them there all day, but in time the ligaments, the natural supports of these organs, the guy ropes, so to speak, become permanently stretched, and then the organs fail to rise even when the clothing is removed.

Further, constricting the waist interferes with the return of blood from the pelvis and thus favors passive congestions of the organs.

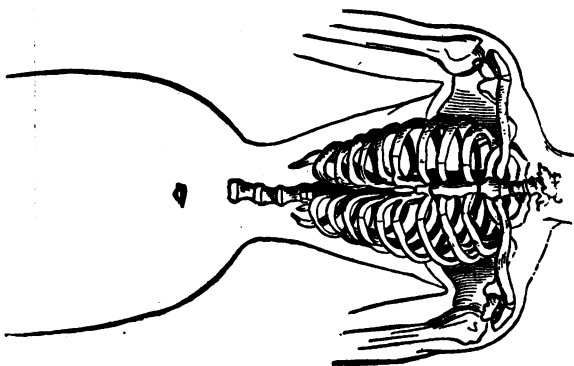
Now all this sinning against Nature's laws and plans may be carried on for a long time without causing any great damage *if the general health is good*. So soon, however, as the general health deteriorates, from any cause, from maternity, from sickness, from trouble, from confinement to the house, from lack of exercise, from care and hard work, the conditions are all present to concentrate the manifestations of the ill health upon the pelvic organs. Thus you have "womb trouble."

The real difficulty is bad habits and bad nutrition of the body; the manifestation of it is in the pelvic organs.

When once the trouble is seated there, it in itself still further deteriorates the general health and thus perpetuates



SKELETON IN NATURAL FORM.



SKELETON IN CONTRACTED FORM.



Venus de Milo.

the disease. Action and reaction goes on until the poor woman becomes a confirmed invalid, with all that that means to herself and family.

We do not expect that any remarks of ours will cause the disappearance of the corset from our sisters in general, but we do hope the sufferers will consider this matter seriously and try to take the shackles from the abdominal muscles. This can be done now without sacrificing the shape — (far be it from us to suggest anything that would really lessen a woman's beauty. There are health waists made with and without bones that meet all the requirements of both health and beauty.

The importance of the general health in preventing pelvic disease is generally overlooked. The physician and the patient alike are too apt to look upon the trouble as a local one, and the deterioration in general health as induced by the local difficulty, instead of the local difficulty resulting from the general ill health.

This is not the view of the celebrated Graily Hewitt, F. R. C. P., professor of the diseases of women in the University College, of London, and former president of the Obstetrical Society.

He says: "An extended experience has enabled me to submit a further, and as I believe, a most important generalization on this subject. What I have to say, in fact, amounts to this, that alterations in the shape and position of the uterus are rarely witnessed except in individuals whose general strength has become seriously impaired by a systematic, and often a lengthened practice of taking little food. The term 'chronic starvation' appropriately design-

nates the condition, and a long course of observations has convinced me that it is a most important factor in the production of the class of diseases above alluded to."

"There appears good grounds for believing that, excluding accidents and injuries, the primary defect, the first step in the downward course, leading finally to established local disease, is a general weakening or impairment of the nutrition of the body generally."

Without stopping to dwell further on the causes of pelvic disorders, we will consider what can be done for their relief.

There are four things to be aimed at in the treatment of all diseases peculiar to women. These are:

1st. Improvement in general health.

2nd. Relief of the local congestion.

3rd. Relief of the local displacements.

4th. The strengthening of the natural supports of the pelvic organs, so that when the displacements are cured they will stay so.

Is there anything in the above propositions that is not common-sense as well as physiological? Anything that could be objected to by anyone?

In making a practical application of these principles we think that the history of a real case will illustrate the treatment better than in any other manner.

A lady came to our office with the following history and symptoms: Married, had two children. Had good health until two years ago. She had a tired and worn look; she is rather thin and pale. Complains of pain in the back, fatigue in walking or working about the house, constipated,

poor appetite, sleeps badly, nervous, and has morbid, excessive discharges. She is really unfit, she says, to attend to her household duties. The pelvic organs were displaced downwards and backwards. They were congested and nearly double their natural size, and, of course, much too heavy. They were literally packed into the pelvis and bound there by their size and weight. The abdominal muscles were flabby and weak, and it was reasonable to suppose that the ligaments supporting the pelvic organs were relaxed and feeble.

Now, what was to be done to restore this woman to health, and make her a fit wife and mother again?

We might have lifted up the displaced organs and put a prop under them in the shape of a pessary. If this were well and carefully done, and if no inflammation were excited by the foreign body, the patient would have had some relief — *while the prop was there*. But when it was removed, the trouble would have returned.

We did not put a disagreeable foreign substance within our patient's body.

We first ascertained if our patient really wished to get well; this being clear, we asked her if she was willing to take the necessary steps, and put herself to the necessary trouble. We assured her that there was no *drug* known to us that had the power, when taken into the blood, to lift these organs into place, and make their natural supports strong enough to hold them there. We assured her that unless she was willing to assist us, to co-operate and persevere in the home-treatment, she had better not commence.

When we had explained the condition of affairs present

and the means we used for the cure, she readily consented to try.

We instructed our patient to lie down an hour in the forenoon, and an hour in the afternoon. As congestion and falling of the pelvic organs downwards was present, she was to lie with her *hips higher than the shoulders and waist*, in order that the organs might fall by their own weight towards the waist, instead of down into the pelvis. This position relieves the congestion of the pelvic organs at the same time, because it favors the outflow of blood from them. A very simple illustration we often use to show the importance of position in relieving local congestion. When one has an inflamed hand or foot, and the hand or foot hangs downwards, in a minute it begins to throb and swell, and then pain intensely. Why? because this position increases the congestion. Now, put the hand over the head for a minute, or the foot upon the table, and notice the change. The redness and swelling lessens, and the pain almost disappears.

What is true of the hand or the foot is true of the pelvic organs. Therefore our patient was instructed to lie with the hips higher than the shoulders.

We suggested a simple but effective plan, invented by a lady patient with a similar trouble. This was to put a common chair in the bed, the chair resting on the front of the seat, and the top of the back. This is the position that nurses have, for ages past, placed chairs to make a support for the back of their patient.

Now, it was to be used to support the patient's hips. Pillows and a blanket were to be placed on the chair back,

and our patient was to lie with the hips on the chair back, and the knees supported over one of the rounds or the bottom of the chair seat. She could have a pillow under her head (not the shoulders), so as to be able to read or knit in comfort while in this position, thus bringing the abdominal muscles into play. This free movement of the abdominal muscles would cause an up and down movement of the pelvic organs, and favor the loosening of the adhesions, and a more rapid circulation of the blood. Then the old and worn-out material would be removed, and new material for nourishment brought in. These deep breathings give a gymnastic training to the uterine supports.

After lying in the above position as long as comfortable, our patient was to turn on her face with the hips elevated on two or three pillows. This position likewise favors the return of blood from the pelvis, and in addition causes the organs to fall forward into their natural place.

When tired of this position she was to lie on her left side for a time, the hips raised on two or three pillows, *the left arm behind the back, and the breast close down to the bed.* In this position take as long breaths as possible, Then reverse the position and lie for fifteen minutes on the right side, with the hips elevated, and the right arm behind the back, thus bringing the right breast close down to the bed.

In addition to this, she was to have the foot of her bed elevated eight inches by blocks under the legs, thus continuing during sleep the good work commenced in the day.

These directions, with the explanation of the reason for

them, and the illustration of the proper methods, constituted the first step in treatment.

In addition, she was instructed to take, every night, an injection of a pint of warm water, with a half cup of molasses in it, for the purpose of moving the bowels.

The next step, which was explained to our patient at her next visit, was the "colon flushing," (see page 22.)

This treatment, "flushing the colon," does good in these cases in several ways. In the first place, as has already been explained, it stimulates the stomach and liver, increases the appetite, and favors the assimilation of food. If the celebrated Dr. Graily Hewitt is right in saying that semi-starvation of tissues is the great cause of pelvic disorders in women, then whatever increases the appetite and favors the absorption of nutriment benefits these troubles. That "flushing the colon" does just this there can be no manner of doubt.

Again, colon flushing relieves local congestion in the pelvis. When the washerwoman keeps her hands in hot water for a time they become white and shrivelled, because nearly bloodless. The hot water has driven the blood out of them. This is exactly what we can do to the pelvic organs with colon flushing. The hot water in the colon passes up behind and to the sides of the pelvic organs; it is retained there some little time, and thus the heat relieves the congestion and softens and soothes the swollen and inflamed tissues.

Injections of hot water in the front are very *much* less effective, as in the latter case the injection is not retained, and only touches the pelvic organs at an extremity. In

the former case, "colon flushing," the heat is applied for some time on at least three sides of the affected organs. (

Again, the weight of the considerable quantity of water in the colon at one time tends to push the pelvic organs towards the front of the abdomen, and thus the displacement is removed. "Colon flushing, then, acts in three ways in the treatment of female disorders, and should be used in all cases. Some employ it every night, but our patient was instructed to use it every second night, and to commence with but a quart of the hot water at first, and gradually increase until two quarts could be taken without pain or discomfort.

The next step was to strengthen the natural supports of the pelvic organs, so that when the organs had been brought back to their position they might be retained there.

The ordinary supports are ligaments and muscular tissue, running off from the sides of these organs and attached to the sides of the pelvis. These supports act as guy-ropes. Other muscular supports form a floor below the pelvic organs.

Now, when the organs are misplaced these supports have become weakened and stretched and need to be shortened and strengthened. They must be exercised and then, like the biceps muscle of the arm, they will grow thick and strong.

Every movement of the abdominal muscles brings these muscles supporting the pelvic organs into play. These latter gain most in strength when freed from the heavy weight of the enlarged organs they have carried so long.

Therefore, we instructed our patient, as we have already said, to practice taking long, deep breaths — abdominal breathing — while lying down with the hips elevated.

Dr. George R. Taylor says on this subject:

“Increase the pump-like action of the chest, and it will be found that the displaced pelvic viscera will return to their normal position.

“This fact evidently affords an important suggestion as to the legitimate means of *cure* for the class of invalids suffering from pelvic disorders.”

Next, we suggested that she either buy an exerciser or have her husband improvise a pulley-weight machine, so that while lying down she could take the movements that would develop the abdominal muscles. These movements consist in grasping the handles and letting the weight draw the arms upwards and backwards over the head. This is done without muscular exertion on the patient's part. As the arms go up, thus lifting the ribs, the patient takes a long, deep breath. Next, by a muscular effort, the hands, with the arms unbent, are brought down to the thighs.

This movement calls into play the abdominal muscles as well as those of the arms, shoulders, and each movement causes the pelvic organs to rise and fall, and thus exercises and strengthens their supports.

To sum up, then, we suggested plans: 1st, to replace the organs in their natural position and relieve the congestion and excessive weight; 2nd, to improve the general nutrition of our patient; and, 3rd, to strengthen directly the natural supports of the pelvic organs.

Now, what was the result of this treatment?

Fortunately we had a patient who could understand the methods we had laid out for her, and who had perseverance to carry them out.

At the end of a week she reported an increase in appetite and less pain and discomfort in back.

In two weeks more she had gained a pound and a half in weight and could now take a hundred movements on the exerciser, (using the lightest weight,) whereas, at first, twenty movements were enough.

In another week the gain in appearance was marked. Skin was much clearer, and cheeks and lips had a little color. Patient had more vim and eye was brighter, more cheerful and hopeful. The pelvic organs had ceased to occupy her thoughts to the exclusion of everything else; this in itself was a sign of improvement. The patient finally made a complete recovery.

There is not much more to be said on the subject of the treatment of pelvic disorders in females. Anything that is curable by medical treatment will be relieved by following the above lines of treatment persistently. We could give numberless cases of cure by this method, cures too, that had been treated for months, with no good result, by the usual burning, scraping and blistering methods, aided by external and internal supports.

The objection we have to these later methods, is that attention is directed to the results and not to the cause of the trouble, and that the benefits derived from them, if there be any, are but temporary.

By the methods we advocate the seat of the trouble,

the "*fons et origo*," is reached, and when this is removed, local treatment is unnecessary.

All women have, or should have, an innate modesty that makes local treatment for pelvic disorders disagreeable to them, and repeated local treatments should be avoided when possible.

There are cases, of course, where surgical treatment is absolutely necessary. These cases will be benefited by the treatment advocated here, but will, of course, require an operation in addition. The very large majority of cases, however, can be cured by the means we have suggested. Not only will the local troubles be cured, but the general health vastly improved.

* CASE.—A lady consulted us for excessive periodical flow. Not only was the flow too long continued but it was too frequent. The result was that the drain on her strength was excessive and kept her in a weakened condition. Before she had fully recovered from one period another came on. Thus no progress could be made.

We prescribed no medicine in this case, but simply instructed the patient to sleep during the month with the foot of the bed elevated eight inches. In addition she was to lie down an hour in the morning and an hour in the afternoon with the hips elevated as described in the preceding pages. She was also instructed to take the exercises there described. Also two flushings of the colon weekly.

No other treatment was given. The result was a complete cure in a single month.

* CASE 2.—Mrs. H., had retroversion, with pain in the

back, constipation and very poor general health. Had worn pessaries with no permanent good.

Treatment the same as given in preceding pages. Relief from pain and bad symptoms in a few days. After that steady gain in general health. She was thin and sal-low previously, but gained several pounds the first month and improved in clearness of skin.

The following three cases were reported in substance by Dr. George H. Taylor:

CASE.—A gentleman consulted me with reference to his wife's health, concerning which he gave this account. She had born two children, and three years before she had suffered a miscarriage. From the effects of this accident she had not recovered. For the first two years she was able to stand and walk a few steps occasionally, but during the last year she was confined to bed.

She had had the usual variety of advice in a city renowned for its physicians, but none of them afforded more than temporary alleviation. During the latter half of this period she wore a ring pessary. Her last physician caused her removal to the sea-shore, for the advantage of change of air. There she remained as helpless, however, as before.

The lady was young, without hereditary fault or constitutional tendency to disease. Evidently she ought not to remain ill.

The treatment of the case was in the line laid down in the foregoing, namely: relief of congestion by position of the body, and strengthening the natural supports by exercise. In addition, massage and passive moments by an

attendant and by apparatus, were employed. No local treatment was used.

With the simplest means I had the satisfaction to see my patient improve with great rapidity. The uterus soon returned to its natural position, and the evidences of congestion disappeared. In two weeks she could walk, and even mount stairs with little difficulty, and with no unpleasant consequences. Her father, who kept close watch of her case and was abundantly solicitous of the result, had expressed his calculations that six months was a fair length of time in which to give the *new method* a proper trial.

Feeling perfectly well, however, and further treatment relating to pelvic organs being regarded as superfluous, she returned home at the end of three weeks, and engaged in the duties of her household. The restoration proved entirely permanent.

CASE.—A lady came under my care seven years after the birth of her last child. For two years her monthly periods had extended through half, often more than half, the month; sometimes, indeed, allowing no interval.

The hemorrhage was usually alarming during the first few days, attended by fainting fits, and great physical and nervous prostration. During the intervals she was able to walk about the room, and sometimes to ride out, being always carried over the stairs. She was very pale, even her lips were bloodless. She had received the usual course of local and tonic treatment, but in spite of it she was gradually declining. I adhered to my usual course in this case, which is to make at first no local applications, reserving these for subsequent resources, if the need of such be de-

monstrated. In this case the result proved that there was no need of any local treatment whatever.

There was some hemorrhage at the return of the first period after she commenced the *new method*, as described in preceding case, but its duration was much shortened. For four months after this, during which she continued treatment, the periods were perfectly natural and healthful. Within a year after the treatment she was delivered of a child without unusual hemorrhage, and made an easy and rapid recovery.

CASE.—Extreme pain at the monthly periods was the characteristic symptom of a lady who had borne two children, the youngest of whom was seven years old. This symptom had increased for a number of years until it was insupportable. She usually became unconscious at the commencement of the periods, and remained so for hours, sometimes for a day.

For a year or two before I saw her, the physician in charge had, in anticipation of the periods, habitually inserted a catheter through the cervical canal, extending it quite to the cavity of the womb. This precaution always proved effectual in preventing pain, but the effect was only temporary.

This lady presented a nervous, worn, emaciated appearance, and expressed herself as having a feeling of desparation. Pursuing the plan above indicated, I proceeded not to turn, or push up, or straighten, or make any local applications of any kind to the suffering organ, but to elevate the diaphragm and the whole mass of the digestive

organs, and to excite and extend downwards the natural movements derived from respiration.

The processes for extending the motions of the diaphragm to the pelvis, and for removing the superincumbent abnormal weight were extremely gratifying to her, and she carried them on at her home.

Her monthly period recurred in three weeks after commencing the treatment, and *she experienced no pain whatever.*

This was the first time in many years that she had passed a menstrual period without severe pain, except when operated with the catheter. Her general health, strength, appearance and spirits were all proportionally improved, and she made a permanent recovery.



CATARRH.

There is no disease, not even dyspepsia, more prevalent in some parts of this country than catarrh of the nose and throat.

Those in our northern climes who have not more or less of this trouble, are the exception rather than the rule.

That our climate is the principal cause of the disease seems clear to us, from the fact that the disease is so prevalent in some parts. A more striking fact, that points to the same conclusion is, that sufferers that we have sent to the southern states, have been quickly cured without local treatment. On their return to this climate, however, the disease has quickly reappeared.

From the latter fact, it will be seen at once how difficult or impossible is the cure of this disease, so that it will stay cured. If the disease is due to climate, why will not the trouble reappear after a time unless we can change the climate.

We assure our readers that it will, and the only thing the sufferer can do is to form habits in the care of the nose and throat that will counteract the tendency to catarrh in this climate.

At a convention of specialists who treat the diseases of the nose and throat, held in Buffalo not long ago, several papers on the treatment of catarrh were read, and the matter discussed. It seemed to be the sense of the meeting, that this was a disease the specialist could not cure. When it was caused by growths in the nose he might remove them by surgical measures, and thus relieve the

patient, but the common, uncomplicated catarrh, was practically beyond his, the doctor's, reach.

When the patient stopped coming for treatment the catarrh would reappear, and even in the intervals of weekly treatment the patient lost as much as he had gained by the doctor's sponging and spraying in the latter's office. Depending on the weekly visit to the specialist's office for the cure of this disease was like depending solely on an hour a week in the Sunday-school to overcome the teachings of Satan during the rest of the week.

We may say, then, in brief, 1st, That if catarrh is to be cured, it must be by home treatment; and 2nd, That when cured, it must still be looked after so as to keep it cured.

There are several methods of home treatment for catarrh, some bad and some good. The principal bad one is the use of the "nasal douche." This is a bag or can of water, suspended above the patient's head, from which a rubber tube leads to the nose. A stream of water is then allowed to run into one nostril and out of the other. The method does not cure the catarrh, and it does cause, quite frequently, inflammation of the ear, and in many cases subsequent deafness.

The above being a bad method, we shall next give a good one, and we shall follow the request once made of us by an Irish patient, when we told him that there were several methods of curing his trouble: "Try the best one first, then, av yoo plaze."

The best home treatment we know for catarrh of the head is the use of a vaseline spray. This is a recent in

vention, and an important one. Sprays have been used for years in this disease, but a moment's thought will show how inferior the common spray, carrying a watery solution, is to the vaseline spray. When you apply a watery solution to the membrane of the nose it stays in position perhaps twenty minutes, and exerts its beneficial effect for an hour or more.

- But when the vaseline spray is used, the vaseline, as finely subdivided as smoke, is applied to the remotest cavity of the nose, and coats the membranes with a medicine that remains in position for twenty-four hours or more.

The vaseline carrying the medicine must be applied while warm, and thus no shock is given the sensitive nerves of the nose. We recommend, then, that the sufferer purchase a vaseline spray costing a dollar and fifty cents.

Then the following prescription is the one we advise to use with it:

One ounce white fluid vaseline, or albolene.

One-half dram Eucalyptol, or menthol.

One-half dram Oil Sandal Wood, pure.

Use morning and night, warm in vaseline spray.

The drugs used in this are not absorbed into the system, but act only locally.

This treatment is primarily for the nose, but the vaseline smoke passes into the throat, and even into the bronchial tubes, and is a benefit to both.

A single application of the above preparation will give relief for many hours. The medicine may be detected on the membranes of the nose by the sense of smell for more

than a day after the application. This treatment has an admirable effect on the vocal organs.

For the cure of catarrh in the throat we know of no method so good as gargling with cold salt water, after the method spoken of in an article by Dr. H. L. Swain, published in the *N. Y. Medical Record*. "The fluid which is to be gargled is taken into the mouth, so that the latter is a little more than half full. The patient is then told to bend the head back, open the mouth wide, and make a complete movement of swallowing, not allowing his mouth to close. The movement of swallowing must be complete as if intending to send the fluid into the stomach, but if the mouth remains open none, or only a very limited portion of it, ever gets any further down than the œsophagus. The movement of swallowing completed, the air is allowed to "gargle" through the fluid in the usual way as long as is possible; and when the fluid must be ejected, the patient, placing the tip of his tongue against the incisor teeth of the upper jaw, nods the head quickly forward, and the fluid runs out into the vessel waiting to catch it. If there is no obstruction in the nasal passages to prevent, and the patient has successfully followed instructions, the fluid on being ejected will pass up back of the soft palate and come out through the nose, moistening all parts of the nasopharynx in its transit. Experience shows that while only one movement of swallowing with the mouth open is necessary, the presence of the fluid so far down the throat causes the desire to repeatedly swallow, but as long as the mouth remains open, far from being a detriment, it is a direct assistance to the performance of the act. This fact

is especially true of the last act of gargling, viz., the passage of the water through the nose. The repetition of the swallowing more perfectly dilates the pharynx, allowing the fluid free entrance to its cavity, and by so doing relaxes the soft palate, which is essential for the fluid to get from the pharynx out the nose.

At first glance this method differs but little from that of Von Troeltsch, and in reality varies only in its greater completeness and the certainty with which it acts. The advantages are its extreme simplicity, allowing of easy accomplishment, the thorough cleansing of the throat and nose which is thus made possible, and the scope of its application. The difficulties in learning are easily surmounted. First, the act of swallowing with the mouth open is, to a person of normal amount of will-power and muscular control, a very easy matter. To some adults and to children it becomes difficult, and, as the tendency to close the mouth is very strong when one swallows, is only acquired in many cases by placing something between the teeth to prevent closure. Children of scarcely half-a-dozen years may be made to learn by giving them the fluid into the mouth, holding the head back, and, placing the thumb upon the lower incisor teeth, commanding the child to swallow. A small amount of pressure on the lower jaw suffices to keep the mouth open, and thus the gargling begins. By a little patience an adult may teach a child of even dull comprehension to gargle rightly. Adults, while learning, frequently profit by the placing of the crooked thumb between the incisor teeth while gargling, especially when they complain that the fluid all goes down the throat.

The latter is frequently true of the first swallow taken each time when first beginning to gargle, and is probably due to the parts not being sufficiently moist; but occurring at other times, is usually due to a partial closure of the mouth, or to the back of the tongue rising up into contact with the soft palate. Many patients complain of the inability to get the solution through the nose. A little practice suffices in most cases to make it possible to a greater or less extent, while some will get it the first time they try.

By the use of the Vaseline Spray and the method of gargling set forth above, the ordinary catarrh ought to be relieved in a short time. It would be wise, however, to establish the daily habit of gargling as a matter of cleanliness as well as health.

Note:—In catarrh special care must be given to the excretory functions of the skin, the lungs, the bowels and the kidneys, for the system must be kept clean and free from impurities. Bathe daily and take a sweat bath once or twice a week. Breathe deeply, the use of the Wilhide' exhaler will be found very helpful in securing deep and curative breathing. Keep the bowels open, drink freely of pure cold water, which will have a favorable effect on both the bowels and the kidneys. It will also be well two or three times a week to thoroughly flush the colon, and this way remove the impurities.

PILES OR HEMORRHOIDS.

We have seen the worst cases of inflamed piles cured in the following simple manner:

The patient was instructed to flush the colon with hot water, in which was a cup of molasses, so as to thoroughly empty and cleanse the canal.

Then, while lying on the face, a pint or more of hot water was to be injected into the lower part of the colon and retained there. The hot water and the position of the body both favor the flow of blood from the blood-vessels at the rectum, and thus relieves the congestion of the hemorrhoids.

Under this plan of treatment we have seen large hemorrhoidal tumors grow smaller by degrees until in a few weeks they had shrivelled to little tabs of skin. The pain in these cases disappears in a few days.

This plan of treatment should be thoroughly tried before resorting to an operation.

Two things should be known in regard to piles.

First, that the disease is the enlargement of the blood-vessels at the rectum, due to congestion.

Second, that this congestion is due to sluggishness of the liver as a rule.

Now, we have already shown that flushing the colon relieves liver engorgement, and that the effect of hot water is to relieve local congestion, therefore, it goes without further saying, that this treatment ought to relieve piles.

We can certify that the treatment does it and is a radical cure for all cases curable without operation. It should be faithfully tried for a month or more before severer methods are resorted to.

INCIPIENT CONSUMPTION.

The U. S. Statistics show that in some parts of the country the death rate from consumption among adults is $\frac{1}{4}$ that of the total death rate. In other words, one out of every four persons you meet will, sooner or later, die from this disease. Think of it for a moment! When an epidemic, like Cholera or Yellow Fever, ravages a section of the country the sympathies and help of the whole nation is offered to relieve the suffering people, and to stamp out the epidemic. But consumption, a disease that destroys more lives yearly, perhaps, than all the epidemics that ever prevailed in this country, causes the public no alarm, and excites but a languid interest, except with those who have felt in themselves or families its baleful power. It is estimated by DR. SCHNEEP that over 3,000,000 people die annually in civilized countries from consumption.

In England, France, Germany and Russia alone the *annual* death rate from this disease is 869,000.

It is entirely within the bounds of truth to say that this dread disease is an unnecessary one, and that it might be quickly exterminated from the earth. If this should ever be done, it will not be brought about by acts of legislation or public sanitary measures, so much as by each person putting his or her lungs in such a healthy condition that the germs of consumption will find no lodgment there.

Consumption is not only an acquired disease but one which, by due attention to the conditions favoring natural physical development, might be eradicated. This theory

of the cause of consumption is confirmed by the following peculiar fact. In the large majority of cases, consumption commences in the upper part of the lungs, just beneath the clavicles, or, in ordinary language, just beneath the collar-bones. Out of 4530 cases Pollock found that it commenced there in all but 84.

Why should it select this as the point of attack? Because here is the part of the lung that is least used. In most of the avocations of civilized life, man has his shoulders drawn forwards rather than back. In walking, in writing, in reading, in sleeping, the head and shoulders are thrown forward and the upper part of the lungs cramped. The portion of the lungs under consideration is the reserve portion, that not used much in ordinary breathing. It is only when one runs or takes a deep breath, that the lung cells in this part are distended with air. We are hearing much now about the contagiousness of consumption, and the bacillus or germ discovered by Koch, that, taken into the lungs, causes the disease. What are the facts on this point? Undoubtedly there is a consumption bacillus, that will cause the disease, **if it finds a lodgement in weak lungs.** But, on healthy lung tissues, the germ is harmless. A person with healthy lungs might daily breathe millions of the tubercle bacilli without the remotest danger. The inference from the above is that to prevent consumption we must keep the upper part of the lungs healthy by distending the cells with good air hundreds of times daily.

Make the weak parts strong. Keep the reserves as well drilled and seasoned as the active troops. The resisting power of a fortification is

measured by the strength of its weakest point: so with the lungs.

But suppose the bacilli have already obtained a lodg in the lungs. In other words, suppose that consumption has already commenced. . Then distend the upper part of the lungs to their fullest capacity a thousand times daily. Fresh air and disease-germs are antagonistic. Fortify the cells not yet attacked against the inroads of the enemy, and if the disease be not too far advanced, Nature thus assisted, will bring about a cure. It is not generally known that consumption in its early stages is frequently recovered from. "It does seem a little strange," says Dr. Richard Gerner in the *Glasgow Medical Journal*, "that almost every other diseased organ should require gentle care and rest, and the lungs alone, when diseased, sturdy unrest: but this proceeds from the very nature of the trouble—viz., that the disease is primarily born of **inaction and decay**, like rust on a neglected plough-share, which, taken back into the field and pressed into active duty is, as it were, cured and restored to health."

The first thing to be done then, in the treatment of incipient phthisis or consumption, is to improve the general nutrition of the body. We cannot impress it too strongly that the germs of consumption are harmless to man unless they find a suitable soil in the lungs.

A great furor has recently been made about the contagiousness of consumption, and some have advocated going so far as to have consumptive patients isolated, shut away from the healthy, as if they were lepers or afflicted with small pox.

Such cruelty, inhumanity and cowardice has been gravely urged in the name of preventive medicine. But now, after all the scare, comes the latest work on consumption by Dr. A. Haupt, of Soden, Germany, who shows by statistics kept for years in consumption hospitals, that healthy persons, those who have sound lungs, do *not* acquire the disease from contact with the sick. In other words, if the soil in the lungs is not prepared for the consumptive germ, it fails to grow. If on the other hand, the soil is ready for these germs, there are enough of them in the air everywhere in civilized countries to start the disease. So that the believer in the contagiousness of consumption must either shut himself in an air-tight glass case, or live on a mountain top in the wilderness, if he wishes to avoid the all pervading germs.

Away with such nonsensical theories, or rather, the acting on such theories.

Let the world pay attention to fortifying the lungs against the germs, and thus prevent the disease.

What is to be done if the germs have already obtained lodgment in the lungs? Increase the general nutrition of the body in every way, and then the lungs can resist the inroads of the disease.

The first thing necessary to improve the nutrition of the body is to stimulate the digestive and absorbent functions of the stomach and intestines. Naturally, then, you must throw the so-called cough medicines out of the window. The drugs used to stop a cough are sedatives. Now no sedative or nauseant is known that does not lock up the natural secretions, and thus lessen the digestive powers.

Instead of trying to *stop* a cough, you ought to try to increase it, as the cough is nature's method of expelling offending matters from the lungs and bronchial tubes. It is infinitely better to have this stuff thrown out of the lungs than retained there.

Of course, the above advice applies only to curable cases of the disease. Those who are hopeless, and need to have their pathway to the grave made easy, should take soothing drugs.

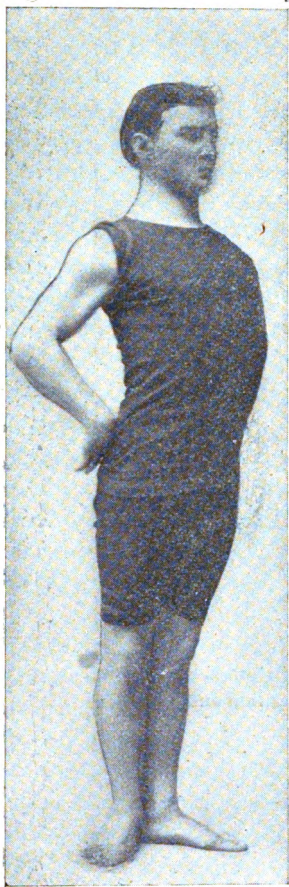
"Flushing the colon," according to the principles laid down in the foregoing pages, is the first step to improve nutrition. This unlocks the secretions and prepares the stomach for food. It "dumps the grate," and clears the way for a good fire.

The next most important remedy is life in the open air. The "piney woods cure," the "Rocky Mountain cure," the "sea voyage cure," the "camp cure," all these are of the utmost importance.

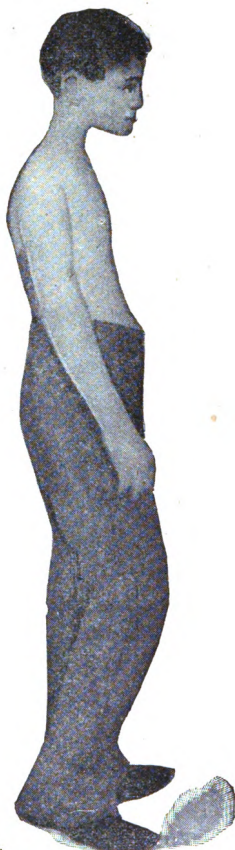
The consumptive ought to become a wild Indian, as far as an out-door life is concerned, and eat and work and sleep in the open air.

Dr. Trudeau inoculated twelve rabbits with tubercle or consumptive germs. Six of these rabbits he turned loose on an island where they ran wild. The other six were kept confined in hutches such as rabbits are usually kept in.

Results—all the six rabbits in the open air recovered from the inoculation and remained well. Five of the confined rabbits died of tubercles in the lungs and different parts of the body. The sixth one was still lingering but badly diseased when the experiment was brought to a close

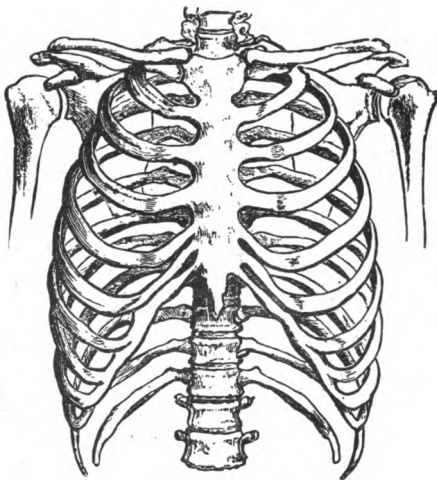


From photograph showing good
breathing power.



From photograph showing lack of breathing
power.

From Health-Culture



—NATURAL FORM OF THE SKELETON.

Showing the joining of the ribs to the Sternum and Vertebra.

Fresh air and exercise enabled the first six to overcome the disease germs.

Confinement gave the disease full play in the others.

Now, you house lovers, sleepers in close bedrooms, people afraid of cold air, you are the rabbits in the hutches. Beware lest the verdict in your case be "died of tubercules in the lungs."

If you are a worker, however, especially if you have others dependent on you, you may not be able to leave your home. What then: can nothing be done? Much, very much! You can live with open windows day and night, summer and winter: (banish the idea forever that consumption comes from cold; and that equally false idea that cold air causes cold, except it comes in draughts.)

You can systematically exercise, especially practicing those exercises accompanied by deep breathing that opens and strengthens the lungs. Exercises without fatigue, after the principles laid down on pages 78 to 83 of this book.

We have no hesitation in saying that the Exerciser is the only machine suited for lung development by the consumptive.

You can also treat the stomach as we have suggested, and thus increase nutrition.

"And is there nothing more?"

Nothing more, dear friend.

If you can be cured at all, you can only be cured so far as we now know by the principles laid down in the foregoing.

If you are hoping that some wonderful, mysterious

drug has been or will be discovered, a drug that will cure consumption without your help, you are hoping against hope.

The sooner you recognize that the cure rests in your own hands ; that it depends on your own courage, common-sense and perseverance, the better for you.

Improved nutrition is your salvation, and that must come through exercise, diet and fresh air.

PUBLISHERS' NOTE.

In revising this volume, preparatory to issuing the new edition, it seems only just that we should speak something of what we do know and testify concerning what we have so often seen as the good results accomplished by the Health Food Company in the up-building of the little ones and the re-building of the worn and emaciated. Our observation and experience with their methods and their admirable food substances, continuing nearly a quarter of a century, leads us to lend our strongest endorsement to the wisdom, knowledge, scholarship, skill and large experience, which amply qualify them for their chosen work of providing perfect nutrients for all forms of disease, and each year has made it more evident to us that vastly more can be done with their food than with drugs, for "the healing of the nations."

Nothing within our knowledge has equalled the Universal Food as a tissue-former. Besides this remarkable reconstructive, they produce a line of breakfast and dessert specialties unequalled by the products of other houses, some of which are so simple in the cooking-process as to scarcely demand a moment's attention. Their instructive pamphlets are mailed freely to all applicants from their numerous offices, at the head of which is the establishment at 61 Fifth Avenue, New York City.

HEADACHE.

The victims of "hay fever" hold an annual convention in the White Mountains, where, with red eyes and moist handkerchiefs, they meet and bewail their woes, and pass resolutions, and have a good time.

If the headache sufferers should once convene, and it were possible for any human tongue to voice the pain, the anguish, the despair, that is theirs at times, what a moving "tale of woe" that would be.

Are you one of its victims? Have you been subject to periodical attacks of what is called *sick headache*, or bilious, or nervous headache?

If you have, you can bear us out in the statement that there is no form of suffering comparable to it.

You remember how it comes on. You awake in the morning with a slight cloud on your spirits. You do not feel that buoyancy, that vim, you should feel. You are just a little languid; the atmosphere has a yellowish tinge; you don't know whether you want any breakfast or not; you eat it, but the food has no taste; you feel worse after breakfast. Nothing interests you now; your business, that usually absorbs all your interests and energy, seems a weary burden. There is no headache yet, only a dull feeling in the brain, and glimmerings of light in the eyes, that like flashes of lightning, presage the coming storm.

You say to yourself, "I am afraid I am in for a siege of headache." Despair seizes you for a moment as you remember the horrors of a headache day. Still "Hope

springs eternal in the human breast," and in spite of failures innumerable, you fly to some remedy, bromide, caffeine, antipyrin, chloral, or perhaps a cup of tea. They have failed you hitherto with a scientific certainty, but perhaps—this time—God grant it.

No use. Slowly the coils tighten around you, struggle as you will. A dreadful incubus settles down upon you, body and mind. You wish to see or hear no one, and yet you can't bear to be by yourself. You are cranky. And now that black despair has laid hold upon you, the pain commences. It is not so very bad at first. If only it was anywhere else than in your brain, you might summon up resolution to bear it patiently; but the seat of resolution and will power is itself the seat of trouble. We have courage to try to fight while the enemy is at the outer walls, but when he has gained a foothold in the citadel our efforts are paralyzed.

Now the pain grows slowly more and more intense, and you writhe feebly in its grasp. There is a gimlet being steadily forced into the base of the brain, at the back of the neck, and twisted about among the roots of the nerves. Or, a small awl is being driven into the brain over the left eye; or the whole top of the head is under a rolling pin, being slowly crushed.

When this process has continued for some time there is a new horror added. A strange feeling rises over you, starting apparently from the stomach. Its character is undefined at first, and you can hardly describe it. It seems as much like homesickness as any thing, and yet it's hardly

that. About this time some sympathizing companion says. "P'raps you'd feel better if you'd eat something."

Eat something! ugh! You slowly turn your jaundiced eyes upon her (for it's a her every time), with a look of mingled horror and disgust that ought to cause her to sink through the floor. But in reality your look doesn't even dispel her sympathizing smile.

Now, you are sure it's not homesickness, but stomach sickness that ails you.

There is only one more blow your friends can give you, and that comes soon. Some new comer says:

"Why, what ails your husband, Mrs. Smith."

"Oh, it's only a headache."

Only a headache!! *Only a — !!!*

We draw a veil over the next scene. The fountains of the deep are unloosed. Horses mad with fright, trying to escape from a burning barn, are rushing back and forth over your brain; a sledge hammer falls at irregular intervals upon the back of your neck; the various augers and awls are being driven into the brain with industrious hands; and you, too faint and weak to writhe, can only lie and utter groaning sighs. One thought you may be conscious of; one cruel memory still lingers. She said: "Only a headache."

If death would only come, and come quickly!

Somewhere this side of dissolution, but after hours of torture, the storm begins to lull; drowsiness steals upon you; a delicious, restful languor, in which you seem to hear the second part of Beethoven's Pastoral Symphony

where the storm breaks away, the patches of blue sky begin to appear, the birds softly twitter, and the shepherd leads forth his flocks.

Then Sleep!

What can be done to cure such a disease as this, for in most people, such a headache as we have tried to describe is a settled disease, with attacks recurring at more or less regular intervals.

To prevent the attacks, live regularly. Avoid late hours; avoid the habitual use of coffee and tea; avoid sweets of all kinds, including pies, sauces and pastries; in fact, let your dinner end at the course preceding the dessert. Eat an abundance of good, plain food. Don't eat at night.

A thorough "flushing of the colon" once or twice per week is indicated.

Massotherapy of the abdomen should be practiced daily.

Exercise is of great importance in this disease. Those exercises that are suggested for biliousness and constipation are the best.

After forty years of age you will grow out of the tendency to the disease.

When an attack is threatened, it may sometimes be warded off for a few days by certain drugs, the best of which are caffeine and antipyrine. But these only put off the trouble for a short time; the enemy is checked, not routed.

Personally, after trying every known measure, we have only found but one by which we can thoroughly break up a

threatened attack. This plan is to bring on an artificial crisis, some such a one as takes place when the headache has reached its height. The artificial crisis, however, is not accompanied with pain.

This is done in the following manner:

When we are satisfied that a headache is coming, but before the pain is severe, while it is threatening, so to speak, we introduce the stomach catheter and thoroughly wash out the stomach with warm water and a little salt. This proceeding has been described on a preceding page. It is not difficult to do and can not result in harm. The catheter is soft and flexible, and when the end is introduced into the throat a swallowing motion carries it into the stomach.

Having flushed the stomach, we next "flush the colon" *very thoroughly*, retaining the liquid *as long a time as possible*. Then an hour's rest and we get up feeling as if we had been "born again."

It will not do to try to substitute an emetic for flushing the stomach with a catheter, as the exertion of vomiting will precipitate a headache.

If the catheter is not at hand, try "flushing the colon" alone.

Just why this treatment breaks up the threatened headache attack we cannot say. That it does it in our own case, and in all we have tried it on, is certain. Probably the result is brought about, first, by cleansing the stomach and colon of offensive and poisonous matters, matters that are irritating the nerve that connects the stomach with the

brain, the Pneumogastric nerve. Then, too, the colon flushing causes an outpour of bile and other fluids, and thus rids the blood, and consequently the brain, of irritating matters.

The fact remains, whatever the reason, that the headache can be prevented by the above measures and the mind made clear and hopeful.



CHRONIC AND SUB-ACUTE RHEUMATISM

It is related of the great surgeon, Abernathy, that a patient once consulted him for an obstinate attack of gout.

Abernathy wrote out a prescription and received his usual fee, one guinea. As the sufferer limped down the steps the surgeon opened his window and hailed him.

"Be kind enough to let me know if that remedy helps you, sir! as I am suffering with gout, and can't find anything to cure me."

In truth, chronic rheumatism and gout do not, will not, yield to drugs readily.

These diseases are supposed to be due to an excess of acid in the blood.

The cause of the acid is abnormal and insufficient action of the liver.

These diseases then are due to imperfect nutrition and deficient excretion. As a result the blood becomes loaded with poisonous matters.

The manifestations of the trouble is in the joints, the toes, ankles, and knees or hands, but the seat of the disease is far away.

What is to be done to cure the trouble?

Apply your treatment to the fountain head first. Stop the formation of the acid and its absorption into the blood by getting the liver to do its work properly. This can be done best by daily "flushing the colon," first with hot

water, and then with moderately cool water, containing a tablespoonful of salt to the quart of water. Use this twice daily for the first week; then once a day for a month.

This treatment not only stimulates the liver but acts on the kidneys so as to carry off the poisonous matter from the blood,

The next remedy in chronic rheumatism is the Turkish bath.

This has long been recognized as a most valuable cure. The well attested fact that when one enters the Turkish bath the urine may be strongly acid, but on leaving the bath after a half hour, the urine is remarkably alkaline, shows that the bath makes a profound impression on the system.

The Turkish bath should be used daily, and can be taken at the establishments where these are given or at one's own home by the use of a Thermal Bath Cabinet; these are portable and can be used in any room, which has many advantages, avoiding the publicity and securing better air, as the fresh air of the room is breathed instead of the hot air, as the head is exposed.

The Turkish bath should be used daily. With this one may take at will, in one's own home, either a Turkish, or dry heat bath, a Rus-

sian, or vapor bath; or what is better than either, a super-heated steam, or dry steam bath. The daily use of this bath invigorates the system and restores the functions of the skin, liver and kidneys.

The next step is to restore the functions of the disabled joints by rubbing, massage and passive movements. This may take many weeks, but can be accomplished by perseverance. Then let the patient take gentle exercise and persevere with it.

Our plan of treatment then, in a word, is to remove the cause; then remove the result.

The means are:

Flushing the colon,
Dieting.
Turkish baths,
Massage and passive movements,
Exercise,
Perseverance.

An Interesting Case of Chronic Rheumatism and Gout Cured.

A short time ago we received a letter from a lady in regard to her sister's case. The history of the case was, in brief, about as follows : The sick lady is the principal of a school. A year ago she had La Grippe, which was followed by an attack of rheumatic-gout, as it was called. The joints were swollen and painful, and the patient was unable to move in the bed. This trouble continued steadily, sometimes getting a little better for few a days, and then relap-

sing again. The patient was at no time able to leave her room. She was treated by many physicians, and given all the usual and unusual drugs, including patent medicines, but obtained no permanent relief. Her diet was strictly regulated by the attending physicians, and she was enjoined from eating meat. She took mineral waters of all kinds. She had heard about flushing the colon, and tried that faithfully for four months; received a little relief, but still could not walk. At length she heard of the New Method, and got a copy. Her sister wrote, giving a history of the case, and wished to know what suggestions we would give as to treatment.

We replied that the principles for the treatment of such a case were plainly laid down in the New Method. These were—

First: An intelligent diet. No tea, coffee or candy; very little sugar or starch. Universal Food to begin each meal; crisp well done English breakfast bacon for the fat and creosote which it contains, gluten zwieback.

Second: Daily massage, with the hands or muscle-roller, the affected parts to be carefully worked.

Third: Daily immersion of the affected limbs in hot water, containing a tablespoonful of sal-soda, or washing soda, to the gallon of water. This bath to be followed by rubbing and the massage treatment.

Fourth: Flushing the colon to be continued.

Fifth: *Stop all drugs.*

A letter was received two weeks after this advice was given, from which we make a few extracts. This letter was not intended as a report of the case, but was a business

letter. We insert it now, because it came to hand just as the sixth edition of the New Method is in press.

NEW YORK, July 7th,

DR. FOREST:

Dear Sir--Your kindness in replying to my last letter induces me to write again. Sister has improved so fast in the last two weeks that we have decided to leave the city to-morrow, to go to our little cottage up at Hague, on Lake George. We had given up all idea of going, and intended to rent the cottage, but she seems so much better that we think it best to get off as soon as possible. * The foot looks as well as it ever did, toes straightened out, which has not been the case in ten months. Always before, when the pain ceased, there has been a constant aching, but that has passed away. * * * Direct to

MRS. E. L. FREEMAN,

Hague, on Lake George, Warren Co., N. Y.

We have taken the liberty of publishing Mrs. Freeman's name without her consent, as there is not time to communicate with her before this edition goes to press.

Facts are sometimes eloquent, and need no comment. Ten months confined to bed; unable to walk; constant suffering; all kinds of treatment. Two weeks on the proper diet for such a disease, and the proper hygienic treatment; results: swelling and pain gone; patient walks; and sets out for her country house.

Had this result been reached after paying a hundred dollars for some secret drug, or a mysterious method of treatment, it would be a nine days wonder, and fame and fortune would await the possessor of the secret. But, as the cure was brought about by the application of simple

natural laws, and a common-sense method of treatment, the case does not seem very remarkable.

A CASE OF INDIGESTION CURED.

The following letter bears strong testimony as to the value of Masseotherapy in indigestion, and is none too strong :

Dear Sir:—For many years I have been a great sufferer with a stomach trouble, which the doctors at last, after dieting and taking all kinds of medicines without more than a momentary relief, pronounced neuralgia of the stomach and bowels. I bought a Massage Roller in the spring of '97, used it faithfully and regularly, and now for a period of five months I have had no trouble with my stomach whatever. I eat as I will, and what I will, and nothing causes me any disturbance. The roller has taken away the soreness, which was at times extreme. I am grateful for the relief I have received from it, and most unhesitatingly pronounce it something which everyone could use with benefit. It will relieve nervousness, and will rest and give relief to overtired muscles. In my case it has saved doctor's bills and drug-gist bills as well, which were a large item of expense before I began to use the roller. Wishing you all success, I am

Yours sincerely,

L. A. P.

Boston, November, 11, 1897.

[If any of our readers wish to ask the writer for any further particulars as to her case letters sent to the publishers will be forwarded and receive attention.]

EMACIATION.

Life insurance companies give the following table as a guide to examiners to determine whether one is near the normal weight in relation to height :

RELATION OF WEIGHT TO HEIGHT.

HEIGHT.			Aver'ge Weight.		30 per ct. added.		30 per cent deducted
FT.	IN.						
5	3	.....	130	.....	169	.....	104
5	4	.....	135	.....	175	.....	108
5	5	.....	140	.....	182	.....	112
5	6	.....	143	.....	186	.....	114
5	7	.....	145	.....	188	.....	116
5	8	.....	150	.....	195	.....	120
5	9	.....	155	.....	201	.....	124
5	10	.....	160	.....	208	.....	128
5	11	.....	165	.....	214	.....	132
6	.....	.....	170	.....	221	.....	136
6	1	.....	175	.....	227	.....	140

“ If 30 per cent. above or 20 per cent. below average, the risk is unfavorable, and as a rule will be rejected. Exceptional cases may be favorably considered, provided they are No. 1 in every other particular, and these discrepancies can be satisfactorily explained.”

The above tables are correct enough for all practical purposes. By consulting these you can ascertain if you are much below or above the standard.

If below the normal weight you can do much to bring yourself up to the standard. Remember, however, if you

belong to a family where the type is leanness of body, it will be difficult, if not impossible, for you to get *fat*. You can, by care and good habits, bring yourself up to the standard, and that is all you should aim at.

It has been said, "whoever saw a fat grey-hound, or a lean pug-dog." The same principle applies to human families. The members of some families get fat in spite of themselves, especially after reaching the age of thirty years. The members of others cannot gain much adipose tissue, strive as they will.

We give the following hints to thin people :

First : increase the activity of the digestive organs of the body so that more food can be disposed of. This can be done by flushing the alimentary canal, as mentioned on a preceding page. It has been our experience that the use of flushings have increased the appetite and the weight in thin people. It will not do to try to increase the amount of food eaten until you can assimilate it. Both digestion and assimilation are increased by the flushings.

Again : We have observed that very fleshy people do not eat more than others, but they usually drink more. Fat is largely composed of water, and the liberal use of fluids seems to favor the accumulation of fat. Blakely Hall says on this point :

"Liquids make fat. There is no doubt of this in my mind, though I am fully cognizant of the fact that people will deny it. The character of the liquids has a good deal to do with it, but the practice of drinking invariably leads to unwieldy bulk. In Spain, where men drink little,

a fat man is unknown. In Paris, where the men content themselves with sipping thimbles full of absinthe or small cups of black coffee, the French are thin to a remarkable degree. The women, on the other hand, drink great quantities of champagne, Burgundy and latterly of beer, and they are, as a result, prone to stoutness. In England, men drink ale and beer, and they are a thick-necked, pudgy and heavy race as a rule. I had observed all this many times, and when I went to Germany, where I knew the consumption of beer was very great, I was prepared to find fat men in abundance. I was not disappointed. There would seem to be no end of big, corpulent and unwieldy men in Germany. While they are in the army they are slim and splendid looking warriors, but two months after leaving the ranks they become heavy, puffy and beefy to the last degree. This is even so in the ranks among the other soldiers, and the cavalry were men of such extraordinary weight that they always excited comments from strangers."

We claim that water drinking favors the accumulation of fat even more than does that of beer ; and water should be used instead of the latter.

As it will not do to drown the stomach with large quantities of water, we suggest that after a flushing of the colon a pint of water be injected into the colon and retained, as mentioned under the head of Kidney Diseases. Use the second stomach, the colon, to aid the first.

Cultivate the habit of taking salad oil with the meals. This is a matter of great importance ; the taste for oil can be acquired. Learn to take a tablespoonful of salad oil with or after each meal. See the article on "Nervousness,

for directions on this point. In fact, all the suggestions given in that chapter, as to sleeping and eating, are of use in the cure of emaciation as well as in nerve difficulties.

It is impossible, however, for constitutionally thin people to eat or sleep themselves fat. The digestive powers give way before the end aimed at is reached.

Systematic exercise must go hand in hand with the other measures. It is the nearly universal rule that fat people get thin in the gymnasium, and thin people gain in weight after the first week or two.

Why should this not be the result in thin people? When, under the influence of systematic exercise, the upper arm has gained an inch in circumference, the lower a half inch, the thigh an inch and a quarter, and the muscles on the trunk and shoulders are half as thick again as they were, there must come a rounding out of the outlines and an increase in weight that will be most gratifying.

It is this increased muscle growth that will take up the increased amount of food one eats.

McLaren had twelve non-commissioned officers from the English army and navy sent to him to be trained and instructed. These men were from nineteen to twenty-nine years of age. He says, "The muscular additions to the arms and shoulders, and the expansion of the chest, were so great as to have absolutely a ludicrous and embarrassing result; for before the fourth month, several of the men could not get into their uniforms, jackets and tunics, without assistance, and when they had got them on, they could not get them to meet down the middle by a hand's breadth.

"All increased decidedly in weight—the smallest gain

being 5 pounds, the average 10 pounds; and one, and he twenty-eight, and a five-feet-eleven man, actually went up from 149 pounds at the beginning, to 165 pounds in less than four months."

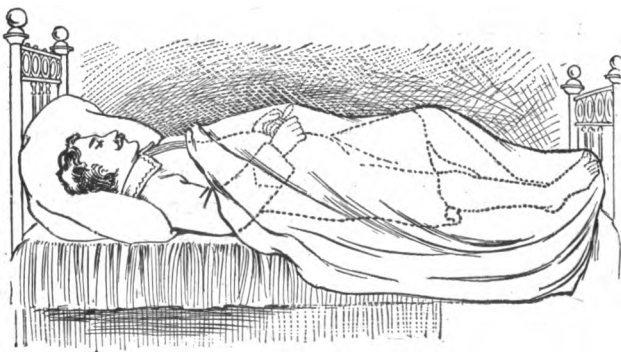
As will be seen, these changes do not occur in all persons with the same rapidity, even though external conditions as to food, sleep, and the time spent in exercising, be much the same.

But sooner or later the thin person, under the influence of systematic exercise, gets more ample proportions.

We have seen just as striking changes made in ladies by systematic exercise as McLaren gives for men. There is no question that any lady can, by a few minutes daily exercise at home, and with right habits as to diet and sleep, increase the measurements of chest, arms, shoulders and neck very materially; and with this will come better health, more buoyant spirits, a cleaner skin, and an increased beauty and grace.

This will be a work, not of years, but of a very few months.

As to diet for thin people, the theory, accepted for ages past, has been that the vegetable diet with rice, cereals and sweets was best suited for increasing the amount of adipose tissue.



CONSTIPATION.

There is no treatment so effective for the cure of constipation as the use of the massage rollers; lying in bed and over the night robe roll the stomach and bowels thoroughly, up and down and crosswise from side to side, and finally passing up the right side and across to the left side, following the colon. Give this treatment night and morning; after using drink freely of cold water, thoroughly massage the stomach, and work the water out into the bowels in this way clearing the stomach before taking your breakfast.

CORPULENCE.

A good anecdote is told by a gentleman who resided for a time at a famous French sanitarium. The window of his room overlooked a little court at the upper end of the garden, and here, in the early afternoon, he overheard the following conversation between the proprietor of the sanitarium and a very corpulent lady boarder.

"Monsieur le docteur?"

"Ah Madame! be seated, I beg of you."

"Monsieur, I have been under your treatment for six weeks and I have scarcely decreased in weight at all. I begin to despair."

"Ah Madame, courage! patience! Voyez vous Mademoiselle la?"—pointing to a very thin lady walking at the lower end of the garden—"when she came here, six months ago, she was as fleshy as you are. Now, behold!"

In the evening another conversation took place in the little court. This time it was between the very thin mademoiselle and the doctor.

"Monsieur!" in rather a sharp tone of voice, "for six weeks or more have I followed your rules and now I am as thin as when I came."

"Ah, Mademoiselle, what would you? Courage! patience! voyez vous Madame la?" (pointing to the fat woman who had interviewed the doctor earlier in the day). "When she came here she was as thin as you are! Now, behold! ! !"

Of a truth a not inconsiderable portion of mankind, or more markedly womankind, would come in the same category with one or the other of the persons mentioned above—a fat person who would be leaner, or a lean person who would be fatter.

The corpulent individual, whether man or woman, should receive sincere sympathy. While the world laughs good-naturedly, it should also pity.

The obese person, compared with others, is like a soldier who must carry a heavy knapsack, blanket, and rations on a march, and keep step with comrades in light marching order.

But the mere work of carrying extra weight, or his unsightly appearance, bad as are these, are not the principal penalties the obese person pays for his load of fat. He suffers from breathlessness on making any exertion requiring strength or speed. This is not due, as is generally supposed, to fat deposited in the lungs, but to the rapid burning of fat on muscular exercise, and the consequent accumulation of body heat and an excess of carbonic oxide gas in the lungs. The fat man or woman on exertion is like the furnace built to burn anthracite coal, but which is fed pine wood or bituminous coal. The result is that, after the first quick blaze, the small flues become choked with smoke and soot and the fire is smothered. Not only is an excess of fat a very uncomfortable acquisition, but it is a dangerous one as well.

Fat is a lowly organized inert matter, stored within little globules or bags and deposited in layers beneath the

skin; when in excess it is also infiltrated through the muscles.

Muscles thus affected are soft, pale and flabby, instead of being firm and strong.

If only the superficial muscles, those of the arms and legs for example, were thus affected it would be bad enough; but, when as is frequently the case, the heart muscles becomes thus infiltrated and weak it is plain that danger as well as discomfort results.

It is for the reasons above given, that the fat man, on making moderate exertions, wheezes and blows like a leaky engine, and finds his heart beating at the rate of one hundred and twenty beats per minute, instead of the normal sixty-five or seventy.

In view of the foregoing, well might the fat man exclaim with the melancholy Hamlet,

“O, that this too, too solid flesh would melt,
Thaw, and resolve itself into a dew.”

Fat has a function to perform in the animal economy, but it is a lowly one.

Fat is first a reserve fuel to be used in case of emergency, and to be burned when the proper supply of food is not at hand.

Again it acts as a pad beneath the skin to protect the tissues from cold and injuries.

More important still, it acts to fill up the hollows, round off the angles, and give the curved lines of beauty to the human form.

For all these uses only a very moderate amount of fat

is necessary. Doctor Carpenter says that only one twentieth of the normal body is fat. In other words, a man or woman weighing one hundred and fifty pounds needs no more than eight or ten pounds of fat distributed beneath the skin to give the lines of beauty.

How to dispose of an excess of fat.

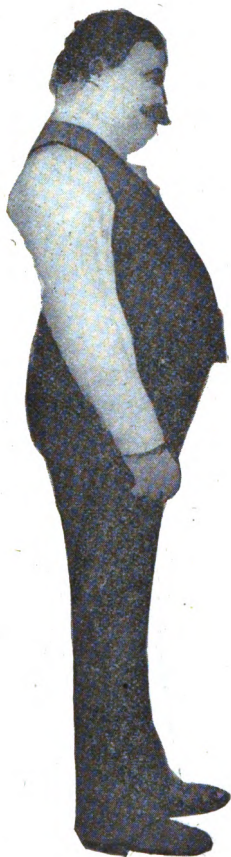
Literally it should be burned off. In other words it should be used up within the body and replaced by a more highly organized tissue.

Doctor Ferdinand Lagrange says in his "Physiology of Bodily Exercise:" "Under the influence of work the muscles increase while fat (in excess) disappears."

While the foregoing is the scientific explanation, the fact itself, that an excess of fat disappears with muscular development, is a matter of every day observation, both in man and animals.

Mr. Wm. Blaikie, in his well known book, "How to Get Strong," gives an instance of a gentleman who weighed three hundred and five pounds, who in five months, without much change in his diet, reduced his weight to two hundred and fifteen pounds. This was accomplished by a three to five mile brisk walk every evening.

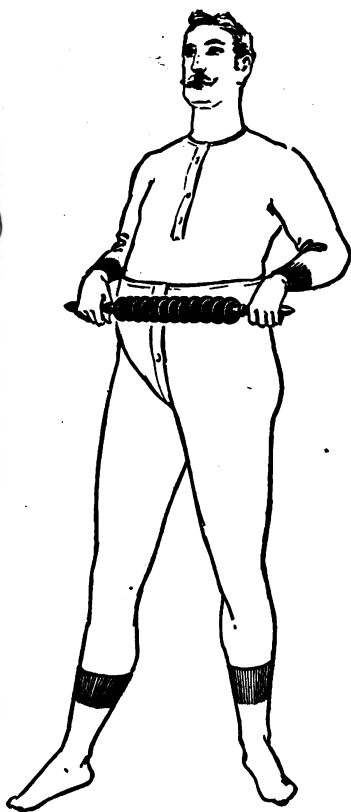
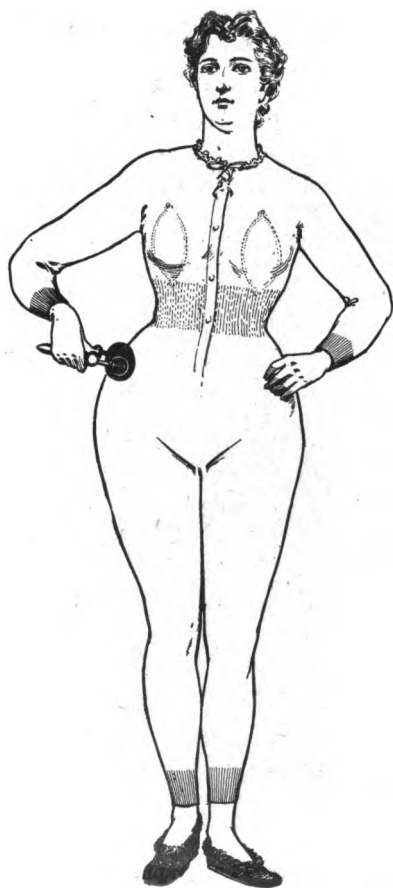
Mr. Banting, by living on a lean meat diet principally, and exercising freely in walking and boat rowing, reduced his weight from 202 pounds to 150 pounds in a short time. His weight remained some years after at about this figure, and Mr. Banting says he enjoyed perfect health.



From Photograph.



From Photograph.



REDUCTION OF FLESH.

THE NEW MESSAGE ROLLER TREATMENT FOR THE REGULATION OF FLESH.

There are two conditions to be avoided in the acquiring of health, strength and comeliness of form or personal beauty; one is the excess of adipose tissue or flesh, the other is the want of it. These conditions depend upon heredity and environment or conditions, whatever the cause may be, more or less, may be done in overcoming the results.

The person who is becoming too fleshy should of course avoid an excess of fat producing foods and take an abundance of exercise. Where this can be fully carried out the desired result will be secured, but often times it may be difficult to regulate the diet properly, and especially for want of time and physical strength to secure the necessary amount of bodily exercise, as this frequently comes with advancing years when there is a lessening of physical force and strength, or is the result of diseased and abnormal conditions, rendering the person weak, and there is not sufficient bodily strength to take the requisite amount of exercise for the accomplishment of the purpose.

• Those with a tendency to fullness in the abdomen will do much to overcome it by a series of exercises, especially bending over so as to touch the fingers to the floor and then backward as far as possible, but it is very likely to be the case that for lack of physical strength these movements, which are a strain on other parts of the body, cannot be maintained for a sufficient length of time to do very much good.

Massage has been found exceedingly helpful, especially when taken in connection with the Turkish baths, but this treatment is beyond the reach of some and costly for all. It has been found that the desired results can be obtained more readily and surely in the use of Dr. Forest's New Massage Rollers than in any other way. These are made by putting in a suitable frame a series of polished rollers or wooden wheels with a soft rubber buffer on each. In applying these there is little or no friction on the skin as the wheels turning avoid this. They may be used over the underclothing, or if in the hands of another, over light bed clothing, and the pressure is brought on the deep tissues where it is needed, not on the skin or surface of the body. When applied with a steady, hard pressure, the fatty cells, which are deposited in the muscular tissues, are broken down, enter into the circulation and are eliminated. The movements should be lengthwise of the muscular tissues, not across them, as the object is to increase the circulation and take the blood from the parts rather than to bring it to them. Over the hips the rolling should be as high up above the waist as it can readily be given and up and down over the thighs, all around, and over the abdomen may be up and down and from side to side as the muscular tissues run in each way.

In case there is a pendulous and protruding abdomen it sometimes comes from a weakening of the muscles on the sides, allowing it to droop, for this the treatment should be given up and down on each

side of the abdomen which will tend to strengthen and increase the elasticity of these muscles, and so draw back and hold it in place. The rolling should be applied morning and evening over the under-clothing and as much as one hundred times over each part. This treatment can be given more effectually over the hips and thighs than elsewhere, but all parts of the body will be benefitted by the reduction of these parts and become more solid and firm.

For the use of men and women who are strong and vigorous, yet too stout or fleshy, roller No. 5 has been made with handles on each end and twelve wheels, each turning separately. With the use of this a firm and steady pressure can be brought to bear without any danger of injury, and the work can be done more rapidly. The smaller size rollers, No. 1 with six wheels or No. 2 with four wheels, may be used effectively, and ladies will usually find these the most desirable. Many find the use of two of the small rollers an advantage, using one in each hand on the sides or over the limbs at the same time.

The efficacy of this treatment has been thoroughly tested and there are many who bear evidence in their appearance and by their words as to the success of the method.

It will probably seem almost paradoxical to claim that with the use of the same implements the body may be built up in flesh, but the truth of this has been fully demonstrated. Leanness often comes from an impaired digestion or a sluggish circulation. The food is not properly assimilated and therefor

does not nourish the tissues, or the blood fails to carry the nourishment to all parts of the body. No more effective remedy for indigestion has been found than the use of the rollers over the stomach and bowels. Very obstinate cases of dyspepsia and constipation have been effectually and permanently cured in this way, and of course with this has come an increase of flesh as well as strength and vigor and the use of the rollers over the body will promote the circulation of the blood. In this case the application should be made lightly so as not to break down the fatty cells already forming, and for the development of any special part of the body as the face, neck, bust, arms, limbs, etc., the treatment should be made rather lightly and crosswise of the muscles and veins, tending to bring the blood to the parts, and this way feed and build up the tissues. On the face there should be a rotary motion, on the neck let it be around rather than up and down, and forward and upward under the breasts, so as to bring the blood into the parts rather than away. By treating around the limbs and arms these will be rendered more plump. Bathing the parts first in cold water will prove helpful by promoting the circulation. This will build up the special parts at the expense of other parts of the body, but it is often the case that one's face and neck are the poorest part, the fatty tissues being deposited on the body and not equally disturbed. For this purpose the light rollers should be used, the one with three wheels for the face and neck and the five wheel one for the bust and body.

Sometimes there is a shrinkage on one side of the body from a partially paralyzed condition. The use of the roller has been found very helpful in these cases, strengthening, stimulating and building up the tissues in the shrunken parts.

In connection with the roller treatment for the building up of special parts, what is known as Health Culture "Skin Food" has been very effective; this is composed of fine vegetable oils, no crude or animal fats being used, as these will make the pores coarse and cause growth of hair on the face and neck. It should be applied after the roller treatment, when the glands are stimulated and it is very readily taken up and forms a fatty deposit near the surface, and on the face it will effectually tend to the removal of wrinkles. When convenient it is well to bathe the parts with hot water before applying as this opens the pores and promotes absorption.

It is sometimes the case that the results are less marked in this than in the reduction treatment, for there is more to contend with, the want of nutrition having often to be overcome. The food should be that which tends to the production of fatty tissue and that which can be the most easily digested, care being taken that it is properly prepared.

From *Health-Culture*.

INTERNAL BATHS IN THE TREATMENT OF FEVERS.

Although the New Method properly deals only with chronic diseases, we cannot forbear to speak of the use of internal baths in specific fevers. We are the more inclined to this because we have recently seen that this plan of treatment has come to have a standing among the foremost men in the medical profession. It is now some ten years since we began to study the system of flushing the colon that has been mentioned on a preceding page. We observed then, and have put in practice since, the observations we then made as to the effects of the procedure on reducing the temperature in fevers, and its effects on the kidneys in eliminating poisons from the body.

Every year since has strengthened our convictions on this subject. We do not claim to be the only, original observer of this matter, but that our observations were made independently, and without the knowledge of what others had done.

The years 1890 and 1891 have shown a confirmation of the views we have advanced. For instance, in the *New York Medical Record*, for July 4th, 1891, is a short but interesting article by Dr. Beverly Robinson, Visiting Physician to St. Luke's Hospital, on "The Internal Use of Water in the Treatment of Typhoid Fever." In this article Dr. Robinson acknowledges his indebtedness to a paper read by Prof. Debove before the "Medical Society of the Paris Hospitals" on July 25th, 1890.

Dr. Debove claimed to have treated one hundred and

fifty cases of typhoid fever in the Paris Hospital, by giving water alone, without medicine, to the patient. The results of his treatment were surprising. The percentage of cures was far greater than by the drug treatment, and equalled that by the Brand method of cold baths that is used in the German army hospitals. Dr. Debove's plan was to encourage his patients to drink cold water freely every hour or two, so that in the course of the day an adult patient should drink about six quarts of water. This cold water, taken into the body, is passed out of the system by the kidneys mostly, after being raised to a fever heat. Thus a considerable quantity of heat would be abstracted from the fever-racked body, and, still more important, a large amount of the poison in the blood would be eliminated. The eminent Prof. Cantani endorses these views of Debove and takes a very important step farther. "He adjoins to cold water by the mouth, large injections of cold water, rendered slightly antiseptic, by the rectum. The latter he administers twice daily."

Both of these methods of treatment increase the quantity of urine and diminish its specific gravity, especially the drinking of water, and, as Cantani believes, the antithermic effect is produced more surely than by other hydro-therapeutic methods. It likewise seems evident that the cold water is absorbed in large quantities and then cools the entire body and even the blood. In this manner Cantani considers that the tissues are permeated and cleansed by the water and freed of ptomaines, and this takes place without disturbance of any kind, except occasionally a slight chill. Cantani also believes that *if cold injections be*

employed at the beginning of typhoid fever it is possible to abort the disease in very many cases."

In another article we find the following summary of Prof. Cantani's views :

"Antipyresis by Drinking Large Quantities of Cold Water.—Although he is a warm advocate of the bath treatment, Prof. Cantani regards slight reductions of temperature as preferable in many cases to the marked antipyresis produced by a cold bath. During many years he has obtained this result by letting the patient drink large quantities of cold water, and administering, at least twice daily, a large enema of some cold antiseptic solution. The same method of antipyresis is not equally efficient in all cases of fever; in typhus, for example, the most marked reductions of temperature are obtained by the drinking of large amounts of cold water, whilst in typhoid, cold enteroclysms, (*i. e.*, enemas), yield better results. In typhus the patient is given from *five to six quarts*, and sometimes even *eight quarts* of cold water during the twenty-four hours, and the windows of the room are kept open day and night. In some of the cases the duration of the disease was markedly shortened, the temperature in one case being reduced from 41° to 37° on the eighth day. In typhoid fever large quantities of cold water are introduced into the bowels, and the effect of these is supplemented by letting the patient drink as much as possible of cold water. It was found by a large number of observations that after each enteroclysm of *two quarts of water* the temperature fell 0.6° – 0.8° C. in the axilla, and this reduction was maintained for two, three or more hours.

The water injected, which had a temperature of 11° was usually evacuated in ten to thirty minutes, and then had acquired a temperature of 35° – 37° C.

Both of the above mentioned methods of antipyresis increase the quantity of urine and diminish its specific gravity, especially the drinking of water. This proves that the cold water is absorbed in large quantities, and then cools the entire body, and even the blood, an effect more certainly obtained than with other hydro-therapeutic methods. Thus the internal organs which have the highest temperature during fever are cooled, the tissues are permeated and cleansed by the water, and freed of ptomaines, and this takes place without disturbances of any kind, except occasionally a slight chill."

We have long held the above views as to the proper treatment of acute fever, and are pleased to find that, perhaps, Prof. Cantani even preceded us in point of time in advocating this treatment. How different such views from those usually held, that cold water must ever be denied to the fever-stricken patient. How many a poor sufferer has tossed weary days and nights, (and does still, for that matter,) longing, begging, praying, for a cup of cold water from the old well; only to be told that cold water in fevers is deadly. And lo! after all these years, we find that Nature was right all the time, and that the longed for water was the very thing needed to wash out the fever-breeding poisons, and to cool the heated blood. Six to eight quarts of cold water a day in typhoid fever! Think of that, ye sufferers, who would have given all your earthly possessions for a single cup.

While we agree fully with Prof. Cantani as to the giving cold water to drink, we differ a little as to the advisability, in all cases, of giving the injections *cold*. We use tepid or warm water in flushing the colon in these cases. As it is acknowledged that the principal benefit derived from this treatment is its effect in causing elimination of poisons through the kidneys and bowels, we feel sure that this result is better attained by the tepid flushings than by the use of cold water. (See our experiments illustrating the influence of colon injections on the kidneys.) The latter sometimes causes a shock to the patient. We have found that these flushings can be used twice or three times per day with advantage in fevers, but care must be taken to keep the patient in bed during and after the treatment; and he must not be allowed to rise to discharge the water from the colon; a bed-pan must always be employed. In fact, throughout all dangerous fevers, a bed-pan should be used. Many a life is lost because the weakened heart gives way from efforts made by the patient in rising to discharge the bowels. Very often the death occurs from this cause, after the fever has left, and the patient is supposed to be out of danger.

To return to internal baths. Dr. Robinson says:

"On taking charge of my hospital wards at St. Luke's last autumn, I determined to treat my typhoid cases, tentatively at least, with cold water internally. Subsequently this treatment was carefully employed in three cases, apparently of moderate severity. These cases all did well. There was scarcely an untoward symptom. I experienced no difficulty in giving each of them four to six ounces of

water every two hours in addition to the three or four pints of milk, that they were taking daily. This amount of fluid caused no disturbance whatever, not even a slight dyspeptic attack, and the patients took it without a murmur. The amount of urine was notably increased in each case and its specific gravity lowered, as I had a right to infer.

"These patients gradually recovered their strength and health, and the convalescent period continued most satisfactorily. In a fourth case, begun after this method, I felt obliged to supplement the internal use of cold water by cold baths after Brand's method. This case was one of particular severity. He ultimately recovered, and, so far as I could determine, was benefited by the cold baths. In making the foregoing plea for the internal use of water in treating typhoid patients I do so in the belief that we will thus be carrying out nature's prescription. I do not say that it will prove as efficacious as the method of Brand, but I am hopeful that it may. At all events, it may properly supplement it, and it will have two very great advantages, *i. e.*, it can cause no harm, and is perfectly simple and easy of trial."

The method of Brand here referred to is the treatment of typhoid fevers by cold baths without the use of drugs. This method is employed exclusively in all the German military hospitals, many of the French military hospitals, and in most of the private hospitals in those countries. By this treatment the mortality of typhoid fever in the German army has been reduced from forty per cent by drug treatment to eight per cent, and in some of the hospitals as low as two per cent. The treatment in these cases is as follows:

As soon as the fever thermometer shows the patient's temperature to be above 103° he is lifted carefully from bed and laid full length in a bath tub of cold water. The temperature of the water is from 65° to 75° . The patient, while in the tub, is constantly and vigorously rubbed. He is lifted out in three or four minutes and wrapped in a warm blanket. This is the sole treatment, and the results are the surprising ones given above. Our plan of treatment of fevers has been a little different from this.

Very few families have portable bath tubs, and many patients shrink from being put into a cold bath. We have therefore long employed the following procedure. The patient is undressed while still covered with the bed clothes, long thick woolen socks are drawn over his feet and legs, then a sheet, folded just so as to reach from the top of the patient's socks to his neck, is wrung out of cold water containing one pint of good vinegar to the gallon of water. This sheet, quite wet, is spread on the front half of the bed and the patient is carefully lifted upon it. The flaps are instantly wrapped tightly over his body the arms being down, and the sheet tucked in around the neck. Then a dry blanket is thrown over the patient, and the nurse pats and rubs the patient vigorously. At the same time a cold wet compress is placed on the patient's head. He is left in the wet sheet for fifteen to twenty minutes and then lifted or rolled on to a dry blanket. This treatment invariably reduces fever, stops delirium if it is present, and puts the patient to sleep. Together with internal baths, it is the most rational and successful treatment for all acute fevers. Baths external and internal are already endorsed by the

leading members of the medical profession in Europe, and to some extent in this country. In ten years this will be accepted generally, as the plan of treatment for nearly all forms of continued fevers.

The history of a case treated in this manner—the worst case of scarlet fever that ever came under our observation—may not be uninteresting.

James K., a strong boy, 12 years of age, was taken with scarlet fever. It developed rapidly, so that by the second day the rash was thoroughly out. The lad's temperature at this time was 105° , and still rising—(the normal temperature is $98\frac{1}{2}^{\circ}$ F.) He became mildly delirious, and absolutely refused to drink or eat anything. Cold water was urged upon him, but he insisted that it was poisoned, and refused to taste it. He did the same when milk, or any form of food or drink was offered. For five days, although the child must have been consumed by thirst, he never drank a drop of fluid of any kind, and, of course, would not take medicine. On the evening of the second day the temperature had reached the very dangerous point of $106\frac{1}{2}^{\circ}$ —the pulse was almost too rapid to count. The family consented at last to try the plan of treatment mentioned above. He was wrapped in the wet sheet, and kept there for thirty minutes; then placed in a dry blanket. This reduced the fever two degrees, and quieted the delirium somewhat. The family were instructed in the method of using the fever thermometer, and directions were left that as often as the fever became as high as 104° the wet sheet was to be used. Of course, wet compresses were kept on his head. Through the second night and part of the third

day the wet pack was used as often as every two hours. Meantime an occasional injection of water was given, as he still refused to drink it. By means of the wet pack the fever was kept down to safe limits, sleep came at intervals, and on the sixth day the patient was rational, and took his first drink of water and the first nourishment in five days. The child made a good recovery, without complications. In this case the internal and external baths were the only treatment that could be administered.

In most acute diseases, drugs are necessary at times, but, unfortunately, the sole dependence is too often placed on them, and the simple and rational methods by bathing are neglected. The practice of the present day is a vast improvement on that of the past, however, and medicine is rapidly approaching a scientific foundation.



HIT OR MISS NOTES.

After "flushing the colon" with hot water for a week or two, it is best to gradually reduce the temperature of the water until it is moderately cool. Some persons find it impossible to use the water cool, as this causes them pain in the bowels. We find that after the colon has been thoroughly cleansed, the cool water has a more tonic effect than very warm water.

Remember to test the water before using by holding the hand in it *for a minute*. It must not be used hotter than can be borne *comfortably* by the hand.

In dysentery the seat of the trouble is in the colon, often near its lower extremity. Hence, it can be treated locally. In acute cases, congestion and inflammation are present. In chronic cases congestion and ulceration.

In treating either condition keep the patient *lying down, with the hips elevated higher than the waist and the shoulders*. Raise the foot of the bed 8 inches. This quickly relieves the congestion and pains in the lower part of the colon, especially in acute cases.

Do not let the patient sit up a moment in acute cases. Use the bed-pan always.

These measures are of immense importance, and should be used in addition to the medical treatment.

Chronic cases may be cured by flushing the colon carefully, and without force, with hot water, to which a littl

salt has been added. Then follow this with an injection of two ounces of melted white vaseline. This should be retained as long as possible, the patient lying on the face with the hips elevated. Use the same treatment in acute dysentery.

In chronic cystitis (inflammation and catarrh of the bladder), we have never found any treatment equal to the following:

The sufferer procures one of the flexible, velvet-eyed catheters, made on purpose to be used by the patient. (Price fifty cents).

The patient introduces the catheter and empties the bladder of its contents. Before doing this warm one ounce of fluid white vaseline, and have it standing in a warmed cup. Then immediately on emptying the bladder, while the catheter is in position, warm a glass syringe holding an ounce, and inject the ounce of warm vaseline.

Then tightly compressing the end of the catheter, withdraw it, leaving the vaseline within the bladder.

This will be gradually discharged, but, meantime it will have coated over, soothed and healed the inflamed mucus coating of the bladder.

The vaseline must not be the common kind, but the vaseline oil, or soft white vaseline.

Men, when they have passed the age of sixty years, are subject to an affection of the bladder, which, unless understood and properly managed by themselves, may make the

balance of their lives miserable, and finally hasten their end.

At the neck of the bladder there is normally a small gland, called the prostate gland. In old men, in some earlier than in others, this gland slowly enlarges until it forms a dam at the outlet of the bladder, and prevents this organ from emptying itself. The retained fluid decomposes and ferments, and sets up an irritation and catarrh of the bladder.

The sufferer has to try to empty the bladder very frequently, sometimes as often as every hour. He fancies that he does empty it by his efforts. This is a mistake; the bladder is half full all the time, and it is only the excess, the quantity that can flow over the dam, that is carried off.

Introduce one of the catheters described above, and a quite large quantity of fluid can be drawn off. The flexible catheter glides over the dam, and draws the fluid from behind it.

There is no cure for this trouble, any more than for grey hair or failing eyesight. It is one of the marks of age in men. *Drugs are worse than useless.*

Use the catheter every night, so as to, at least once a day, empty the bladder. Then if there is any irritation, inject an ounce of the warm fluid vaseline.

We have recently received a number of letters from elderly gentlemen evidently suffering from the condition described above. It is a very common trouble and should be understood by the laity so that they may seek relief

before a dangerous disease of the bladder or kidneys is induced.

Muscle-rollers and muscle-beaters are cheap and admirable instruments for stimulating the circulation and nutrition of the body. By these little instruments the muscles of any part of the body may be made to grow quite rapidly.

Thus, a thin scrawny neck may be enlarged, and even hollow cheeks filled out.

The best we have seen are made and sold by The Publishers of this work.

The tannin in both coffee and tea changes the pepsin in the gastric juice of the stomach, and thus slows digestion of food. They should not be used with meals where the digestive powers are weak. Tea is particularly bad where there is a tendency to an acid stomach.

How few people know what it means to follow a physician's directions carefully and strictly!

If told to take a dose of medicine three times per day, that may be done, after a fashion.

But when it comes to obey directions as to manner of life; as to diet, and exercise, and the use of flushing and massotherapy (more important by far in the cure of chronic troubles than drugs), it is hard to get these prescriptions carried out properly.

Dyspeptics tell us that they have tried every known medicine for years, but to no purpose. "We have now tried your system they say, but are still troubled."

We ask as to the diet used for the first two weeks.

"Oh! well! it wasn't convenient to use the meat and toast diet; and I never did care for meat anyway."

"What about drinking water an hour before meals?"

"Well, I didn't try that because I tried warm water in the morning two years ago, and it didn't cure me. In fact I never did like warm water."

"Well, you used the muscle-roller over the stomach, of course?" "Oh, doctor! I tried it *once* but you don't know what a tender stomach I have; and I didn't feel a bit better either."

"What about flushing?"

"Oh, that's all right: I tried that twice and it had some effect; but my stomach is still sore."

"How much fluid did you use at a flushing?"

"Oh I don't know: a cupful or two."

"And after *thoroughly* trying our system of treatment in this manner, you feel that it has not cured you?"

"Yes, really doctor; I am very little better; and I did expect, *so* much from your system. I am awfully discouraged."

So are we—with such patients. If the laity could only learn that in order to *cure, eradicate*, a chronic disease, there must be a change in the factors that caused it; and that to try a certain system requires some attention to details. In bad cases there can be no cure, without attention to diet. We wish the case mentioned above was an imaginary one only.

Again, people who have had a chronic dyspepsia for years expect to be cured in three days.

A lady came in and wished to know if she could return the "New Method," as the system did not suit her case and she did not dare to follow it.

How long had she had the book?

"Since Saturday last" (four days).

"What is your disease?"

Then follows a history of chronic dyspepsia of years standing, and treatment by every known drug and system of medicine. She now could eat nothing without great distress.

"How has our system disagreed with your case?"

"Taking water an hour before meals has caused several slimy, loose discharges from the bowels, and I am afraid something may set in."

We assured her that pure water could not create slime, and that it was better to have the slime and catarrh carried out of the body than retained there. We persuaded her to try the system for one week more and then report.

At the end of seven days she reports that she can eat the food recommended without any pain, but now the water has constipated her instead of causing looseness. We find on inquiry that in many years she has never once had a movement of the bowels without taking a drug. For the last six months she had daily taken Carlsbad Salts for this purpose. The "New Method" had not cured this trouble in one week.

This same patient has since persevered and now eats almost anything without its causing pain or discomfort; she is stouter and stronger in every way and the constipation is nearly cured.

Perseverance and carefulness is necessary, whether the struggle be to obtain wealth, fame, or to cure chronic disease.

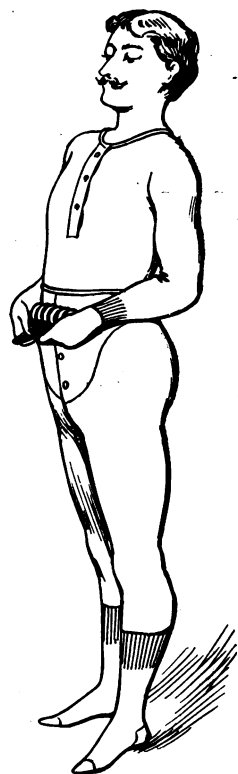
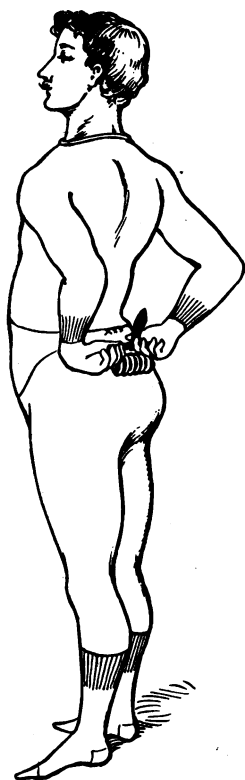
The muscle-roller is a muscle and flesh developer. By its use the muscles of any part of the body may be developed.

Some of our lady patients habitually use the roller on the cheeks. They claim that it fills out a thin hollow cheek wonderfully.

We should suppose that this must be the result of its use in thin faced persons, as an application of it causes the cheeks to glow for hours. It is the best way known to us to paint the face, that is, to fill the capillaries with red blood. Muscle-rolling means more blood and increased nutrition to any part of the body where it may be applied.

Some fifty years ago, a Mr. Halstead, of New York, effected some wonderful cures of feeble and emaciated dyspeptics, by a process of "kneading the bowels."

Dr. Trall says: "Two of my schoolmates, eighteen and twenty-one years of age respectively, declined in health. The family physician called their ailment dyspepsia, and attended them one year. They grew no better. Then Thompsonian, root and Indian doctors, far and near, tried their steaming and compounds in vain. The young men continued to decline. Both were extremely emaciated, and the younger was unable to sit up. The elder brother suffered excruciatingly at times of colic, and, becoming convinced that he could not recover, in one of his unendurable paroxysms of suffering, committed suicide by cutting his throat,



The **Massage Roller** can be used for "Kneading the Bowels" with most wonderful results, and over the back will remove lameness in a short time,

"A few days after this tragedy Mr. Halstead was heard of. A messenger was posted to New York, who paid a fee of \$100; took a solemn oath not to disclose the secret, nor to apply it to any one but this individual patient, the younger brother. All medicine was discontinued; the regimen was the same and the manipulations were commenced. In a couple of weeks the skeleton-patient was able to sit up. In a couple of months he was walking about.

"In one year he was in the enjoyment of good health. He is at this writing a Christian minister."

We have known such cures, made by a novice with the muscle or abdominal roller. Any one by following the directions laid down in this book under the head of massotherapy by the muscle-roller, and in the chapter on dyspepsia, can achieve as striking results.

Please note, however, that the above cure is not brought about in one day.

Every dyspeptic ought to pay a fee of \$100, in advance for treatment, as then in their desire to get their money's worth they will continue treatment long enough to be cured.

Golz proved by his experiments on animals that abdominal massage increased the amount of blood in the veins of stomach and intestines very markedly, and thus it must have a tendency to stimulate the functions of these organs.

In a delicate person muscle-rolling or a massage should not be continued for more than twenty minutes at a time for the first week or two. The stimulation will be too great if long continued. After this the length of an application

may be increased gradually. It must be used lightly over the stomach and abdomen, never so as to cause pain.

Asthmatics should eat very sparingly at night. If the case be a bad one it is well not to eat any supper at all. In any case, nothing should be eaten after noon heavier than crackers and milk, or mush and milk. The principal meal in these cases should be at noon.

One of our patients, a fleshy lady about sixty years of age, suffered frightfully from asthma and bronchitis. Often she would sit up in bed the whole night coughing, and, as she stated, would raise pints of phlegm from the lungs. She also believed that she was suffering from heart disease, and she had had several attacks in which she was believed to be at the point of death from this latter trouble. For several years she had suffered in the manner described and had obtained no relief from treatment.

We prescribed the diet laid down for dyspeptics, instructed her to take her principal meal at noon, and at night to eat nothing more than a piece of toast and a cup of weak tea. No cough medicines were given. It was really wonderful to see how quickly the asthma and the cough were cured by the treatment of the stomach.

TOBACCO.—"Grandma," said the small boy excitedly, after returning from the lecture on temperance and the dangers of tobacco using, "The man said that the oil of tobacco—nickey something he called it,—“Nicotine,” suggested the mother— "Yes, nickeltine, is such a *dreadful* poison that a drop of it on a dog's tail will—will kill a man."

Now we are not prepared to go quite as far as this in our statements about tobacco. We know that tobacco is a narcotic poison, but like all other narcotics, the effect depends on the dose taken, and the individual temperament. A big, robust, phlegmatic man may smoke his three to five cigars a day and the only visible result of the drug is that the smoker's breath smells like a tripe-factory. The nervous system in such individuals is not very susceptible to narcotics, and the tobacco has simply a soothing effect, unless it is carried too far.

On the other hand the man with a nervo-bilious temperament, the high-pressure brain worker, the youth and young man, the dyspeptic, the majority of Americans, all these might as well take small daily doses of morphine as to take the nicotine from cigars, cigarettes and pipe. (The habit of chewing tobacco is too filthy to discuss in public.) We have personally tried tobacco and found it "no good" for us. As a physician, we have seen hundreds who have been sadly injured by it, and not one who has been benefited by its use, so far as we could see.

As to tea and coffee, when taken with meals, it has been proved beyond question that the tannin in these substances precipitates or throws down the pepsin in the gastric juice, and thus slows digestion very much. *If one has a slow and weak digestion*, any form of dyspepsia or indigestion, these beverages should be avoided, at meal times especially. If something hot be needed with the meals take a glass of *hot* milk.

Tea is especially bad for one who has a tendency to

acidity of the stomach. There is no known substance that will "sour on the stomach" quite so quick as a cup of strong tea.

Hartelius says: "It is known by experience that strong abdominal muscles are found where there is good digestion; and that on the contrary, weakness in these muscles is accompanied by weakness in the digestion. It has been proved that movements that bring the abdominal muscles to contract strongly, have a strengthening influence on the digestive organs."

This observation agrees with our experience. We invariably find the muscles of the dyspeptic's abdomen thin, weak and tender to the touch. In proportion as these muscles become stronger from exercise and massage or muscle-rolling and beating, the digestion improves.

In Europe the use of massage in the treatment of pelvic troubles in women is becoming more and more popular among the physicians. We are heartily in favor of abdominal massage in these cases, and this, together with the treatment laid down in the chapter on "Pelvic Troubles in Females," will cure every case of this kind that is curable without a surgical operation.

Gentle manipulation of the stomach through the abdominal walls, after eating, by means of the muscle-roller or hands favors the more rapid digestion of food. If your dinner distresses you try the above plan. This treatment will immediately relieve gas in the stomach and intestines.

CURED BY A CANNON BALL.—A celebrated German physician orders his dyspeptic and constipated patients to roll a five pound cannon ball over the abdomen for fifteen minutes morning and night. This is done while the patient lies on his back. If one hasn't a muscle-roller and can get a cannon-ball he might try this plan of abdominal massage. We *know* that abdominal massage will cure these troubles, though treatment by a five pound cannon ball seems rather heroic and more appropriate for a nation of soldiers, like the Germans, than for peaceful Americans.

Experiments Illustrating the Influence on Kidneys of Hot Colon Injections retained.

The writer has tested on himself, in a large number of experiments, the effect on the secretion of the kidneys of fluids injected into the colon and retained there.

We have stated that fluids thus retained are quickly absorbed and taken into the blood, and then in a short time, are carried off by the kidneys, thus thoroughly washing out the later organs.

Here is a summary of the experiments that prove this.

We first ascertained by a series of observations that the average amount of urine passed between the hours of 9

P. M. and 9 A. M., 12 hours, was 22 ounces. Specific gravity averaged 1016.

Nov. 10th at 10 P. M., after flushing the colon slightly, we injected 20 ounces of milk and water in equal proportions at a temperature of 110° f., and retained the fluid. Within the next 12 hours we passed 56 ounces of urine, instead of the normal quantity for us, namely 22 ounces. Sp. Gr. 1010.

2nd EXPERIMENT.—After a flushing at night, injected and retained 16 ounces of milk and water.

Passed in the next 12 hours 54 ounces. Sp. Gr. 1005.

3rd EXPERIMENT.—Took a thorough colon flushing, but did not attempt to retain any of the fluid.

Passed during the next 12 hours 40 ounces urine. Sp. Gr. 1012.

4th EXPERIMENT.—Took no flushing, but at 10 P. M., injected 8 ounces of water containing 15 grains Iodide of Potash in solution.

Awoke out of a sleep in 2 hours with the peculiar taste of iodine in the throat; this proved that the drug had entered the blood as quickly as if taken into the stomach. The urine passed at this time, namely, two hours after the injection, gave the reaction for iodide of potash, showing that the drug was already passing out of the system through the kidneys.

The amount of urine passed in the twelve hours in this experiment, was only 17 ounces. This drug, iodide of potash, is *supposed* to act as a diuretic on the kidneys, *i. e.*, to increase the flow of the urine. It did not do so in this case.

and hot water alone proved a much more powerful stimulant to the kidneys.

A large number of experiments were made, all going to prove that a flushing of the colon with hot water, followed by an injection of from a half a pint to a pint of hot water that is retained, is one of the quickest, safest, and most powerful means known to stimulate the kidneys into action. This method is a more powerful diuretic than any drug known to us. The only precaution to be used in order to retain the hot water is to *immediately* lie down for a half hour after receiving the injection. It is a good plan in these cases to be all ready for bed and to retire immediately after receiving the injection.

Now what *practical* deduction is to be drawn from these experiments. Suppose we have a case of congestion and inflammation of the kidneys (not an uncommon difficulty). In such ~~a~~ trouble there is a stagnation of blood in these organs; the kidney tubes are choked up with albumen and casts so that little or nothing can pass through them. This causes the poison that the kidneys should carry off, to be retained in the system, and the result is that the whole body is in as disagreeable and dangerous a condition as is your house when the sewers become choked up.

The symptoms that accompany this trouble are pain and weight in the loins and pelvis, headache, loss of appetite, perhaps nausea, and *the passing of but little water, this of a very dark color and often containing blood.*

This is the condition that causes the symptoms given above. Now how shall we relieve this condition?

If we can wash out these choked up kidney tubes and

blood vessels with a mild, non-irritating fluid like water; if we can equalize the circulation of blood in the abdomen and pelvis so as to relieve the passive congestion of the kidneys; if we can soothe and quiet these inflamed organs by the local application of heat; and if all of this can be done quickly and safely; what more can be asked?

All of this can be, and has been done many times by us in these cases, by injections of hot water retained in the colon.

"The proof of the pudding is in the eating," and the test of a theory is in its practical application.

Notice the following case:

Acute Congestion and Inflammation of Kidneys treated by Hot Colon Injections retained.

W. C., 26 years of age, clerk, came to our office one morning complaining of the following symptoms: He had a headache, complete loss of appetite, had slept little or none the previous two nights, had pain and heaviness in the loins of the back, and, most noticeable of all, he was passing but little urine, this of a very high color, and it caused him pain to pass it. He had had an attack of this kind the previous year from the effects of which he did not recover in more than a month, so he knew pretty well what the difficulty was.

He had brought along a small specimen of the morning's urine for our examination. We found on a chemical examination about 25 per cent of albumen present; with the microscope, blood casts and blood cells in abundance. It was then a clear case of acute congestion and inflammation of the kidneys.

We advised his going immediately to bed and to commence the use of the hot colon injections. Owing to business complication he could not give up work for at least 24 hours, no matter what the danger to himself might be. We gave him the best and safest drug possible under these circumstances, namely Sulphate of Magnesia or "Rochelle Salts," a teaspoonful every hour in water.

The next day he called again. No better—rather worse; had taken the medicine all day, but no effect on kidneys. The water was less, not more than 12 or 14 ounces in 24 hours, and contained blood in abundance, could be seen plainly with the eye alone.

At our suggestion he went home, took a warm bath and went to bed. Immediately after his bath he took an enema of a pint of hot water and retained it. In six hours he repeated this enema, and in six hours more took another, same quantity, all retained.

We called at his home the following day, and he gave us the following record as to the amount of urine passed in the preceeding twenty-four hours:

12. 30 P. M. 4 oz.	11 P. M. 4 oz.
4. 30 P. M. 6 "	7 A. M. 9 "
7 " " " 4 "	10 30 " " 5 "
10 " " " 5 "	12 " 3 "

Total 38 oz.

That is, during twenty-four hours without drugs, but under the use of the hot injection he passed 38 oz.

While in the preceeding twenty-four hours while tak-

ing a drug hourly, as directed, he passed one-third of this quantity. During the last part of the second day he was in bed or lying on the sofa, which undoubtedly helped bring about the good result.

The best part of this second day's report was that the pain in the back had almost entirely gone; and we found on examination that the blood had disappeared from the urine and every bad symptom greatly improved. Albumen still present in small quantity however. He continued this treatment two days more, except that he did not remain in bed. The results on the second day of treatment by hot injections was even more striking than on the first day.

He then returned to business, although not entirely recovered, as a little albumen still showed on chemical examination. This disappeared in the course of ten days, and the patient made a perfect recovery.

At the previous attack of this same trouble (not so severe an attack by the way), the patient under drug treatment had been confined to the house more than two weeks and did not entirely recover for a long time after that.

Suppositories for Constipation. In very obstinate cases of constipation with a congested condition of the rectum and hemorrhoidal tendencies the Suppositories, sold by the publishers of this work, will be found very helpful, used in accordance with directions sent with each box (price 50 cents). The use of these will very often afford great relief and supplement the flushing treatment,

THE SECOND STOMACH.

When you have a patient much debilitated, and yet with a weak stomach, so that a sufficient amount of food cannot be administered, feeding by the colon may be resorted to. The colon can be used as a second stomach.

The question then arises as to what is the best food to administer in this manner?

Professors Ewald and P. Huber, of Zurich, have each found that raw eggs, beaten up with a little salt, is the best form of nourishment for this purpose. Two or three eggs are to be taken, and half-a-teaspoonful of salt added, with about a tablespoonful of water.* These are thoroughly beaten and then injected. These may be given three times per day.

An hour before each enema the rectum is to be cleared out by an enema of warm water.

We have thoroughly tested this plan of treatment, and found it practicable and of the greatest benefit. Milk, warm from the cow, may also be successfully used. The best way to administer any fluid per rectum is to pour it into a fountain-bag, hang the bag high, place the patient on his right side in a prone posture and allow the fluid to enter.

We find this treatment increases flesh and strength very rapidly, and, as the general health improves, the stomach grows stronger. Ability to retain and digest food, and an increase of appetite, follows this treatment. There is usually a rapid gain in flesh. This treatment proves "The

Elixir of Life" to many a debilitated sufferer. There are two important factors in all chronic diseases: the first is non-elimination of body poisons; the second is chronic starvation, because the organs cannot digest and assimilate sufficient food. Every reader of the New Method ought to know how to overcome both of these factors. We urge the trial of the "New Method Elixir of Life" in all cases of debility.

(a.) Quite a number of people have written us that, after injecting two or three quarts of hot water, it does not all return; much of it is retained, and causes trouble during the night by acting on the kidneys frequently. In such cases as this we would suggest that the flushings be taken in the morning instead of at night. The moving about during the day will cause the water to be discharged from the colon before it can be absorbed.

(b.) Again, certain persons, perhaps one out of a hundred, suffer from colicky pains when the water is in the colon. The reason seems to be that the presence of the liquid excites spasmodic movements of the intestines. In these cases we recommend the person to use anise-seed or peppermint tea for the flushing. This tea may be made by pouring two quarts of water on a tablespoonful of anise-seed, or caraway seed, or a handful of peppermint or spearmint leaves, letting this stand until nearly cool, and then straining and using to flush the colon. These substances seem to regulate the movements of the intestines, so as to prevent spasmodic and painful action.

(c.) Please remember that we advise the use of *hot* in-

jections only at the beginning of treatment. After a week or two, as soon as the colon has been well cleansed, the injections should be used only blood-warm.

(d.) Certain persons claim that flushing the colon does not relieve their hemorrhoids, or piles, but rather tends to increase the trouble. If, after a fair trial of the treatment laid down on page 161, the piles are still troublesome, we would recommend the use of a "pile pipe." This is a very ingenious little instrument, and has a magical effect on most cases of piles. We would advise a trial of this before resorting to an operation,

(e.) It might be doubted by many that such results as we have given under the head of Pelvic Diseases in Females, could be obtained by the simple methods of treatment here laid down. Our views are confirmed by an article just published by Prof. Von Preuschen, of Berlin, on the cure of Female Diseases by the Swedish movements. He reports a great number cured by such treatment alone. Among other cases was one of falling of the pelvic organs, a *very* bad case of ten years' duration. The patient reached a perfect cure, and two years later, when seen, she was found to be perfectly well, although she had been engaged in hard work all the time, and had taken no care of herself. Seven other similar cases were reported, all cured, and no relapses among them.

From this report it may be seen how much more important are the measures we have long advocated, in the cure of female troubles; namely position of the body, massage and exercise movements, than are the internal supports, caustic, &c., so commonly employed. There is one method of treatment that we add to those already given as beneficial, and that is the "constant" or galvanic current of Electricity (not electric belt humbugs).

BILL OF FARE FOR DYSPEPTICS.

In bad cases of dyspepsia, it is often necessary to be very careful as to the food taken. In such cases we write out a bill of fare to be followed strictly for two weeks or more without change. It is what we call the "anti-ferment bill of fare," and under its use we have seen the worst cases of dyspepsia cured.

It requires some self-denial on the part of the patient to cut off the "goodies," the puddings, pies, etc., as well as the fruits and vegetables, but in bad cases this must be done for a time. In a little while too, the food here recommended satisfies the appetite.

BILL OF FARE.

On first awakening in the morning take a cup of cool, not warm, water, sipped slowly. Then rub and knead or roll the stomach for five minutes. Then rise and take a little non-fatiguing exercise, such as bending over and trying to touch the floor a few times, crawling around the room on hands and feet three times, and spend ten minutes in taking as deep breaths as possible. Then rest until breakfast time.

Breakfast:—Begin it always with Universal Food, a table spoonful in a glass of hot milk, the whole made hot together. Gluten zwieback or peeled wheat zwieback with best butter; chew food till reduced to an emulsion. If a hot drink is found enjoyable use Kaffiebrod.

At 11 ½ A. M., another cup of cool water- At 12:30 dinner, beginning with Universal Food as before, with a little tender chopped beef or mutton broiled over a hot fire, plenty of gluten zwieback and butter.

At 5:30 P. M., repeat the breakfast. The last meal should be light to insure sound sleep.

Gradually the list of allowable foods may be extended, Meat is not essential, but a little may be taken morning or noon if desired. Salads of lettuce, celery, and other tender green herbage, with a little pepper, and salt, and vinegar, and plenty of good sweet oil, may be taken, with an occasional baked potato. The well masticated gluten and peeled wheat zwieback are in themselves capable of curing the most inveterate dyspepsia, and the Universal Food is sure to be digested by the weakest stomach.

In certain cases of dyspepsia, where the food caused pain in the stomach after eating, we have put the patients on an exclusive cracker and milk diet for a week, the milk often taken hot with a pinch of salt in it. After a week or so of this diet the patient could take other things without inconvenience.

The importance of cheerful conversation at meal times cannot be over estimated. The late Dr. Chambers of London mentions the case of a curate, unmarried, who com-

plained of suffering of various kinds after eating even the plainest food. But, strange to say, he had noticed that when he went out to a dinner party and ate and drank freely, even of rich food, he felt no inconvenience from this indulgence. The cause of this apparent anomaly was not far to seek. At his solitary meal in his room his brain was still turning over its theological grist while he ate his meal, and the consequence was that the blood that should have been sent pulsing through the stomach glands, was languidly moving through the brain. At the cheerful dinner party, accompanied with moderate mental excitement, the heart beat faster, and all the functions of the body, including digestion, were carried on more vigorously. We have frequently observed similar cases to the above. Only the other day a good German lady who has suffered tortures from dyspepsia told me that while at an entertainment recently she could not resist the temptation to eat some pickled herring and cheese. To her surprise she experienced no inconvenience from this indigestible diet. Thinking that at last she had found something she could eat, she tried the same "bill of fare" at her own home the next day, and had to send for the doctor two hours later. A dinner at home in her case was not accompanied by the freedom from care and the cheerful surroundings that had made pickled herring easy of digestion the day before. In some way there is an intimate relation between the flow of gastric juice and the flow of wit and humor and good feeling at the table. This is not a figure but a fact, as was proved by the observations on the Frenchman, St. Martin, who had a window in his stomach.

The story of a man with a window in his stomach, is a true and interesting one. By a premature discharge of a musket, part of the abdominal wall and a little of the front wall of the stomach were torn away. When the wound healed there was still a direct opening covered with a movable flap into the stomach. By pushing aside this flap or curtain, one could study the working of that very important organ, the stomach.

Dr. Beaumont kept this unique man in his employ for years, with the sole aim of studying the digestive processes.

One of Dr. Beaumont's experiments was to give St. Martin a fine dinner, and then, during the meal, find fault with and worry the poor fellow about his work and other matters.

The invariable result of this experiment was, that the dinner did not digest for many hours after the usual time, if it digested at all. Herein is a hint to business and professional men, who take their work and worry to the dinner table. Likewise an explanation of the fact that a fault-finding wife produces a dyspeptic husband. "Better a dinner of herbs with love than a stalled ox with hatred." This is physiologically as well as figuratively correct.

It is related in the biography of a certain celebrated Englishman that he always came to breakfast looking as if he had just heard a rare piece of good news. We know that with such a spirit he had no difficulty in digesting a good breakfast.

The late Dio Lewis advocated that delicate people should

make breakfast the heartiest meal of the day. He claimed that at breakfast a long interval had elapsed since the stomach had been called upon to work; consequently it was rested, and as the vitality of the whole body had been increased by a night's sleep, therefore the hearty meal of the day should be in the morning. This is a plausible theory, but experience has abundantly shown that it is fallacious as regards most people. Brain workers, sedentary and delicate people especially, nine times out of ten are better for a light meal in the morning and a hearty meal after noon. How many pass their forenoons in despondent stupidity owing to hearty breakfasts.

The French are wiser on this point than are we, and the roll and small cup of coffee in bed, and the little "*dejeuner*" at 10 A.M. meets the wants of the system perfectly, and yet leaves the brain clear for mental work. If you are a brain worker try the light breakfast plan.

We would not, however, lay down inflexible rules in this matter, as no two persons are exactly alike.

The late Dr. Chambers, of London, the great authority on stomach troubles, wrote this pregnant sentence: "There is no habit so pernicious to the gastric digestion as systematically taking purgative drugs, and there is none more common." Notice that these drugs injure the stomach even more than the intestines, the organs upon which they are supposed to act. The habitual pill and purgative taker gets the stomach and intestines into such an irritated condition that the presence of food, and even the natural excretions, make the victim uncomfortable. Then there

is a demand for something to hasten the motion of the substances in the alimentary canal. The intestines have given up all voluntary or independent action, so the usual irritating drug is demanded. It is the undue sensitiveness of the alimentary canal, induced by these drugs, that causes the mischief, as the food that should be a pleasant stimulant, becomes, in these cases, an uncomfortable irritant to the weakened stomach. Therefore, it is hurried out of it before it can be half digested. As a result, the purgative taker is usually languid and uncomfortable, and in need of a tonic of some kind.

Then think for a moment of the hundreds of millions of dollars that are spent annually for "pleasant purgative pellets," "little liver pills," "ready regulators," "liver lighteners," "intestine invigorators," and the hundred and one patent medicines, call them what you may—invigorators, tonics purifiers, nerve strengtheners—whose charm to the consumer is that they are purgative in their action. The patent medicine that does not act as a more or less active cathartic, has no hold on popular favor.

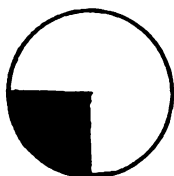
It is nearly as difficult to overcome the pill or cathartic habit as to break off the taking of morphine; but either may be accomplished. A lady has just reported to us that constipation of twenty years standing, with an absolute dependence upon drugs all that time, had been overcome by the hygienic treatment laid down in the "New Method."

The following most important confirmation of the views given in this book, is from Prof. Nothnagel, the best known

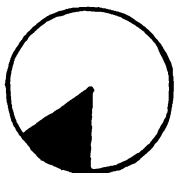
perhaps, of all the German teachers of medicine. This has just appeared in medical journals, since the first editions of the book have been out.

"TREATMENT OF HABITUAL CONSTIPATION.—Professor Nothnagel considers the three most important elements in the treatment of habitual constipation to be massage of the abdomen, electricity, and abundant exercise. An efficient substitute for a masseur is a metal ball, weighing from three to six pounds and covered with cloth to prevent chilling the skin. The patient should every morning roll this over the course of the large intestine for five or ten minutes, beginning in the right iliac region. Professor Nothnagel believes that in the end, massage is invariably of service, but that we must not expect much benefit for weeks, and perhaps months. As cases of long duration react but slowly to almost all methods of treatment, we must (in order to guard against the results of fecal accumulation) have resort to laxative mineral waters, drugs, or enemata. Nothnagel believes it better, under these circumstances, to *avoid drugs*, and only to use an enema, either of pure water or one containing common salt, olive oil, or preferably, glycerine. Acid fruits should be freely taken, along with a nutritious and easily digested diet."—*Medical News*.

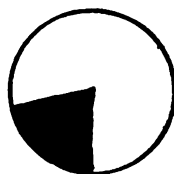
Diagrams Showing Comparative Amount of Aliment in Various
Every Day Foods.



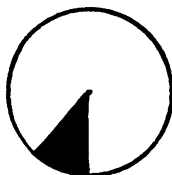
Beef



Pork



Fish



Milk



Cheese



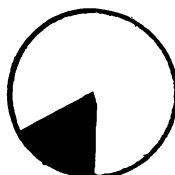
Eggs



Beans



Peas



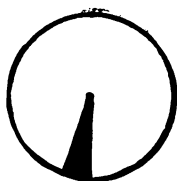
Potatoes



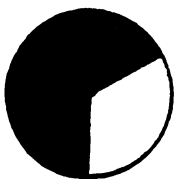
Bread



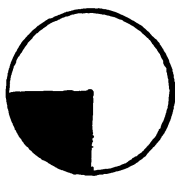
Whole
Wheat Bread



Lettuce



Dates



Bananas



Nuts

These diagrams were prepared by Dr. Latson to illustrate approximately the relative food values, for use in his work on the "Food Value of Meat," in which the subject is very thoroughly considered. This is commended to those interested in the question, which is certainly an important one, as if meat is not essential to physical and mental vigor many would prefer, from economic and other reasons, to abstain from it, and this 25-cent book considers the question very fairly and fully.

A CASE OF PARALYSIS.

The following grateful and appreciative letter was not written for publication, but believing it will do good by encouraging others to try the new treatment we asked permission from Mrs. Goodale, and in her reply she says she has not the slightest objection if it can be the means of helping the sick.

STILLWATER, MAINE, AUG. 16, '98.

W. E. FOREST, M. D.

My home is in St. Joseph, Mo., I came here four weeks ago to doctor my father who had a stroke of paralysis last September, and who has been doctoring ever since with drugs without appreciable benefit, and had for the two months previous to my coming been growing worse.

I have had such gratifying success in following The New Method Treatment with him that I cannot refrain from writing you about it.

When I arrived I found father had no appetite whatever, in fact, was sick at his stomach much of the time, was having no action of the bowels without cathartics, consequently he had been taking physic daily for months, and even then the bowels did not move every day; his urine was very scant, very high colored and smelled very badly, the doctor was giving him drugs to increase the amount, but with no effect, his feet and ankles were badly swollen, he sat in his chair all day long, and when for any reason he did walk he must be pulled to his feet by main force, and have some one to support him as he walked, in addition to a cane.

To-day, less than four weeks since I came, he has an excellent appetite, has a natural operation of the bowels every day, his urine is plentiful, light colored and has lost

its horrible odor ; the swelling has nearly all gone from his feet and ankles, he can get up without assistance from any kind of a chair, has walked as far as six blocks in one day without any assistance except his cane, his countenance is better, he can talk better, and in all this time not one drop of medicine has passed his lips.

An hour before breakfast I give him a cup of hot water, either clear or with a little lemon juice in it. An hour before dinner and supper he has a cup of hot water with quite a lot of orange, pineapple, currant, raspberry, raisin or some other fruit juice in it.

Every other day, at 10 a. m., we have given him a hot bath, rubbing him vigorously while in the tub. I rather think that is too often, however, and in future shall give him but two a week. I gave the hot baths particularly for the swelling in the feet and ankles. After the bath he lies down for an hour. We use the muscle roller over the paralyzed side for about half an hour in the middle of the forenoon and afternoon each day rolling as hard as I could without causing pain. Every night when he goes to bed we flush the colon with hot water. For his breakfast he has a dish of sliced peaches or pears, then a dish of oatmeal, with raspberry or some other fruit juice on it. For dinner he has about three kinds of vegetables and a few nuts (no pie, cake or other sweets at dinner or at any other time.) At supper he eats either fruit or vegetables (not both) with whole wheat biscuit. He drinks nothing with his meals.

All my friends who are invalids are so delighted with the improvement in father's health that they are coming to me one at a time to get me to tell them the wonderful secret, so I want to order four of the No. 2 muscle rollers. Please send the rollers at once and oblige,

Very truly yours,

MRS. L. F. GOODALE.

A CURE FOR LEAD COLIC.

We publish the following to show the value of the New Method Treatment in this distressing complaint.

OZONE PARK, N. Y., Nov. 28, 1895.

DEAR SIR:—Some time ago while calling upon a friend of mine one Sunday night I found that he had gone to the doctor's to obtain treatment for lead colic. He had for a couple of weeks been complaining of a constant pain in his left side in the region of the stomach, want of appetite, constipation, etc., the usual accompaniments of lead colic.

When he returned he brought a bottle of iodide of potash, one of castor oil and one of morphine.

I explained to him the New Method Treatment that night (Sunday). The following afternoon (Monday) he sent for me and treatment was administered that afternoon, also that night, and the next morning he was perfectly free from pain, had a huge appetite and felt better than he had in weeks.

Treatment was continued that day and the following day when he went out for exercise and air; and the next day (Thursday) he resumed work, although somewhat weak, but by the following Monday he felt as strong as ever.

He has the colic once or twice a year and has always been under the doctor's care for two or three weeks.

This time he was cured in less than a week and a saving of a doctor's bill as well.

Yours truly, L. E. STILES.

The following letter from a prominent professional woman, who when she took up the treatment was almost a nervous and physical wreck, bears important testimony as to the value of Dr. Forest's treatment.

HARRISBURG, Pa., October 18, 1899.

Dear Sir:—I am glad you are able to send me the new Facial Roller; if the success attending the use of the large one on my face has been so great, the results of one adapted to the purpose will of course be still more marked. I have now used Dr. FOREST'S MESSAGE ROLLER on my spine for two years, with of course intervals between; it quite stopped the neuralgia in my back. I honestly think these Rollers are one of the cleverest and best inventions of the day. To delicate people who require massage and have not the means or opportunity of procuring the services of a masseur, the Roller is invaluable; of course it has to be persevered with.

I have also used the lavage treatment as recommended in Dr. Forest's book, "The New Method," and cannot speak too highly of the results for whatever purpose used. I have told my physician that I was resorting to these two simple methods for improving my health, and he, too, is most pleased with the satisfactory results. As there is a great deal of quackery in these days I have purposely withheld my full opinion regarding the above until I had very fully tested them, and now, in fairness to yourself, and hoping to assist some doubtful fellow sufferer, I am writing this letter to you. You have my permission to publish as much as you like of it. I am, Yours faithfully, (Miss) K—G—.

Miss G. has gradually but surely regained her health and physical and mental vigor by the application of these home methods without resorting to surgical or other institutional treatment. What it has done for her it will do for the thousands of others who are in need of the building up that this affords.

Margaret Saunders in Demorest's Magazine says:
"A Massage Roller in the hands of a bright and persistent woman is worth its weight in gold."

MASSAGE AND GROWTH.

Robert Louis Stevenson, in his late journeys and wanderings in the isles of the South Pacific, made a very interesting and suggestive observation. This is, in brief, that in certain sections, which he mentions, the chiefs and their families, and the upper class in general, are not only better mannered and more intelligent than the common class of natives, but they are invariably heavier, taller and handsomer in body, than the common people. What is the explanation of this striking fact? Simply, according to Mr. Stevenson, because the ruling classes keep "lomi-lomi" men and women among their servants, and from the time of their birth until death, the classes of people mentioned are almost daily rubbed and massaged.

But, it may be said, why may not this larger growth of body be due more to an abundant supply of food and easier conditions in life, rather than to the effect of "lomi-lomi" upon the growing human animals?

There is one fact that seems to demonstrate with scientific certainty that it is the "lomi-lomi," and not the food, that makes the difference. In certain groups of these islands, *where shampooing is unknown*, the ruling classes are *not* larger, although better fed, than the common natives.

Dr. Emerson made a similar observation in the Sandwich Islands, twenty-five years earlier. He says, "The people of the Sandwich Islands are of normal stature, strength and size; but the chiefs are so much larger, handsomer, and more magnificent in muscular development, that foreigners would think they belonged to a superior conquering race, did they not know otherwise. The chiefs are about twenty five per cent. larger than the subjects. The only way to account for this is, that they (the chiefs and their families), have themselves lomi-lomied habitually all their lives

(Written for the N. Y. Medical Record.)

THE RELIEF OF PELVIC AND ABDOMINAL PAIN BY HOT COLON DOUCHES.

BY W. E. FOREST, M. D., N. Y.

CASE 1.—Mrs A., sixty-five years of age; was attacked suddenly by an excruciating pain in the left loin over the region of the kidney, and extending forward and downward toward the groin. She had had similar attacks some months before for which I had treated her.

The attacks were what are usually called “gravel, or kidney colic,” and seemed due to the passage of calculi from kidney to bladder, through the ureter. The pain was continuous, but there was no tenderness on pressure.

As the pain was intense, the first indication was to give relief, and for this purpose I ordered hot fomentations over the side, and gave a quarter grain of morphine hypodermically. She begged me, after fifteen minutes, to repeat the dose, as the pain did not subside, but I declined to do this.

I left some opium suppositories, however, to be used through the night if necessary.

In the morning early the lady's daughter came to my office to report that her mother was getting worse. The injection of morphine had numbed the pain for a time, but, so soon as the influence of the narcotic wore off, the pain began to manifest itself again, and now it was very bad. The opium suppositories were apparently useless, and the patient wished another injection of morphine.

I was engaged at the time and could not well leave. It occurred to me that the ureter, lying as it does immediately behind and in contact with the colon on the left side,

might be reached directly by hot applications within the colon.

At this point a thin membrane only would interpose between the irritated tube and the local application of heat.

I instructed the patient's daughter to have her mother lie on her left side (partly on her face) with the hips a little elevated. Then the daughter was to very slowly inject into the colon, with Davison's or fountain syringe, water as hot as could be borne by the hand, *i. e.*, a temperature not less than 108° F. I promised to see the patient as soon as I was at liberty, and give morphine if it should be needed. The injection of hot water was to be not less than a quart in amount, and to be retained as long as possible. The object of the injection was not to move the bowels but to relieve the pain.

In an hour or so I called to see my patient—found her sleeping quietly. The daughter said that the first injection had been retained about ten minutes. It brought much relief from the pain. When expelled, hardened feces had come away with it. Another hot injection had then been given, and, while giving it, the patient had dropped off into a quiet sleep, the first natural sleep in more than twenty-four hours. The last injection, about one pint in amount, was still retained in the colon.

I left my patient sleeping, with orders that if the pain returned again she was to have another hot colon douche. Saw her in the afternoon; there had been no return of the pain, but the side was quite sore. The second injection had never passed from the colon, but there had been a profuse discharge of urine, showing that the water had been absorbed from the colon and passed out of the system through the kidneys. Two more hot rectal, or rather, colon douches, were given for the soreness, and the next day my patient was out of bed as active as ever. She passed a quantity of small uric acid calculi. No stone of any size was seen.

CASE 2.—J. I., 32 years of age, a commercial traveller, stopping at the hotel. While writing at a desk, he was taken with a sudden, sharp pain over the region of the left kidney. The pain was so severe as to make him feel faint, and become sick at the stomach. He went to his room immediately and had been in continuous pain since the attack. I found him writhing on the bed, consumed with a raging thirst, but vomiting everything he drank. He threw up only what he drank, no bile nor mucus with it. He said he had never had a similar attack; was usually in good health. He had been a little dull latterly in body and mind, and he had noticed that the urine had been high colored and scanty. The pain extended from the left kidney down into the groin.

There was no rectal syringe at hand, and the pain was so great he could not wait for one to be procured, so I was compelled to give a quarter grain morphine hypodermically.

His brother had been sent for and came while I was present. I explained the situation and asked to be sent for if the pain returned. Four hours later I was summoned again. The attendant said that after the morphine injection the pain had been less severe for an hour or two, but for the last two hours it had steadily increased and had now become unbearable.

The patient said that it was now as bad as when I first saw him; vomiting continued.

I prepared the hot colon injection, had my patient lie partly on his left side and face, and instructed the brother how to administer the douche. The fluid was pumped into the colon very slowly and retained. In a few minutes the groans ceased, and by the time a pint and-a-half had entered the colon, the patient was quietly sleeping. In this case also the water was retained in the colon and absorbed into the system.

In the evening, after another douche, my patient took the train for his home in Philadelphia.

CASE 3.—A lady; unmarried, 31 years of age; an artist by profession, nervous temperament, subject to fainting attacks.

I saw the case first while she was suffering from what she called "ovarian neuralgia." I obtained the following history: For the last two years she had been suffering with pain over the region of the left ovary, at the time of the menstrual period. The pain was worse just before the flow, but continued during and after it. This trouble had grown steadily worse. During the last six months it had been especially bad, and for two weeks in the month she suffered excruciating pain in the left side in front and radiating down the front of the thigh.

This pain was paroxysmal in character and periodical. For instance, it would come on at about one p. m., and grow steadily worse until evening, when she would be almost beside herself with pain. By seven o'clock, the pain would begin to die out: then a period of comparative ease until one o'clock in the morning, when the pain would return with all its force and last until daylight.

There was marked tenderness over the left ovary during the time that pain was present. This suffering had continued for a week and would last for a week more at least. She was conscious of some pain all the time throughout the whole month.

She had been under the care of a physician, but he had not been able to give her relief except by the use of morphine; this drug prostrated her so that she could not use it. She had taken antipyrine and quinine with little or no effect. Had taken three doses of antipyrine that afternoon, together with two little pellets of something she did not know the name of, but it was said to be a specific for neuralgic pains. None of these remedies had relieved her in the least; would I do something to help her, as her doctor was out of town, and she could not stand the pain much longer.

• I explained that so far as drugs went I had nothing to suggest different from what she had already tried. Morphine she could not take and the others had failed. I suggested that she might try the hot colon douche: while I had never tried it in just such a case as hers, it seemed as if it might relieve the pain. At least it was the "forlorn hope," as there was no other remedy that I could suggest. The sufferer gladly consented to try this treatment, and her mother was instructed in the method of using it.

The mother carried out my instructions carefully, with the result that in fifteen minutes the pain had mostly subsided. After resting for half an hour, the patient dressed and went to dinner, and ate quite heartily. This was contrary to orders. A few minutes after dinner she had a fainting attack or collapse, that alarmed the mother very much. Whether this was due to the antipyrine taken during the afternoon, or to the colon flushing followed by the exertion of dressing I cannot say. To avoid any trouble of this kind again I ordered a stimulant before using the flushing, and rest in bed for an hour or two after it.

While the pain had been relieved for the time being, it was not certain that the relief was due to the hot flushing, as the drugs taken during the day might have at least taken effect. Again, the pain usually grew less in the evening, though not so rapidly and completely as it had after the flushing.

However, the attack was due again at one A. M., when there would be an opportunity to test the new treatment. I ordered a hot flushing to be taken that night a half hour before the pain was due, and again the next day at noon, before the afternoon pain was expected. If the pain became severe the flushing was to be repeated during the attack.

The following day I learned that the flushing given at midnight almost checked the expected attack. There was a slight manifestation of the pain but not enough to prevent sleep.

There was no further pain after this. The patient took a hot flushing every night for the effect on the ovary, but was soon about the house, though her strength returned very slowly. She stated that her system seemed shattered by her sufferings.

There was still soreness on the left side in the ovarian region, but day by day this became better, in spite of the fact that she went to her studio and did some work.

Ten days after the cessation of the menstrual flow she came to my office with her mother. It was important to know, on account of a proposed journey, whether there was any local trouble in the ovarian region to account for these attacks, and to see what the hopes of a permanent cure might be.

On examination I found a hard, round swelling in the left broad ligament, close up to the uterus. This was exquisitely tender to the touch, not movable and evidently, partly at least, inflammatory in character.

It was so tender that I could not determine at that time how much the ovary was involved.

As my patient was going out of town I could only suggest for this swelling a blister over the region of the trouble and the use of the hot colon douche at night. Her great fear was the return of the pain at the next menstrual period.

On her return to the city, some weeks later, I learned that she had remained quiet during the rest of the month. She had taken the hot colon douches every night. The menstrual flow had come on at the proper time without pain; had continued free from pain for three days; on the third day she had had great mental disturbance and trouble, an emotional cyclone, so to speak, due to family matters, and the next morning the pain returned.

It was relieved by the hot rectal douche but had tended to return periodically each morning, showing that

it was neuralgic in character and was started this time by the mental disturbance.

On examination I found the swelling in the left broad ligament much reduced in size and the tenderness almost gone. I am now treating the case with the daily use of the hot rectal douches and twice a week the application of galvanic electricity to the swelling in the left ligament; the positive electrode behind the ligament in the vagina, the negative on the abdomen.

In addition she has the foot of her bed elevated eight inches at night, and she is to lie down for an hour in the morning and an hour in the afternoon with the hips elevated on pillows. This to relieve pelvic congestion by the influence of gravity, and to stretch the shortened left ligament of the womb.

Since writing the above she has passed another menstrual period almost without pain. The suffering of the past two years now seems like a horrible nightmare to her. She tells me, too, that more than a year ago she was examined by a specialist in this city who told her that she had a severe chronic inflammation and must come into his hospital for a long course of treatment. She declined and has struggled against the trouble in spite of the terrible suffering.

CASE 4.—Mrs. S., 34 years of age. Has had two children, the last eight years ago. She was taken suddenly in the night with great pain in the uterine region. The pain was continuous and accompanied with soreness and tenderness to the touch. It seemed to her like "inflammation of the womb." Her husband used hot applications an hour without the least relief, when the patient remembered that I had instructed her once as to the relief of pain by hot rectal douches. Her husband administered one and the pain disappeared in fifteen minutes. There was marked soreness over the supra-pubic region for a day or two, but no return of the pain.

I did not personally see this case, but obtained the details from the husband of the lady. As near as I could learn, the pain must have originated from a vaginal injection having gone astray, some of the liquid possibly entering the uterus and fallopian tube. Every practitioner knows that such accidents often cause serious results.

CASE 5.—Miss M. F., 30 years of age, tall, thin, anæmic young woman. Has doctored for many months, but with little or no benefit. Complains of three things, namely, great debility, great pain at her menstrual period, before and during it; and pain in urinating. This latter trouble is a recent one, the pain at her menstrual period she has had for years, but of late it has grown worse. Of course she is of a badly constipated habit.

For the relief of the pain at the menstrual period, which was about due, I advised the hot rectal douches every night, commencing at once.

For anæmia I gave the elix-peptonate of iron.

Three days after the menstrual period, she reported again and stated that she had had but very little pain—less than in many months. The hot rectal douche gave relief at once. It had had no bad effect on the flow—had certainly not increased it. She was feeling much stronger than at her last visit, as she had not been prostrated as usual by her period, and the tonic had had an opportunity to strengthen her.

She expressed herself as delighted with the effect of the hot colon douche, and said that she should use it during every menstrual period. Has reported since and there is great improvement. Is free from pains of all kinds and has a good color in cheeks and lips. *Continues the douches.*

CASE 6.—Woman aged 62 years. Was taken with a steady pain, a little to the right of the epigastric region. She was slightly jaundiced. There was soreness to the touch when deep pressure was made. She vomited occasionally; has had such attacks before. From the his

tory and location of the pain, I judged it to be due to a biliary calculus. The patient had been under treatment two days when I saw her. As she was constipated from the narcotics she had taken, I ordered the colon flushed with hot salt water. When this had been done twice, the pain in the epigastric region ceased, and there was no more trouble from the gall stone. The vomiting ceased and the appetite returned.

The histories of the above cases have been selected out of many others because they illustrate different types of abdominal and pelvic pain that can be relieved by hot colon douches.

In cases I. and II. we have the typical kidney colic, one case in an aged female, the other in a young male. Both cases were promptly relieved by the treatment, even when morphine had failed to bring permanent relief. In case I. the attack was apparently shortened, as I had twice treated her previously for the same condition and each time it had taken three days before the soreness and pain had ceased. In this last attack it ended much more quickly.

The rationale of the treatment in this class of cases is simple. The hot water in the colon comes into nearly direct contact with the irritated and contracted ureter, through which we suppose a calculus to be passing. Now the effect of heat on living tissues we know to be threefold: 1st. It is a sedative to the painful nerves. 2nd. It relaxes the spasm of muscular tissues. 3rd. It relieves congestion. Hence our application tended to relax the ureter and allow the stone to pass on to the bladder, and, at the same time, the pain and congestion were relieved, and inflammation prevented.

A further influence of the treatment is due to the absorption of more or less of the water from the colon. This relieves the thirst without taxing the disturbed stomach, and as the water is eliminated by the kidneys,

washes them and the ureters with a bland liquid. In all these cases I would recommend, after a thorough douching of the colon with the hot water, the injection of a pint of hot water to be retained. This latter will always be accomplished, if the patient, after receiving the liquid, lies quietly on the face or side with the hips elevated on a pillow.

Hot mineral waters, saline or lithiated, may be used if desired for this latter purpose. The question arises whether pain in the right kidney and ureter will be relieved as well as on the left side?

According to my experience, it will, if the douching or flushing be thoroughly done.

I have demonstrated that the hot water can be made to pass throughout the length of the colon to its end on the right side. Here it comes in intimate relation with the right kidney and its accessories.

In case III, ovarian neuralgia and inflammation of the broad ligament, we have a similar rationale for the relief of pain, as in the preceding cases. We need hardly be reminded that the colon is in close contact with the uterus ligaments and ovaries. It was once the fashion (after Simon) for the surgeon, on the slightest provocation, to insert the hand and forearm into the female rectum for diagnostic purposes.

With the hand in the colon the uterus and ovaries are in its grasp, and can be mapped out and examined with the greatest ease, a thin membrane only separating the hand from these organs.

Now the hot water in the colon comes into as direct contact with these organs as did the hand of the surgeon in the same position.

In the hot colon flushing, the uterus and appendages are immersed, so to speak, in a hot bath.

The effects of heat in relieving congestion, soothing painful nerves, and relaxing spasm, need only be mentioned

here. They explain the relief experienced in this case when narcotics and anodynes had failed.

A moment's consideration will show how much more effective a hot colon douche should be in such cases than the usual hot vaginal douche. In the colon douche the hot liquid is applied to and *retained* on nearly all sides of the disturbed organs.

In the vaginal douche it is applied intermittently at one end of the uterus.

There is as much difference between the effects of the two methods as there is between a warm sponge bath and a continued, hot tub bath, when the soothing and relaxing effects of a hot bath are desired.

Certainly, in the case related, the pain was relieved by the hot colon douche when all other measures, such as hot external applications, hot vaginal douches, and the internal use of anodynes, antispasmodics, and even narcotics, had entirely failed.

In case IV., the patient felt that she had been saved an attack of uterine inflammation by a prompt resort to the hot colon flushing. One thing at least was certain, she had been promptly relieved from severe pelvic pain by this treatment.

The next case V., painful menstruation, represents a very large class of sufferers. We would be safe in saying that in this country, among the more intelligent classes, the young women who are free from suffering at the menstrual period are the exception rather than the rule. How great this suffering may be in many cases only the sufferer and the physician can understand.

Not long ago a young married woman told me that for three days at the beginning of her menstrual period she remained day and night in the kneeling posture, as it was in that position she could endure the awful agony that was hers each month. If she slept at all during this time, it was when completely exhausted, still kneeling, she rested

her head on a pillow in a chair. This is an unusually severe example of a large class of sufferers. Most of these cases occurring as they do in young unmarried women, will not, nor should they submit to local treatment by a physician. The best the physician can do in these cases is to prescribe narcotics or antispasmodics to be used at the time of pain for a temporary effect. These drugs will be used a short time and then the patient either gives them up, or becomes a victim of the drug itself.

If the physician's advice is not sought through motives of delicacy, the usual home remedy is alcoholic stimulants of some kind, usually hot gin. The quantity drank by some of the sufferers at such times is almost past belief.

The substitute I have to offer in these cases for the narcotics, anodynes and stimulants, is the hot colon douche. It has absolutely no drawbacks or injurious effects, when properly used, but, on the contrary, has a decidedly tonic and curative influence on the conditions that causes the suffering.

In the majority of these cases there is an undeveloped uterus, often bent upon itself, with sensitive nerves and spasmodically contracted blood-vessels. The influence of the heat upon such conditions is beneficial. Upon the menstrual flow itself, the hot colon douche, used during the flow, has a good effect. If the flow be excessive, the douche lessens it; if scant, it increases it; in short, it regulates the discharge, and makes it normal.

In case VI., the hot colon douche relieved what seemed to be an attack of hepatic colic. This case is mentioned to show that the influence of the colon douche is not confined to the pelvis, but extends to the upper part of the abdominal cavity as well.

The treatment is particularly appropriate in these cases as it has long been known that large rectal injections relieve jaundice.

In cases of pelvic pain following a miscarriage, where inflammation seems to threaten, and an immediate recourse to morphine seems indicated, I have found the hot colon douche to relieve the pain almost immediately, and to have a very beneficial effect on the womb and accessories. The hot douche besides relieving the pain, elevates the organs into place, lessens the congestion, and favors the return of the womb to its natural size. I have the hot colon douche employed daily in these cases.

The foregoing cases are types of the class of cases that I have found benefited by the use of the hot colon douche. I trust that others may give this method of relieving pain in the pelvic and abdominal cavity a fair and impartial trial, so that by an extended series of observation the real merits of the method, if it has any, may be established.

Speaking from my own experience, I feel sure that the hot colon douche will have a quite important position in the therapeutics of the pelvic and abdominal cavity.

It may be well to recapitulate the proper method of using the remedy, for even in so simple a matter as this there is a right and wrong method.

The patient is to lie on the left side with the left arm behind the back, legs partly drawn up, hips on a pillow or folded blanket; the chest low, in short, in the Simms position. This position allows the patient to administer the injection with the right hand. It is always better, however, to have an attendant administer the injection if possible. If an attendant gives it, the patient might better lie directly on the face, with a folded blanket or pillow under the thighs. The water is to be of a temperature not more than 112° F., nor less than 106° F.

From a pint to a quart of the hot liquid should be slowly injected, and retained for a few minutes.

If there are fæces in the rectum, as is usually the case, the injection and the fæces will be quickly ejected.

Then at once have the patient lie down and repeat the

hot injection, using a larger quantity the second time which may be retained longer, and after expelling another and repeated injections should be taken, and these will certainly relieve the pain. At last about a pint of hot water should be injected, this will be retained if the patient lies quiet, and it will be discharged from the system through the kidneys.

If the patient is at all weak, it is wise to give a little simple and nourishing food.

In a letter dated November 9th, 1896, Mr. Jas. Reid, of Carlton Hill, N. J., says that his wife has been afflicted very badly with Uterine troubles, had consulted the physicians, and taken much medicine without gaining any permanent relief, but after trying the treatment given here, the movements and flushing the colon thoroughly with hot enemas in a few weeks she was entirely well and the recovery has proved permanent. We have abundance of testimony as to the efficacy of this method and its superiority over the vaginal douches now so much in vogue with some practitioners.

FOOD VALUES.

On the following pages will be found a Food Table, which shows how to select food according to needs. Six especial features are made prominent, viz., time for digestion, amount of water or waste, amount of heat and energy, amount of fat, amount of flesh and bone material, and cost. Other valuable suggestions are given. These things are all of practical value in daily life and to every person, especially when wishing to obtain the best results at the least cost.

In the selection of food the first thing to be considered is digestion, for if the food is not digested it is worse than useless. So, the first column of figures in the table shows the time for digestion. The next to be considered is the water or waste in food, for if there is much water there is little nutriment, and this can be found in the second column. If the food is needed mainly for brain force look in the heat and energy column. If chiefly for muscular exertion, look in the column for flesh and bone material.

If economy is necessary, after the previous points are settled, look in the price column and decide what foods will furnish the most nourishment for the least money; thus, split peas will give about six times more nutriment for the same sum of money than meat.

The analyses, also prices of food products, often differ very much, and digestion also; but the above figures give an approximate average for comparison; yet they will vary more or less according to times, places and persons. A few percentages are estimated, and fractions are omitted. The fat indicated in the fat column is apportioned in the other percentages.

These tables and the following notes on food and health were compiled by Prof. Alfred Andrews and he is now revising and elaborating them for a manual to be published under the title of "What Shall We Eat," to which we would refer the reader for further information on the subject.

COMPARATIVE TABLES. OF FOOD PRODUCTS AND VALUES.

ARTICLES.	Digestion, hours.....	Water, per cent.....	Heat and Ener- gy, percent.	Fat (not includ- ed in per cent)	Flesh and bone material, p. c.	COST. Cents.
Almonds (sweet).....	2½	9	61	(53)	30	20 c. per lb.
Apples (raw).....	1½	85	10	—	5	25 to 50 pk.
Apricots	1½	85	12	—	3	15 to 20 lb.
Arrowroot	2½	16	83	—	1	35 to 40 lb.
Asparagus	1½	94	3	—	3	18 bunch.
Bacon	5 to 6	21	66	(68)	13	14 lb.
Bananas	1½	74	20	(1)	6	2 to 3 ea.
Barley	2½	15	70	(2)	15	4 lb.
Beans (green).....	2	91	6	—	3	6 qt.
Beans (dried).....	2½ to 3½	13	57	(3)	30	6 to 8 qt.
Beans (Lima)	3	13	62	(2)	25	10 qt.
Beef (fat).....	4	52	28	(28)	20	8 to 18 lb.
Beef (lean).....	3 to 4	72	8	(4)	20	8 to 18 lb.
Beets	2 to 3¾	85	11	—	4	6 doz.
Blackberries	1½	84	12	—	4	10 qt.
Bread (white).....	3¾	36	53	(2)	11	10 lb.
Bread (whole wheat)	3¾	38	49	(4)	13	10 lb.
Bread (rye).....	3½	45	47	—	8	5 lf.
Bread (graham).....	3½	36	52	(3)	12	5 lf.
Buckwheat	3 to 4	14	72	(3)	14	4 lb.
Butter	3	12	83	(85)	5	20 to 30 lb.
Buttermilk	2	89	6	(2)	5	4 qt.
Cabbage	3 to 4	88	7	(1)	5	5 to 8 ea.
Carrots	3½	85	12	—	3	6 doz.
Cauliflower	2	90	6	(2)	4	12 ea.
Celery	3	91	6	—	3	5 stk.
Cereal coffee	1	10	74	(2)	16	25 lb.
Cheese	3½ to 6½	36	34	(28)	30	16 lb.
Cherries	2	84	12	—	4	10 lb.
Chestnuts	3¾	10	73	(3)	17	12 to 15 qt.
Chocolate	3	15	65	(50)	20	40 lb.
Cocoa	3	10	64	(56)	26	50 lb.
Cocconut	3½	7	74	(67)	19	5 to 8 ea.

ARTICLES.	Digestion, hours.....	Water, per cent	Heat and Ener- gy, per cent.	Fat (not includ- ed in per cent)	Flesh and bone material, p. c.	COST. Cents.
Codfish (salt).....	3	51	—	—	27-22 salt	10 lb.
Corn meal (Indian)...	3¼	14	70	(7)	16	3 lb.
Corn (green)	2½	85	10	—	5	18 doz.
Cranberries	2	86	10	—	4	10 qt.
Cream	3	66	29	(27)	5	40 qt.
Cucumber	2 to 4	90	6	—	4	2 to 3 ea.
Currants	3	88	10	—	2	10 qt.
Dandelion	1½	91	3	—	6	5 bnch.
Dates	2	30	61	—	9	10 lb.
Duck	4½	76	8	(6)	16	16 lb.
Eels	3 to 4	65	22	(22)	13	12 ea.
Eggs	2 to 3½	74	11	(11)	15	1 to 3 ea.
Figs	2½	24	68	(1)	8	12 to 15 lb.
Filberts	3	12	68	(60)	20	20 lb.
Fish (white).....	3	78	5	(3)	17	12 lb.
Grapes	2	82	13	(2)	5	5 to 10 lb.
Grape-nuts	1	5	78	(2)	17	15 pkg.
Ham (cured).....	4 to 5	29	37	(37)	24 10 salt	13 lb.
Hazelnuts	3¼	11	68	(63)	21	15 lb.
Herring	3½ to 4½	75	11	(10)	14	3 ea.
Irish moss	2	18	58	(4)	24 (14 slts)	25 lb.
Lamb	2½ to 3½	72	12	(10)	16	8 to 18 lb.
Lemons	1	86	11	—	3	20 dzn.
Lentils	3	14	56	(2)	30	10c. per lb.
Lettuce	1½	97	1	—	2	8 ea.
Mackerel	4	69	10	(8)	21	20 lb.
Macaroni	2½	11	70	(2)	19	10 lb.
Melons (water).....	1	90	7	—	3	25 ea.
Milk (cow's).....	2	86	9	(4)	5	5 to 10 qt.
Milk (condensed).....	2 to 3	26	57	(11)	17	10 to 15 can.
Mushrooms	1½	90	5	—	5	25 can.
Mutton (fat).....	4	50	32	(34)	18	5 to 16 lb.
Mutton (lean).....	3 to 4	72	8	(5)	20	5 to 16 lb.
Nuts (prepared).....	2 to 3	7	69	(20)	24	20 to 50 lb.
Oatmeal	2 to 3	10	71	(6)	19	3 lb.
Oleomargarine	3 to 4	12	80	(82)	8	15 to 18 lb.
Onions	1½ to 3	88	9	—	3	10 qt.
Oranges	1 to 2	86	11	—	3	25 dzn.
Oysters	2 to 3½	82	4	(2)	14	25 qt.
Parsnips	2½	82	15	(1)	3	2 ea.
Peaches (raw).....	1½	85	12	—	3	10 qt.
Peas (split).....	2½ to 3	14	56	(2)	30	5 lb.
Peas (green).....	2	79	13	(1)	8	25 to 40 pk
Peanuts	3	7	65	(47)	28	8 to 10 qt.
Pears (raw).....	1½	85	10	—	5	2 to 5 ea.
Pineapple	2 to 3	64	30	—	6	10 to 15 ea.
Plums (raw).....	1½ to 2½	85	9	—	6	10 to 20 dzn.
Pork	4 to 5	40	48	(49)	12	5 to 18

ARTICLES.	Digestion, hours.....	Water, per cent....	Heat and Ener- gy, per cent.	Fat (not includ- ed in per cent.	Flesh and bone material, p. c.	COST. Cents.
Postum (food drink). 1		6	76	(2)	18	25 pkg.
Potatoes (Irish)..... 2½ to 4		75	21	—	4	1½ lb.
Potatoes (sweet)..... 3		72	24	—	4	3 lb.
Poultry 2½ to 4		74	6	(4)	20	10 to 16 lb.
Prunes 2½		50	46	—	4	10 lb.
Pumpkin 2		96	2	—	2	12 can.
Pure Gluten Bread 2½		45	15	(3)	57	20 per loaf.
Pure Gluten B'kft F'd 1½ to 2		8	26	(2)	40	20 lb.
Pure Gluten Macaroni. 2		10	87	—	53	20 lb.
Plasmon. 1		10	30	—	60	100 lb.
Rabbit. 3		73	12	(5)	15	20 ea.
Radishes 3½		91	5	—	4	2 bunch.
Raisins 3		37	58	(1)	5	12 lb.
Raspberries 2		82	12	—	6	12 qt.
Rhubarb 2½		94	3	—	3	5 bunch.
Rice 1		10	82	(1)	8	7 lb.
Rye meal 3		14	73	(2)	13	4 lb.
Sago 1½		12	85	—	3	12 lb.
Salmon 2 to 4		77	6	(6)	17	25 lb.
Sardines 3½		64	23	(23)	13	15 to 25 box.
Spinach 2½		88	6	—	6	4 qt.
Sprouts 2		87	7	—	6	5 qt.
Squash 2		96	2	—	2	15 can.
Strawberries 1½ to 2½		87	10	—	3	8 to 15 box.
Tomatoes 1½		80	5	—	6	5 to 8 qt.
Turkey 3 to 4		74	8	(6)	18	15 to 18 lb.
Turnips 2½		91	7	—	2	2 ea.
Veal 3½ to 4½		66	16	(13)	18	8 to 20 lb.
Walnuts 3½		13	68	(52)	19	15 lb.
Watercress..... 1½		98	4	—	3	7 bunch
Wheatena 2		6	74	(4)	20	12 lb.
Wheat flour (white). 3		13	70	(2)	17	4 lb.
Wheat meal (unbltd) 3		14	68	(3)	18	4 lb.
Whortleberries 1½ to 2½		86	9	—	5	10 qt.
Yams 2½		72	23	(1)	5	3 lb.
Zwieback 3		17	73	(1)	10	15 to 20 box.

FOOD AND HEALTH INFORMATION.

This table shows how to select food according to needs; thus, split peas will give about six times more nourishment for the same sum of money than meat.

Coffee and tea may prevent or retard digestion about 33 per cent. Salted meats, fish, &c., are harder to digest and less nutritious. Frying makes food harder to digest, for it toughens the food and burns the fat.

Always eat slowly and masticate the food thoroughly, and do not eat too much, for more ill health comes from overeating than from hunger. Cold drinks should be taken very slowly, or sipped.

Lean persons who wish to become stout should eat foods that have the highest per cent of flesh and fat material, such as grains, legumes, nuts, sweet and starchy foods, provided they digest easily. Those wishing to become less stout should eat sparingly of foods that do not make flesh and fat, such as fruits, vegetables, &c. This guide is not invariable.

There are three things of the greatest importance to health, viz.:—Food of the right kind, amount and quality; sufficient warmth and proper clothing; plenty of pure air and exercise. Perhaps to these should be added cleanliness, the right kind and quantity of work or occupation, proper shelter and surroundings, also plenty of sunlight, and peace of mind.

The food question is of primary consideration. No doubt by far the largest share of ill health comes from unsuitable food, and eating too much and too fast, also malnutrition. To these things every one should give early and constant attention, and each person must decide for himself the selection of the right kind of food. This is worthy of much study and experiment, for it is a well known fact that what will agree with one person may disagree with another.

It is also a fact that the disposition is more or less

affected by the kind of food habitually eaten. Animal food used largely will cause animal tendencies. Also, much stimulating food or drink will, as a rule, stimulate the animal nature. Therefore, select and eat the kinds of food that furnish health and strength, and affect the disposition toward moral, intellectual and spiritual tendencies, thus cultivating the higher nature.

Cereals or edible grains, fruits, nuts and leguminous plants are undoubtedly the best kinds of food, in a general way.

► The questions of how much, how often, and what to eat must be decided by each individual according to the capacity and ability of the stomach to digest food, and also the needs of the person. Some of these things are, no doubt, affected greatly by the financial question; but it is a fact that some of the most nourishing foods are the most economical; for example, barley, corn, whole wheat bread, dried beans, peas, lentils, nuts, oatmeal, rice, grape-nuts, &c. (See Comparative Table). The reasons why these articles are better foods are that they contain more nourishment, digest easily, and cost less proportionately than most other food products.

While not advocating meanness in the matter of eating, yet it is a good plan often to try and see how much nourishment and comfort one can get at the least cost. Above all things, do not allow yourself to become a slave to your appetite (or passions either). Strive to live above the swine plane of life. Study and learn how to be well and keep well. Also, give the mind proper food as well as the body, for this will contribute to health.

The nitrogenous matter or proteids (such as albumen, casein, fibrin, gelatin, gluten, &c.), mineral salts, and some fat in foods tend to make flesh and bone. Bone has one-third animal matter.

The non-nitrogenous matter, or carbo-hydrates (such as starch and sugar), most of the fat, and a small percentage of the proteids tend to make heat and energy.

Neither meat, fish, butter, nor eggs contain starch or sugar. Fruit and vegetables contain very little or no fat.

The legumes, viz., beans, lentils and peas, also almonds, cheese, cocoa, and peanuts contain the highest per cent of proteids (about 30), also much "salts."

The highest per cent of starch (over 80) is found in arrowroot, rice, and sago.

The foods that have the highest per cent of fat contain very little or no starch or sugar. Those having the highest per cent of starch and sugar have very little or no fat. Starch in the body may be changed into fat.

The well balanced food products are barley, corn, condensed milk, whole wheat meal, beans, lentils, peas, oatmeal, grape-nuts, macaroni, almonds, cocoa, cocoanuts, chestnuts, filberts, hazlenuts and walnuts. These contain a good proportion of proteids, starch and sugar, fat and salts.

Prepared nut foods are easier to digest than raw nuts, unless the latter are thoroughly chewed. Nut oil or fat digests easier than animal fat.

A well balanced dinner may be made of pea soup, macaroni, corn bread with nut butter, and rice pudding. For drink, take chocolate or postum.

Other things being equal, the better food products are those that grow above ground, or in the sunlight.

The "salts" in foods, viz., lime, sulphur, sodium, &c., and needed in the body should not be the crude minerals, but such as are contained in cereals, fruits, legumes, nuts, vegetables, and water. Enough are to be had in these; so, other salts should seldom be used.

Extracts from "Foods," by Edward Smith, M.D., L.L.B., F.R.S., London, England. Tenth Edition. 1895.

"There are foods which nourish one part of the body only, and others which sustain one chief vital action; these are called flesh forming or heat forming foods, whilst others combine both qualities." * * * *

"Food is required by the body for two chief purposes, viz., to generate heat and produce and maintain the structures under the influence of life and exertion. The importance of the latter is the more apparent, since wasting of the body is familiarly associated with decay of life; but the former is much more urgent, that whereas the body may waste for a lengthened period and yet live, it rapidly dies when the source of heat is removed or even greatly lessened. The production of heat in the body results only from the chemical combination of the elements of food, whether on the minute scale of the atoms of the several tissues or on the larger one connected with respiration, and is thence called the combustion of food." * * * *

"It may thus be shown that the division of foods into the two great classes of flesh formers and heat generators is

not to be taken too incisively, for whilst a food is acting it may also produce heat, and whilst the heat generating food is acting it may also produce a part of flesh in the form of fat; but although they are so closely associated in their vital work, the leading characteristics of each kind is so marked as to warrant the classification which Liebig has formulated."

Bran and cellulose, when well ground, are of some value to nutrition.

From Kirkes' Physiology. Eleventh Edition.

"Observations upon animals show that when fed exclusively on non-nitrogenous diet they speedily emaciate and die, as if from starvation; that life is much more prolonged with nitrogenous than with non-nitrogenous food, and that animal heat is maintained as well by the former as by the latter. These facts prove that the nitrogenous elements of food, as well as the non-nitrogenous, may be regarded as heat producing."

Food Combinations, &c., condensed from "Hygienic Cookery," by Dr. Dodds.

Persons with weak digestion should not, as a rule, eat fruits and vegetables together; that is, at the same meal. Neither should they eat fat or fried foods.

Fruits and cereals are best suited for the morning and evening meals. Fruits should be eaten at the beginning rather than at the end of a meal.

Most vegetables are better when eaten at the midday meal.

Cereals and fruits are better than meats and fat for warm weather, and meats and fat are better suited for cold than warm weather.

Potatoes and some other foods when baked will digest in much less time than when boiled or fried.

Tomatoes do well with almost everything except fruit.

All grains and vegetables should be thoroughly cooked, especially green fruits and green vegetables.

The time for digestion depends much upon how food is cooked.

Nuts and crackers, ground together (in a coffee mill) make a good food combination, and may be eaten with milk.

Many of the highest authorities on dietetics and hygiene claim that all condiments, salts, spices, vinegar, &c., are not nutritious and retard digestion, being mostly irritants,

The Reduction of Flesh by the New Massage Roller Treatment.

BY FANNY ENDERS.

There appeared recently in the *Chicago Record* the following well written and appreciative paper on the use of Dr. Forest's Massage Rollers for the regulation of flesh, so well stated is this we copy the article with the addition of some new illustrations showing somewhat the use of the Rollers and how they may be applied for the effective reduction of flesh, that our readers may see what a wholly disinterested thoughtful person thinks of the rollers.

We would say the value of these is not stated too strongly, but this is simply the experience of many who have used and are now using them successfully, for this purpose and life is not made a burden while undergoing the treatment, for simply a few moments' time on rising in the morning and retiring at night, is all that is required.

Healthy human flesh is not so solid, so obstinate, nor so quick of growth that it cannot be successfully checked or removed without injury to the well-being, spirits or good looks of its possessor. This will be cheering news to many women who for comfort or vanity's sake heartily deplore the fact that only by the sweat of their brows or by monkish

abstinence have they heretofore been able to keep their pounds in proportion to their inches.

The pleasant assurance comes from an American man, who says this desired equilibrium can be certainly maintained and neither dieting nor tremendous manual labor need be the means resorted to. Dieting has been faithfully tried and it has always proven as injurious as it is ineffective, while physical exercise is all very well in theory, but there are mighty few busy women who can or will take enough of it or follow severe athletics persistently enough, to overcome the inclination toward the formation of adipose tissue.

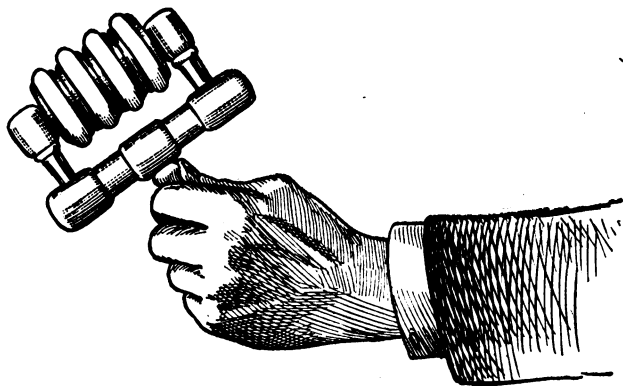
Now, what this man says and he speaks by the book is that all superabundant flesh arises from some defect in the method by which the sadly overtaxed American stomach makes use of the food put in it. As a race we eat fattening foods on the whole, and the weight and bulk produced is not hard, close knit flesh, but an ever thickening coat of loose fat, such as is found on the bodies of fowls and animals penned and fed for fairs and markets.

Given the proper encouragement this debilitating growth deposits its fats cells in the muscular tissues, and so weakens the sinews that exercise is difficult and exhausting. It is all very well to tell a large woman to bend over and touch her toes with the tips of her fingers one hundred times a day, to lie on her back and kick her heels in the air but in her valiant efforts to do this she is most likely to strain her feeble muscles and so exhaust and deplete her strength on the first few trials that only an iron resolution can carry her through.

A NEW KIND OF MASSAGE.

There is only one satisfactory way of overcoming the tendency to fatness and that is massage, With a Swedish

rubber, who understands her profession, fat can be dissipated. But a scientific Swedish masseuse is a luxury only the wealthy can enjoy, so the refuge for ninety and nine women, who hitherto have borne their fat as best they might, is to buy a little appliance called a massage roller and go at the business of fat reduction themselves. A massage roller is a very innocent-looking utensil for the great work it performs. It consists of four solid wooden



wheels, about as big as Mexican dollars, revolving on a small wooden bar. By a handle fastened to a tight frame these are pushed about on the principle of a lawn roller over the grass, and every one of the wheels is bound with a rubber band.

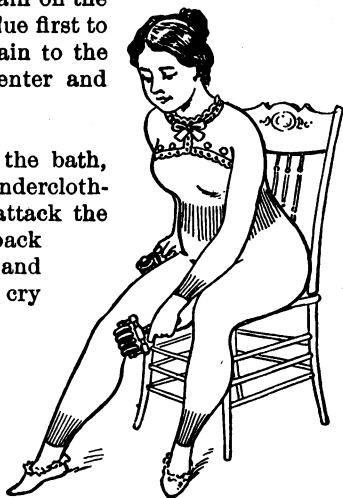
Applied in the right spirit, this little invention, that will fit into a skirt pocket, will develop all the virtues of dumbbells, Indian clubs and a bicycle rolled into one, chiefly because it acts with rapidity and invariable efficacy, and no particular effort or strength of will is required to keep it

operation. The object of its use is to secure exactly the same effect on the fatty tissues and the muscles as the hands of a skilled masseuse, with the blessed difference that no particular skill is necessary in its employment, and on experimenting with it the general effect will be found superior to the labor of the human hand.

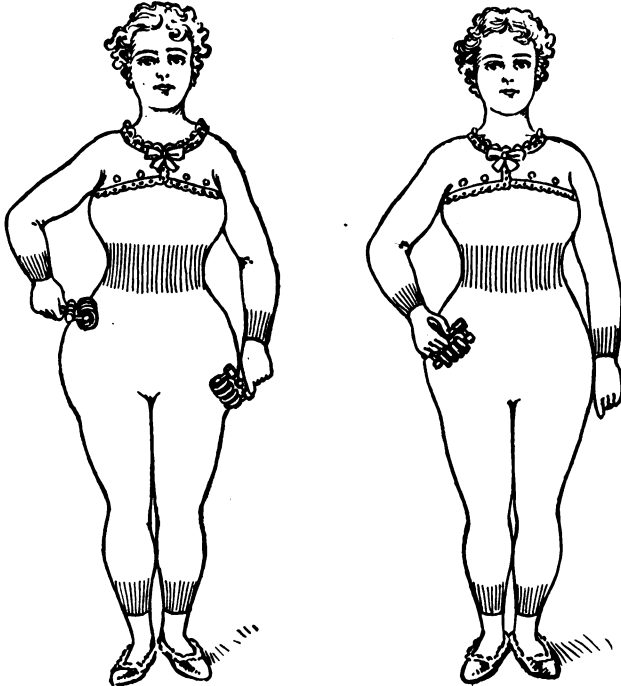
As a rule with women, fat grows here and there over the body without reference to symmetry or comfort. It collects on the hips, shoulders, upper arm or bust, about the abdomen, chin and often either above or below the knee. A fat woman is bound in the course of time to grow round-shouldered, the whole abdomen protrudes, the chin hangs like folds of a curtain on the chest. This is of course due first to the weight of fat and again to the fact that the fat cells enter and weaken the muscles.

HOW TO USE IT.

In the morning, after the bath, slip into wool or cotton underclothing and roller in hand attack the enemy. Run the roller back and forth over the hips and up and down till the hips cry out for mercy, for in preliminary use of the roller it will seem to bruise the flesh and excite the languid muscles like a first game of golf or a long horseback ride. Next the upper arms, running the roller from elbow to shoulder and never across the muscles, for the advantages of the roller are that it increases the



circulation, excites muscles to effort and brings a hard, even pressure on the deep tissues and not merely on the surface of the skin. As a matter of fact the rubber wheels



excite no surface friction at all. Roll them up the arm and easily as you do it, you will feel them down to your very bones, while the skin itself is scarcely disturbed.

Herein lies the prime virtue of this tool. If you ask a

masseuse to treat you for flesh she will try to reduce the fat cells by kneading and pounding. She must exert her efforts to get beneath the skin, and that is what the roller does all the time. Fat cells cannot form, neither can they exist under the rotation of the rubber tired wheels.

The woman who purposes using the roller should hang up in her room a diagram of the direction of all the muscles in her body and whatever point in her frame she proposes to reduce it is wisest always to learn the course of the muscles there, rolling them as they run. To knit the muscles of the abdomen she will treat herself night and morning, running the roller up and down each side, in front of the hip bone as often as a hundred times in one spot.

After the first few days all feeling of soreness will pass off, and then the effects of the treatment begin to show. By regular use of the Rollers as much as five inches reduction in hip girth can be secured in six or eight weeks, and in proportion the other portions of the body can be brought down. As the touch of rubber against the skin is not agreeable, and as the oils in the skin tend to discolor the tires on the wheels all the rolling is done over the night dress on retiring and over the underwear in the morning. In the morning this exercise is most comfortably pursued after one's bath, and then, if from neck to heels the rubber rings are passed in rapid rotation, a delicious glow of circulation will be set up such as not even the most experienced masseuse could bring about.

HELPS DIGESTION AND CIRCULATION.

But the muscle roller, like all good things, does not serve one purpose only. Its chief mission is to dissipate fat, but it aids in preventing fat from forming. Used upon the stomach and abdomen it sets all the organs of digestion and assimilation to doing their full quota of work, and not

to flinging off into fat, all the matter it is too lazy to turn into hard flesh, bone, blood and muscle. It is only a very torpid liver indeed, that discreet doses of a roller cannot imbue with a due sense of its duty, and once blessed with an all around, conscientious liver a woman can count on a rosy, smooth skin, an even temper and such an amount of energy as she never knew before.

The judicious use of massotherapy exerts on this much-abused body exactly the same effect as a day at hard manual labor, for if there is one element in the human body that responds to the touch of the little wheels it is the muscles. Next after the muscles the blood is most sensitive to this influence, and when these two forces can be made to work healthily the body can easily be run like a well-oiled machine.

When beginning the use of a roller a woman should take the circumference of her hips. and week by week judge of their shrinkage by her tape measure. When she is satisfied that she is getting the best of her flesh there, let her buy a new roller, having only three wheels, and begin to roll away her chins and take the wattles out of her neck. With the same roller she can reduce her bust measure by half a dozen inches, but this labor must be done by regulations not in the least difficult to understand nor so complicated that to follow them will take any valuable time from her pleasures and duties. To lay a handkerchief over the neck or cheeks and exercise the roller carefully will not only pull flesh from a fat face, but will put it on a lean one, and in the beneficent act it also flattens out deep lines, discourages wrinkles and stirs up an energy in the blood that is wholesome and beautifying.

As further aids to her comfort and, what is just as important to a woman, her good looks, the roller is almost indispensable. When, because of too much brain work, or

too deep indulgence in social frivolities, insomnia sits on one's pillow, massage with the roller will bring relief that is



magical. Almost chronic insomnia can be broken or relieved by this device. If, when the sleepless one gets into bed, she will see that her feet are warm, her head is cool, the temperature of the room below sixty degrees and the fresh air plentiful, then all she needs is to have some friendly hand run the roller over her nightdress and up and down her back. In spite of habit, she will drift away into unconsciousness. She can lie down a half hour in the afternoon and have her back rolled, when her head aches and her temper is none of the best, and rise a new woman, ready for a dance or a dinner party.

A man can get as much benefit from a two-handled affair, with twelve rubber-banded wheels on it, and by its use counteract the effects of sedentary office life, his rich dinners and his lack of opportunities or energy for the athletics that go to make a well proportioned figure.

THE CULTIVATION OF WOMANLY BEAUTY.

We hold that it is every woman's duty to be as beautiful as possible. Nature intended that she should be the fair sex. One of woman's aims in life should be to cultivate the beauty, be it little or much, that Nature has endowed her with. In doing this she increases her power for good in the world. Emerson says: "A beautiful woman is a practical poet, teaching her savage mate, planting tenderness, hope and eloquence in all whom she approaches."

WHAT CONSTITUTES BEAUTY OF FACE.

The first thing, though not the most important, is a good profile. Fortunately, nearly every woman has a good profile. Do not understand from this that every woman has a *regular* profile. No two profiles are alike, and yet all, or nearly all, are compatible with beauty of face, if the other elements of beauty are present.

The next element that enters into the make-up of a beautiful face is the rounded outlines. Here, alas! is where so many American women are deficient. No matter how beautiful the profile, if it be accompanied with hollow cheeks angular cheek-bones, and sunken temples, the face is not really beautiful. "The curved line is the line of beauty," throughout all Nature, and this is as true of the human face and form, as of the bending willow, or the graceful arch.

HOW TO REMEDY THIS.

"Can anything be done to fill out my hollow cheeks, and make them round?" you ask.

To this question we unhesitatingly answer "yes."

This result can be brought about by the use of the

FACE AND NECK DEVELOPERS.

And the bust can be surely developed by similar means.

These Developers are scientific instruments for the rapid and healthful development of face, neck and bust. The results obtained by their use are really marvelous. It is not an exaggeration to say that thin cheeks, scrawny necks and flat chests can be changed into rounded and youthful forms in a few weeks by the use of these instruments. In bringing about these desired results nature's healthful method only is employed. Beauty and health go hand in hand.

The developers are infinitely superior to the hand massage treatment hitherto employed. These beautiful little instruments are always ready for use, always in good humor, a pleasant companion, ready to be used by your own hand or that of your maid's at any time, a dozen times a day if desired. No lady should appear in company until she has given her cheeks the glow of youth by a minute's use of the face developer. Under their use the flesh hardens, the skin becomes soft and flexible and glowing, and there is a rapid and healthy development of tissues. This is brought about in a natural manner by the developers bringing the blood to the part treated, and thus causing the tissues there to grow.

The Developers act on an entirely different principle from all forms of face rubbing and hand massage. Such manipulations act mostly on the skin and not on the tissues beneath. This constant friction of the skin tends to make it tough and shiny, an appearance to be avoided.

The Face Developer is a cure for neuralgias and headaches.

To develop the breasts and bust, immediately on rising in the morning dip a sponge in cold water, and quickly sponge the breasts and chest. Then rub dry with a coarse towel. Now put on your under-vest, and taking the Bust Developer in the right hand vigorously roll the left breast and left side of the chest. At





Massage for Bust Development.

the same time take as deep breaths as possible and push the chest out in front. Treat the right breast and right side of the chest in the same manner, the Developer being held in the left hand. Such treatment strengthens the lungs, enlarges the chest and rapidly develops the glands and tissues of the breast. Dr. Dio Lewis states that he has seen thin breasts more than doubled in size in a month by this treatment. Use the Developer ten minutes morning and evening. When the breasts have become warm and in a glow, bathe in warm water and rub in thoroughly the Health Culture Skin Food, which is absolutely pure, containing no animal fats, and the best Bust Food made. This will be absorbed and feed the tissues. In the morning on rising repeat the roller treatment, but omit the warm bathing and the Skin Food. Do this faithfully and carefully and improvement will show itself in a week or ten days. The Bust Developer used regularly and systematically is the greatest assistance obtainable in this work. Its action arouses the blood vessels which are dormant, and stimulates circulation, and where blood abounds life will abound. The warm pulsating currents of blood will feed and fill the tissues, and plump contour is the result. Then discard tight undergarments, do not wear tight fitting undervests, do not wear pads that heat and press down the breasts, insist upon a loose lining in gowns over the bust, and abandon the senseless thing called a "corset cover," which has ruined more forms of women than any other article of dress and has done no good. These directions, intelligently understood and applied, will surely result in development and increase of the bust measurement.

DIRECTIONS FOR USING THE FACIAL MASSAGE ROLLER

It is important that the face be thoroughly clean before massaging, and, if necessary, it should be well washed, using a soft brush or Turkish towelling cloth, with warm water and a pure soap, always following with a thorough bathing in cold water, as this overcomes the relaxation of the hot water and stimulates the capillary circulation.

It should always be applied with a firm and steady pressure and rather a vigorous movement. For lines across the forehead roll up and down; for lines arising perpendicularly from bridge of nose roll across, and right here let me advise you to cease the contraction of muscle that causes those lines. Many present the habitual expression of surprise, or continual frown, and are unconscious of it. Do not try to overcome a condition, continuing a practice which causes it.

To strengthen the muscles governing the mouth close the lips, roll across and up and down.

Roll upward from the corner of the mouth toward the top of ear, and from the nose outward toward the ear.

Roll the outward corner of the eye up and down across the wrinkles.

Press the roller close to the outer corner at base of nose and roll well back and forth with a short, digging motion. This motion may serve effectively in much of the work with the roller; a little practice will soon prove the best movement with it.



Using Roller for Facial Massage,

Roll well over the cheek bone, outwardly and upward over side of the face in front of the ear.

Roll well with upward movement over the angle of the mouth from the sides of the chin.

Remember there should never be a downward movement over the cheek.

Roll the Neck—the left side with the right hand, and the right side with the left hand. (These rules are given for self treatment.) The lines on the side of the neck will respond rapidly to the war waged upon them, but a thin, scrawny neck requires much patience.

For double chin (and this is not always caused by excessive fat, but rather by relaxed muscle) hold the roller as in illustration—rolling back and forth, and give regular, systematic rolling from five to ten minutes morning and night, and results will soon appear, as this particular fault is not slow to remedy.

For the lines and sagging under the eye.—Only the gentlest massage should be given about this delicate organ. The safest treatment is applied by the cushion of the forefinger. Rub under the eye, toward the nose, all rules to the contrary notwithstanding; then very gently, and over the eyeball outwardly in the same direction the eyebrow grows. This encircling of the eyeball a few times with the finger will strengthen the muscles, but as the sagging and fine lines under the eye often betray some internal derangement or weakness of visionary nerves, one must not expect too much from massage of this part. Add to the practice of



For Removing Double Chin.

these rules, regularity and perseverance, and your results will be entirely satisfying.

In many cases an external treatment in the shape of skin food, or cream, or in eruptions, a healing balm, is advisable, in connection with the roller. Such should be applied after the rolling of the face. The benefit of any external food or lotion is gauged by its proper absorption by the tissues. The hot blood brought to the surface by the use of the roller literally takes up the preparation applied, and feeds, or cures, by being promptly carried into the flesh.

Many ladies could testify to the ill effects of greasy compounds, which, when applied to the skin, remained on the surface. Such treatment is but a waste of time. Study the law of absorption by increased circulation, and then be sure that your remedial preparations are fine in their nature and pure in their manufacture. The use of a good powder is at times advisable. It serves as a protection, as when the face is to be exposed to the wind and dust, and prevents the pores from filling with worse matter; but be sure it is not composed of poisons.

FOR TREATMENT OF THE NECK, WHEN ABUSED BY HIGH TIGHT COLLARS.

Because of one of fashion's stamps, a round, perfect neck is the exception and not the rule. Begin to restore the beauty of the neck by insisting upon a more soft neck dressing. Wear the throat of your gowns open, when indoors; give the neck a chance to improve. Then give it thorough treat-



Massage for Neck.

ment every night—and always give the neck the benefit of the same attention as the face—and at the same time. Begin this improvement of the neck by washing well with plenty of soap and warm water. Rinse in cold water, dry on soft towel and roll lightly, but evenly, around the neck with the Facial Roller—the right side with the left hand, and vice versa—for ten minutes. The exercise of dropping the head slowly forward, as far as it will go, then back as far as it will go, then allowing it to roll around limp, first to the right and then to the left, is a great help in developing the neck that seems to have suffered from imprisonment. Then, as a last course, bathe again in warm water and rub in a good skin food, as an external nourishment to the starved tissues. This treatment, persisted in for a month, will prove its benefits, though a longer time may be necessary to restore bad cases.

Some Secrets About a Beautiful Neck*

BY ELEANOR WAINWRIGHT.

The typical American girl, as Mr. Gibson has so attractively portrayed her, counts, among her many charms, a beautiful, slender throat and gracefully



rounded neck and shoulders. It would be impossible to think of a Gibson girl in a *decollette* gown, with prominent collar bones and painfully conspicuous hollows, but the girls who covet the Gibsonian type may be interested to know that a beautiful neck lies in their power, if

ROLLER NO. 3.

only they will work for it.

Probably many of the HEALTH-CULTURE readers have found that wonderful results come from the use of the Massage Roller. The writer, who revels in advertisements, came across a description of the roller in HEALTH-CULTURE, and being impressed with the glorious possibilities it offered, she forthwith became the owner of one. It is needless to say, that she has never repented of her bargain. Her plan for development was to roll each collar bone and the hollow in front between the two ends of the bones, a hundred times apiece every night, and she found that her heroic treatment resulted in a rapid improvement. All the enthusiastic girls who care to use a Massage Roller systematically, will find that it is a decidedly paying investment.

For the girls who do not care to take up such heroic

*Copied from a recent number of HEALTH-CULTURE.

treatment, I will give a list of simple exercises to be taken before going to bed. They are vouched for by several girls who have used them regularly, and instead of thin, bony necks, there is not a bone to be seen. One girl who had never worn a *decollette* gown appeared this summer with a beautifully rounded neck. Her friends could not believe that such a transformation was possible, but it was only the result of three months' exercise. It might not take many girls that long, but that particular girl was painfully thin.

First a word must be said about the regularity, as in all gymnastics it is imperative that they should be kept up. Do not give up at the end of a week because you see no immediate results, for you will be doomed to disappointment if you get your expectations up. Then do not exercise for two days and then skip a day, and then perhaps only exercise once and skip another day. All that irregularity will not give you what you want. It is very easy to get careless and put off exercising until you are too sleepy to do it thoroughly, but the girl who covets the quickest result will probably not be guilty of any of these digressions.

Every one is doubtless familiar with the head bending movements so much used in gymnastic classes, but a brief description may not be amiss. These exercises develop all the neck muscles.

I. Head slowly but firmly bent forward, no jerkiness, until the chin nearly touches the neck. Head slowly raise. Repeat ten times.

II. Head backward bend. Head raise. Repeat ten times.

III. Head sideways bend. Ten times to right, and ten to left.

IV. Rotary movements. Head rolled slowly to right, backward to the left and forward. Repeat ten times.

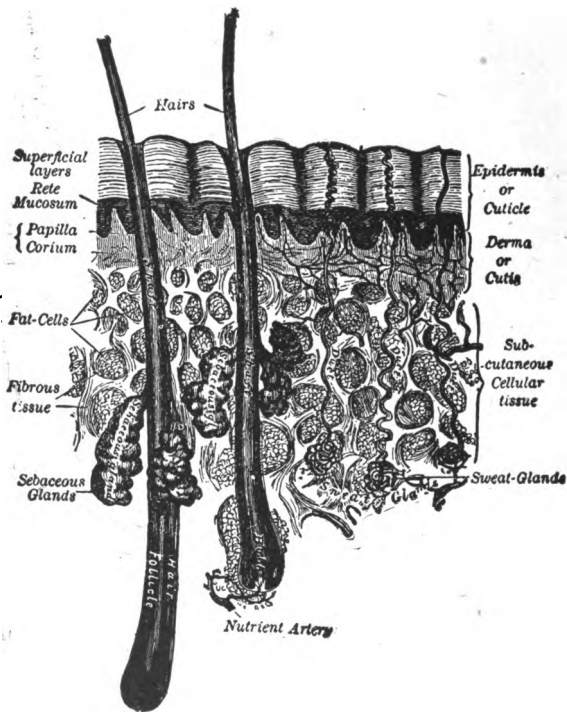
To fill the troublesome hollows on each side of the collar bone a system of deep breathing has proved invaluable. A deep breath should be held as long as possible and then slowly exhaled, holding the air a few seconds in the throat.*

This, like the preceding exercises, should be repeated ten times. Another method is to take a rotary movement of the arms, describing a circle, forward and backward, repeated until you are tired.

One last exercise to develop a well rounded throat is very simple. "Close the jaws, part the lips and slightly but forcibly draw the corners of them backward and downward a few seconds and then relax the muscles."

After the rolling or the exercises the neck should be bathed in hot water and soap and rubbed with a soft towel. Follow this by rubbing the "Health Culture Skin Food" all over the neck and throat, and you find that this makes the skin very white and soft, besides this being a developer. Let what does not absorb in rubbing in stay on all night, and the next morning carefully bathe the neck in tepid water and soap. These suggestions the writer hopes may be of some use to the many girls who long for a beautiful neck, and if she has given any inspirations her wish has been accomplished,

*In this breathing exercise the use of the Wilhite exhaler will be found of great value, as it will insure increased breathing power and an enlargement of the chest. Price \$1.00.



ANATOMY OF THE SKIN.

A Magnified Section, showing the Hair and how it is Nourished.

❁ THE HAIR ❁

ITS CARE and CULTURE . ,

Nature intends that the head of each member of the human family should be covered with hair, which affords protection from the changes in temperature, is also an adornment, and people should not become bald even in advanced years if the general health is well maintained.

A fine head of hair is always to be admired in man, woman or child, and we are justified in efforts to secure and retain it.

We do not inherit bald heads, but do inherit a tendency to have good, strong hair or poor and weak hair; but all have hair to start with, and much of its character and continuance must depend upon the care that is given to it.

Now, hair itself does not primarily become diseased, but its failure is due to conditions, in which it is not properly nourished and so becomes lifeless, loses its vitality, changes color, is weakened at the roots and falls out.

There are various causes for this, as diseases which lessen the general vitality of the system, nervous troubles and local causes affecting the healthfulness and the vigor of the scalp.

To secure and retain a good head of hair the body should be well nourished and kept in a healthful condition and mental strain and causes of nervous-

ness should be avoided as much as possible. The scalp should be kept clean and remain loose over the skull, not adhering to it.

It is often asked why it is that men become bald and women as a general rule do not, and various answers have been given. We believe there are good physiological reasons for this. The hair is nourished and fed by the circulation of the blood through the scalp; it is necessary that this should be properly maintained to promote a good condition of the hair, and whatever interferes with it should be avoided. Have a string drawn moderately tight about the finger or arm and it would soon suffer from the want of a good circulation of the blood, and if continued long the part would wither and become shrunk. This is what happens to the scalp when a close fitting, heavy hat is worn, for it is as though a band were tied tightly about the head; it seriously interferes with the circulation of the blood through the scalp, thus affecting the nourishment of the scalp and the hair. Women do not wear close fitting head coverings and so escape these conditions.

Another and very important reason why women do not lose their hair and become bald is because they wear it long, as is the custom with women and not with men.

The roots of the hair need to be exercised to give them strength and the scalp exercised to keep it elastic and loose, not adhering to the skull. A tree grown in the open is strong rooted and is

seldom upturned, while one in the dense forest soon perishes when this protection is removed. A woman's hair is so exercised in dressing, and the pulling keeps the scalp loose, as a man's cannot be, and so there is with them more of health and vigor in the hair and scalp. It is believed if women were to cut their hair as many men do, and were to wear tight fitting head coverings, as men do, in a short time as many would become bald as there are of men.

Women also have an advantage, as the head is exposed to the air and so the skin is kept more healthy and vigorous.

Men should wear light hats, and as little as possible, changing their position frequently when out, so as to relieve the pressure and admit the air, and if the hair seems weak do not cut it close, as is so often done, but let it grow longer and pull it daily, so as to strengthen the roots and invigorate the scalp. The hair that comes out in this way will be shed any way, and the sooner it is out the better for the new hair that will take its place.

To promote a healthy condition of the hair, preventing baldness and premature grayness, it is seen to be necessary to preserve a good circulation of the life forces of the hair and call for their use and assimilation. For this nothing is equal to massage, which is as healthful here as for other parts of the body. For the very best results one of Dr. Forrest's "Scalp Massage Rollers" should be used. The Rollers, or wheels, which turn separately, are covered with an elastic rubber band or tire, and with



MASSAGE OF THE SCALP.

it there is an even alternating pressure brought to bear on every part of the scalp and the circulation is exhilarated through it down to the very skull itself. The blood, with its lifegiving power, is brought to the part and the skin and hair are fed with that which is needed. In using the Scalp Massage Roller, if the head is bald or the hair is very short, bathe the scalp in cold water, rubbing so as to bring the blood to the surface, drying with a coarse towel, then roll thoroughly and firmly in every direction, reaching all parts of the head and down over the neck, finishing with a downward movement to empty the veins if too much blood may have been drawn to them, otherwise there might be a tendency to headache following the treatment. Ladies and men whose hair is not very short should put a towel or large handkerchief over the head to prevent the hair becoming tangled in the rollers. The treatment should be continued daily from five to ten minutes, or until there is a thorough circulation of the blood established.

Dr. E. W. Brook, of Philadelphia, says of the massage treatment:—"It promotes hair growth, excites the action of the hair cells and prevents absorption of the fatty and muscular layers forming the scalp and arrests atrophy of the hair bulbs, and, by increasing the circulation, prevents the hair from turning gray."

The following bears valuable evidence as to its value in the treatment of the scalp and hair:

Gentlemen.—It may interest you to know that I have used Dr. Forest's Scalp Massage Roller in my practice, and find it

a valuable aid in re-establishing blood circulation in the capillaris of the scalp. It is of great benefit in general debility and deficient nutrition, or where there is a tendency to hair loss. It never tires and never wears out. Mine has been used daily for some time, and seems none the worse for wear.

J. J. KROM, Scalp and Hair Specialist.

Atlanta, Ga.

Madame Van Poole, who has made a study of the care of the hair, says:

Whatever treatment or application is adopted for the cultivation of the hair, its effects will be limited unless the scalp be prepared by properly cleansing it, and massaging to bring the blood into a more active circulation. Poor hair is starved hair; it should be fed by arousing the circulation. In my practice I use and advise Dr. Forest's Scalp Massage Roller for this purpose. ELLA VAN POOLE.

When the general circulation is poor the roller treatment may be extended over the arms and also over the entire body to good advantage. Of course the scalp should be kept clean by bathing as often as it is necessary, using a good soap, with tepid or warm water, rinsing thoroughly with cool or cold water, drying the scalp and hair, after which the Massage Roller should be used. The use of the Roller will afford relief for neuralgia and nervous headache and should be a part of every toilet outfit as much as combs and brushes.

New and Improved Method of Flushing the Colon.

BY LAURA M. WRIGHT, M. D.

Written for Health-Culture.

So much has already been said and written on the use of large enemas for the purpose of washing out the bowels that it would ordinarily seem as though nothing more could be added. However, after several years' experience in colon flushing, the writer feels sure of having something new and important to present to those interested in this method of treatment.

That the old way has been a boon to suffering humanity and has done a vast amount of good must be acknowledged by all fair minded persons. But it is equally true also that there is abundant room for improvement and that greater results are yet to be obtained. The old way sent water backing up against foul material, while the new claims the advantage of discharging fluids into the very midst of it, softening, diluting and flushing it out normally by natural pressure from above, and not in reversed order.

Imperfect apparatus was the first defect observed, then the methods or manner of administration were found to be a cause for many failures. So that it was a source of wonder how so much of good could possibly have been attained.

Observing these things the writer instituted a

series of experiments with results which justify presenting it as a new system.

The primary object of an enema is to evacuate fecal matter which has been retained by constipation. To accomplish this thoroughly the sigmoid flexure must be reached.

By reference to the accompanying illustration the sigmoid flexure will be seen. It is about twelve inches from the external outlet.

The space between the sigmoid flexure and the outlet, or anus, is known as the rectum. This is a soft muscular pouch or sac, its walls being an elastic muscular structure which may contain a pint or more when fully distended. These walls are abundantly supplied with sensitive nerves, active muscles and terminal blood vessels, with a normal downward and outward movement (not inward and upward, as the old method of flushing necessitates).

The special functions of these nerves, vessels and muscles are twofold. First, to expel excrement; second, to report to headquarters (the brain) the presence of any irritating condition, such as inflammation, piles, fissures or ulcers; also of any foreign substance, injected water, for instance.

In the case of an enema administered in the old way, with a two or four inch tube, the fluid is discharged directly into the centre of this sensitive pouch. Instantly a report goes up to the brain, and an emphatic order is sent back, "Put it out," which order is promptly obeyed. So that, instead of reaching the irritating mass above the fluid is



THE COLON AND RECTUM.

A view of the position and curvatures of the large intestines. 32, end of the ileum; 31, appendix vermiformis; 4, cæcum; 3, ascending, 2, transverse; 8, descending colon; 9, 9, sigmoid flexure; 10, 10, rectum. 12, anus; 13, 13, bladder: 11, 11, peritoneum: length from 4 to 6 feet, and a mean diameter of about $1\frac{1}{3}$ to $2\frac{2}{3}$ inches.

From Diseases of the Rectum, by Dr. Jamison,

usually expelled by a forcible, painful bearing down. This is called tenesmus, and is very objectionable, as it causes a constriction of the internal sphincter which may terminate seriously. This effort likewise distresses and congests the rectal nerves and blood vessels, aggravating hemorrhoids, fissures or ulcers where these exist, thus increasing constipation and all its consequent results. These unfortunate conditions and experiences have caused a great many people to abandon enemas altogether.

It is well for us all to bear in mind that nature's instincts and inherent laws should never be disregarded, neglected or violated, for all cures rest with natural forces.

The new system is based upon this principle, and its advantages over the old method will be readily apparent, as the apparatus which is used, though simple, is nevertheless radically different and presents the only proper method for artificially relieving the bowels. In lieu of the two to four inch rectal tube of hard rubber we present flexible, soft rubber tubes of sufficient firmness to insure a ready passage inward and upward. There are two soft rubber tubes. One is ten to twelve inches in length, designated as tube No. 1. Its purpose is to flush the sigmoid flexure. This tube empties the contents of the syringe directly into the mass of retained feces which, in cases of constipation, have become imbedded in the sigmoid flexure, nature's sewer reservoir. Absorption of fluids has left this mass hard, dry and irritating.

This condition causes headaches, biliousness, sick stomach, flatulence and other disagreeable symptoms.

Persons suffering with the following diseases have been effectively treated with the short tube:—Colds, biliousness, sick headache, neuralgia, dysmenorrhoea, chlorosis, gastritis, dyspepsia, persistent constipation, congestion and inflammation of the kidneys and bladder, cholera infantum, summer diarrhoea, convulsions, infantile colic, cholera morbus and intestinal infusoria (worms).

While experimenting with sigmoid flexure flushing several cases came under observation which seemed obstinate and unyielding. One case was regarded by counsel as appendicitis, another as intestinal obstruction. This failure led to experiment with still longer tubes, with most gratifying results. so that now when a case does not readily yield to two or three sigmoid flexure flushings transverse colon irrigation is at once resorted to by means of the long tube, which is twenty-eight or thirty inches in length, and is designed to reach the transverse colon, into the very centre of which it discharges its fluids, expanding every channel, flushing every pocket, cleansing all the walls and then carrying or accompanying the mass downward and outward in a natural manner. In the following I have found the use of the long tube advisable:—Pneumonia, la grippe, bilious colic, gastritis, inflammation of the liver, intestinal catarrh, obstruction of the intes-

tinues, gall stones, paralysis and cancer of the stomach.

Another advantage for this tube is that the fluid is discharged into a district where nerves are less numerous and sensitive. Consequently there is less resistance, and no difficulty will be experienced in retaining a full gallon of water where it is so desired. The great waterway or sewer below—viz., descending colon, sigmoid flexure and rectum—is capable of sufficient expansion to receive it all. (See illustration.)

This tube should never be used until the lower bowel has been fully cleared, as colon irrigation is a prolonged internal hot bath, and as such the passage should be as free from waste material as possible.

It will readily be seen that both of these tubes act upon a natural principle, thus entirely avoiding the backward reversed movement of the old method.

By this means also the internal sphincter is normally called into effort by pressure from the advancing mass above, while the rectal walls, nerves and vessels are shielded from undue and unnatural expansion and consequent irritation.

In paralysis of the lower bowel the fluid cannot be retained, hence flushings need not be used. The position to be occupied while administering these flushings is a very important factor.

Where a person's bowels are large or loose and flabby it is advisable to lie on the right side, with knees drawn up. This position relieves the descend-

ing colon and sigmoid flexure from the weight and pressure of the abdominal contents, and so favors the passage of the tube and the reception of water.

Where people are thin the Sims position is recommended—i. e., lie forward upon the chest, with arms to either side, knees drawn upward toward the left, which slightly turns the hips, relaxes internal organs and gives freedom to both hands.

In some instances it may be necessary to elevate the hips about eight inches, which may be done by rolling a hard pillow or blanket very tight and placing under the hips so as not to touch the bowels.

Any person with a little tact and perseverance will soon become expert in the use of these flexible tubes and irrigations. Before flushing loosen all clothing and bands. Place tube in cold water a few minutes before using to insure firmness and attach by pressing firmly over the hard rubber tube which has previously been adjusted to the fountain syringe.

For a sigmoid flushing lubricate tube No. 1 with moist soap (never with oil, as it eats and destroys soft rubber), then carefully insert the entire length. This is absolutely essential. For this flushing, make a moderate suds of either castile or Ivory soap. Both are solvent, antiseptic and antacid. Open the syringe if water should not start at once, withdraw the tube a little until flow begins, then reinsert and proceed. A fold of relaxed bowel or a particle of feces sometimes closes the aperture and makes this necessary.

Should there be a strong disposition to eject the water close the shut off and wait a few minutes. Then resume, kneading bowels upward meanwhile.

Receive all the water if possible. If not able to do this, rise and discharge the liquid with the feces which have been released, which will clear the way for the next one. This should follow successively for an hour or more (one after another, with intervals of rest between) until the fluid comes away clear. Some cases will require several of these enemas to produce this result by removing the irritating cause, which may be a sour, fermented mass, a quantity of dried, greenish bile or poisonous gases.

Daily flushings should be resorted to at the outset of every disease, for at least one week, or until there is improvement. Then every other day; finally, once a week until fully recovered. Where there is an inflammation of the bowels, womb, ovaries, bladder or kidneys, flushing should be administered every one or two hours, so as to control pain, until person is better; then prolong the interval. In fevers an enema should be given every one, two or three hours, or often enough to effectively reduce temperature, always extending the period as improvement is established.

If people would wash out the sigmoid flexure once a week, instead of taking cathartic medicine, they would be greatly surprised as well as pleased at their improved health, clearer complexion, brighter eyes, better sight and more buoyant spirits.

When it so happens that a case is not relieved by

sigmoid flushings, it is evident that the difficulty has not been reached, and, therefore, the longer tube is indicated.

The proceedings for its insertion and use are precisely the same as for the shorter one, the only difference being in length of time for insertion and greater care to see that it does not become dry while passing inward. The fluid used also should be different—viz., to each quart of water add one level teaspoonful of salt and one heaping teaspoonful of baking soda, and in this case it will probably be better to have an assistant until one becomes thoroughly familiar with the proceedings.

The temperature of injecting fluid for flushings should be at all times as hot as can comfortably be borne, i. e., from 105 to 112 degrees Fahrenheit. A four quart fountain syringe is always the best, as it saves labor.

Evening is the most favorable time to take a flushing, as it affords ample rest thereafter. Always avoid straining when passing either fluid **or feces**.

It frequently happens that the fluid injected is absorbed and passes off through the kidneys or skin in perspiration. This need occasion no uneasiness.

After tubes have been used wash thoroughly and place them in antiseptic water for an hour, after which dry them and lay away in a clean place, out of dust.

Antiseptic water may be prepared as follows and kept in bottles, well corked, handy for use, viz.: First, to one pint of water add one tablespoonful of

Pratt's chlorides; shake well. Second, two teaspoonfuls of listerine to each pint of water; shake thoroughly. Third, three even teaspoonfuls of either baking soda or borax to one pint of water; thoroughly mix. Submerge tubes in one teacupful of either of the above.

A good, strong suds of Ivory or castile soap may be used when nothing else is at hand.

At the close of each period of flushing it is sometimes well to inject one or two ounces of sweet oil, or as much as will be retained, remaining on the back for ten or twenty minutes. Use a small hard rubber syringe for this purpose.

If one is at all interested in knowing exactly what passes from them it is well to discharge the bowels into a vessel, let the contents settle and then drain the top off carefully, adding more water, washing and draining until the fluid is clear enough to see the dregs well.

Sometimes one will be amazed to see the variety of worms revealed. Segments of tape worm may thus be seen, as they have all been flushed from their habitat or home. By this means, likewise, it may be determined whether or not food is well digested.

A TURN-STAFF.

BY GIFFORD KNOX, M. D.

I have spent my vacations for several years among the lakes in Beauce and Dorchester counties, Quebec. In doing this I have followed the long-time custom of some of our leading New Jersey families, who include the members of the Frelinghuysen, Keasbey, Platner and other clans. Indeed, we are quite clannish when we are there, and we have a village called Jersey River, which we make our headquarters and where intruding summerers and hunters cannot gain so much as a lodging. This is one of the thirty or forty villages between the Great Black and Megantic, and as I am not very adept as a hunter or fisherman a part of my August and September pleasure is obtained from visiting the different villages. There is a great deal to amuse and interest one among those quaint French-Canadians, and some matters of observation are worthy of more than passing thought.

Two things, notable and noticeable, are the large number of octogenarians, nonogenarians and centenarians, and the scarcity of physicians. It stands as a common saying in Quebec that "doctors would die and all others would live" in the border counties. Rugged and sterling health, and very little sickness, is the rule. It is a common thing—perhaps one might say the usual thing—for those Canucks to be absolutely ignorant of illness from their uneventful birth until they die of old age. The mortality is largely made up of smallpox and other diseases derived from the cities. The average farmer, hunter and villager does not indulge

in the luxury of death, and economizes on sickness. This greatly interested me, and naturally it seemed as though the climate must be accountable for it. But of this opinion I was d'sabused at Quebec.

The medical men stated that they never have any success in sending patients among the lakes. Some had done so—tuberculosis, Bright's disease, and nervous disorders—and very rarely with derived benefit.

"But it surely is not a racial characteristic," I said, for I knew that there was no such abundance of aged people and rugged citizens in Athabaska and Bagot, St. Hyacinthe, and other counties.

It mystified me all last winter, and when, on the 13th of July, I was one of the first Jerseymen to arrive at Chaudiere, I determined that I would learn the secret of that longevity if it took all summer. It took just two days. The second day was Sunday, and it was the priest whom I interrogated.

"Why," he said, with a hearty laugh, "I will tell you. It is the turn-staff!"

I repeated the word.

"Yes," he replied, "the turn-staff. Bread, you know, is the staff of life. The year turns, you know, four times as it makes the seasons. Yes? So turns life from infancy, from youth—the climaterics. So there are turns for hard work, for childbirth, for trade. Understand? Well, whenever the seasons turn, whenever there are exigencies of life, in any and all times when change of circumstance might change health, the old mothers give the turn-staff

freely. You do not understand? It is the bread. It is known so well as the turn-staff."

This let in the light, and on Monday I went forth, bright and early, to obtain some "turn-staff." I did not succeed, I admit, without considerable trouble, but before night I had corroborated the priest and understood the custom.

"Turn-staff" is bread, biscuits or pancakes made of gluten which is washed from flour. At every "turn of the season" the "old mothers" provide it for about three weeks, at every regular meal, in addition to and sometimes substituted for the ordinary coarse bread. When the new season is well established the "turn-staff" is no longer seen on the table, until another "turn," unless some individual case, as the approach of childbirth, early menses, some particularly hard physical task, or the like, suggests it. When the babies are eight days old, they put the christening robes on their bodies and gluten gruel in their stomachs, continuing the gruel for a week, and giving the same regimen at weaning. In extremely hot or severely cold weather baby has the gruel—"turn-staff porridge."

"It sets all of us folk right," the "old mothers" said. "Sets us right, and so keeps us right."

They do not call it gluten; it is "vegetable fibrin," or "vegetabrin" of the patois. They make it themselves, and it is always pure. There is a marked yellowish tinge to the color, and it has a good appearance.

I did not need to ask the priest the question, but I said to him:—"You attribute the general

health and the longevity to the systematic use of this vegetable fibrin flour?"

"Certainly," he said, "for this it is used. Ask the old fathers—yes, ask the old mothers—yes. Yes, they say, we have thus employed the turn-staff these years. See?"

It was sufficiently plain. The well built muscles, the rich blood, the strength of nerve, the wiry forms, the health-flushed features—all told the truth.

Can we not learn a lesson from this quaint "turn-staff" custom? I admit that I have learned it. If these simple Canucks place such faith and get such health results from their peculiar system of use of homemade gluten foods, is it not as incumbent upon us to "turn" the day, as well as the seasons, with it? Do we mention "infants' foods," and is there a better "infant food" than pure gluten?

Its good work is in the improvement of the blood-making processes, in better digestion, in increased nutrition. It is nourishing in health and remedial in sickness. Its function is to ably supplement all of the remedial measures that skill and science suggest, and to place pre-eminence of valuation on food values.

It has been well said that the disease of the new century will be toxæmia. Medical science is spending its breath on anti-toxæmics. Let gluten take rank as foremost among them. With the system making free use of it, there is no opportunity for toxæmia. It makes a blood in which toxins are out of place. Let it be in general use—on every breakfast table, in every nursery, in every sick room and at the "turns" of the year.

PURE WATER AND HOW TO SECURE IT.

BY ALBERT TURNER.

Written for Health Culture.

The importance of the purity of water used for drinking and domestic purposes cannot be overestimated. It has been found that there is more danger in the water supply than in the conditions of the air or atmosphere, or the food products used. There should be a positive assurance that the water is free from contamination, otherwise extra caution must be exercised in using it,

People who would shun impure food and go hungry before they would eat it, are drinking water from wells, cisterns, lakes, rivers and reservoirs that are loaded with foul impurities, holding in solution calcareous and mineral salts so conducive to senility and old age, and in very many cases deadly disease, producing germs or microbes.

One of the most simple methods resorted to is that of boiling; this continued for an hour or more is said to be effective in killing some germs, and undoubtedly affords some protection, but at most it simply destroys and does not remove them. One does not want to drink even dead germs and cooked filth.

In the case of some kinds of impurities a properly constructed filter will be found of use, inorganic matter may be excluded very largely in this way but not wholly. Lemonade passed through a filter will still be lemonade, not containing quite so much of the lemon, as of course large particles that are undissolved will not pass through. It has been found that many filters after being in use a short time

become foul hotbeds and breeding places for microbes and the water is much worse than before passing through it.

The fact that water, filtered or otherwise is clear and sparkling, is no sign it is pure, as these minute cells or microbes are nearly as transparent as the water itself, and even the taste of the water is not a test of its purity.

For the absolute purification of water there is but one process now known that can be relied upon, and that is distilling; this is nature's method, all water coming from the clouds is produced by distillation, and when gathered in an atmosphere that is absolutely pure, the water will be pure, and if properly stored will afford the best source of supply. The conditions are not such as to afford a continuous and reliable supply of pure rain water and distillation is commended as the only process that can be relied upon.

Distilled water is produced by bringing water to a boiling point when it passes off as steam, which is absolutely pure, this when cooled and condensed becomes distilled water, and the only water that is absolutely pure, containing neither organic nor mineral elements; no matter how impure or how foul it may have been originally; even ocean water, which is salt, may be used.

The demand for pure water has resulted in the invention and manufacture of various devices for the production of distilled water for domestic and other uses. These appliances can now be procured at small cost, so constructed that they can be used on the ordinary cooking range or with special heaters, and the process of distillation can be carried on in such a way as to have available at all times the necessary supply of absolutely pure soft water, the best for every purpose.

Not only is the distilled water so produced free from disease germs, but on account of its freedom from mineral elements it is a very powerful dissolvent, its use is necessary in many chemical processes, and it is also found to be remedial for many diseased conditions. In rheumatism, kidney diseases, gall stones and many other troubles if it is drunk freely it will act as a dissolvent and eliminate from the system impurities that have been deposited from impure water and the superabundance of lime and mineral elements in some of our foods that are causing the trouble.

It is highly recommended by physicians that people past middle life shall use distilled water to prevent ossification, which is often caused by the use of water charged with lime and other mineral elements.

Dr. M. L. Holbrook, of this city, is quoted as follows: "As water evaporates from the body it leaves behind a part of the earthy matter, which it holds in solution, and this tends to choke up or encrust the blood, muscles and nerves, in short, to harden and petrify the whole system in the same manner as we find it encrusts vessels from which the water has been evaporated." From this it will be seen that the body is in a sense, a filter, and the impurities of the water they take are many of them retained in the system, hence the importance of using water which does not contain impurities, especially those of a mineral character, such as found in many springs and nearly all well water; and to remove these impurities from the system nothing is superior to distilled water.

The water used in flushing the colon should always be clean and pure and in some cases distilled water will be found very advantageous, especially where there is a great

deal of dry hard matter adhering to the walls of the colon, on account of its great dissolvent properties. For kidney and bladder troubles the use of distilled water in the form of rectal enemas will be found of very great value. It will be absorbed very quickly and will practically flush the kidneys and bladder, dissolving and removing the deposits very effectually.

Distilled water, which of course is soft, is recognized by every one as being greatly superior to any other for the toilet, particularly so for bathing the face and hands, as it will dissolve the impurities in the skin and is much more cleansing in its effects, rendering the skin soft and the complexion pure and clear. No "skin purifier" will be found equal to this in its results, which are always favorable and never injurious. Especially should the use of hard water be avoided in the bathing of infants, on account of its irritating effects.

Among the various appliances for the distillation of water we know of nothing that is equal to the "RALSTON NEW PROCESS WATER STILL," it is thoroughly made, of the very best material, can be used on any ordinary cook stove or heater; the distilled water is stored in a reservoir arranged for the purpose, it is thoroughly reairated with sterilized air in the process of distillation; it can be drawn off and stored in air tight cans and be ready for use,

Recognizing the importance of using distilled water and the superiority of this Still, we have arranged to supply it to any readers who may desire a first class apparatus for this purpose. The price is \$10, and upon receipt of this amount it will be shipped carefully packed. Address the Publishers,

COLDS, HEALTH AND UNDER-CLOTHING.

BY CHAS. E. PAGE, M. D., BOSTON.

Written for Health-Culture.

In the writers' opinion, underclothing, as ordinarily worn by people who spend any considerable portion of their time indoors—since they are, even in winter, during these hours enjoying a temperature of summer weather,—is altogether unhygienic. It seems on the face of it absurd to wear heavy winter flannels indoors for many hours together with the temperature at 70 F., or over, as is the general practice during the fall, winter and spring months. We see a man enter the house in winter, bundled with a heavy ordinary suit, the inner suit of heavy woolen flannel, and a top coat, also very heavy. He will at once remove the overcoat on the plea that otherwise he "wouldn't feel the good of it" when he goes out again. The same reasoning surely applies to the flannel undergarments. But it is not practicable to disrobe and throw these off every time one enters the house for the evening, or the office for the day. To do so would prove in every case promotive of comfort and health, but it would be too bothersome for anyone to think seriously of attempting it; hence it is wise to abstain altogether from the use of the

flannel inner suit and to depend upon the outer wraps for warmth on going out into the cold. He who does this will always find himself less sensitive to cold than when he was in the habit of wearing under-flannels. The skin is alive; the millions on millions of little capillary blood vessels, whose function it is to breathe, in the same sense as the "inner lungs" so to say, are in the absence of underclothing, if not free, at least comparatively free to the air; the oxygen of the air, moreover, has the chance to exert its disinfecting influence upon the foul emanations of the skin (which is an excretory, as well as a breathing organ), while the pressure of the glove-fitting underwearer upon the capillaries of the skin is avoided. It is this uncanny effect last referred to that causes the creepy, crawly, chilly feeling so common with wearers of under-flannels, and so completely unknown to persons who have abandoned their use. At least, this is one of the causes. There is also another cause: The moisture passing from the skin is taken upon by the woollen undersuit, and when the wearer goes out into the frosty atmosphere, this moisture is transformed into ice water, or something like this; whereas, if there is a layer of comparatively fresh air under the ordinary conventional suit, instead of the two layers of dead and foul air (forcing the skin to breathe sewer gas, so to say, instead of pure air), the moisture is all the time passing off and being dissipated into the great body of the atmosphere, and whatever of cold comes in contact with the

skin is dry cold, instead of moist. It is, therefore, better borne, and indeed, if one is accustomed to the impact of cold air upon the skin, it becomes actually agreeable.

"Man is not by nature a clothed animal," and except in cold climates and during cold weather every fibre of clothing is unhygienic, and the aim should be to drape the body only in a way to satisfy the demands of society and fashion when the weather is even moderately warm at any season of the year. Nothing is more taxing to the constitution of young or old than excessive clothing. In summer, or in hot rooms in winter, the many folds of clothing by preventing the escape of moisture, which should be dissipated in the air without, produce an artificial humidity about the body that is far more relaxing and depleting than the much-talked-of and dreaded humid heat from without, insufferable as we know this to be. With children, always the worst, because most dressed, this treatment tends in summer to bring them into a condition favorable to the production of cholera infantum, or any other, or all other, "diseases of infancy."

The fact of the matter is that there would be nothing heard or known of "infantile diseases" (speaking of children born in a fair state of health) if the little ones could be given fairly natural conditions as to fresh air, exercise, diet and clothing, when needed. Like kittens and puppies, they would have to be drowned to get rid of them, instead of their sickening directly under the family

doctor's eye and dying like sheep with the foot-rot, as at present is the case, particularly in summer.

One of the most important questions in personal sanitation is that of underclothing, if any at all is to be worn. Every well informed person knows something of the greater severity of humid heat or humid cold than dry heat or dry cold. But the moral of this is altogether lost in its relation to the matter of protection from cold in winter by means of underwear. In truth, coarse linen is warmer in winter, as well as cooler in summer, and for the simple reason that it permits of the escape of the moisture (several pounds of water every twenty-four hours) from the skin.

There has recently been introduced in this country a new linen fabric called linen-mesh, which is the perfection of material for under garments. As the name implies, this is woven in a mesh-like manner, or open, like fine netting, and therefore very porous, the space between the threads being of course filled with air which greatly promotes the evaporation of the moisture. It is most desirable for summer wear, as it keeps the skin dry and comfortable. It is also a most excellent non-conductor of heat, and for winter wear it is positively warmer than woolen. Persons who have found themselves continuously liable to "colds" while wearing extra heavy woolen underwear and heavy protectors, have become proof against this by wearing for summer and winter the linen-mesh underwear, showing

conclusively it was the fault of the protectors worn, not their own condition or the climate that was at fault. Many people have found that they almost uniformly "catch cold" in the fall, when they put on their heavy flannels, although they never do in the spring when changing to lighter weight, and the winter time is the season for colds, catarrh and rheumatic affections, caused very largely from the flannel habit.

In the furiously cold climate of Northern Russia we learn that all classes of people wear linen underwear instead of woollen flannel, since experience has taught them that it answers the purpose far better ("Russian Rambles," by I. Hapgood). Flannel absorbs and retains the moisture passing out of the skin, and as the frost of a bitter cold day will find its way through the clothing, the chilliness is that of moist, instead of dry cold. In summer, the woollen flannel wearer's torture during every torrid wave is pitiful indeed, and his habit is promotive of disease, particularly rheumatism, catarrh, bronchitis and consumption. These diseases are practically unknown among the Japanese and this in the face of the fact that according to the commonly accepted theory as to the cause of "colds," catarrhs and inflammatory disorders, the Japanese ought to be the worst and most constant sufferers from these diseases. What of their climate and habits? A French physician, speaking from observation and attesting to the fact of an extraordinary exemption

among the Japanese from rheumatism and catarrrh remarks :

"Japan is a county essentially humid and rainy. The ordinary mean of rainy days is from 180 to 200 a year. The variations of temperature are extremely rapid. A large part of Japan is covered with rice fields, which under the action of solar heat cause a great quantity of vapor of water to remain in the atmosphere during all summer. The winter is very cold. The houses are low and badly protected against cold and are exposed to every wind. The dress of the Japanese leaves the chest naked (listen, ye flannel fiends and chest-protector advocates), winter, as well as summer, and the legs uncovered. The ordinary people do not wear hats; the country people pass half their lives with their legs in the water of the rice fields."

What are our flannel-wearing rheumatics to think of these things? What must our chest-pad and double-flannel-wearing consumptives and sufferers from bronchitis think of them? Here and there one may possibly come to the conclusion that he has been "potecting" himself to death and be inclined at least to hedge a little in his unnatural practice.

Linen Mesh.

WE all know that in a dry climate we are able to endure extremes of heat and extremes of cold with much more comfort and much less danger to health than in one of more or less humidity. The feeling of oppression, induced by an atmosphere saturated with moisture on a hot summer day, is equaled only by the disagreeable chilliness of a wet winter day.

The climate immediately surrounding our body is modified by our clothing. By far the greater part of our skin comes in contact with the air only as contained in clothing. In order that the loss of heat from our body should not exceed the amount produced, the air immediately surrounding our skin should be of a mild or subtropical temperature ; it should also be *comparatively dry*, so as not to interfere with the evaporation of the moisture excreted by the skin, amounting to about two or three pints within twenty-four hours. *There is no clothing of whatsoever kind which itself is warm.* Our clothing simply operates with the heat radiating from the body. Only to the extent

that the clothing is capable of retaining the warmth of the body may it be considered warm. This regulation of heat is largely dependent upon the thickness and porosity of the clothing. *A calm layer of air is a poor conductor of heat;* hence, the air held within a porous garment will but slowly conduct the heat radiating from the body to the outside. As far as the maintenance of an even and subtropical temperature around our body is concerned, it is only necessary to provide for clothing of a certain porosity and thickness, and maintain the same uniformly over the surface.

To obtain dryness of the air surrounding the skin, it is essential that the moisture excreted by the skin should be carried off as fast as produced. *Only a material which will absorb moisture quickly and dry quickly will meet this requirement.*

Of the diverse materials entering into the manufacture of clothing, there are two which are directly antagonistic in their relationship to moisture. These are wool and flax.

Wool absorbs moisture, especially in the form of vapor, in a *very slow* and reluctant manner, but is capable of *holding great quantities*. It is also *slow in eliminating* moisture. To dry two ounces of wet wool requires the same amount of heat which is needed to melt one pound of ice.

Hence *wool* answers admirably the purposes of *outer clothing in humid climates*, but is *unfit for*

underwear. As such, on coming into contact with the evaporation emanating from the skin, it will resist the absorption of the vapor, which will saturate the air around the body and condense into water remaining on the skin. *It is an undeniable fact that the skin of all those who wear woollen underwear is almost constantly wet.* After having been in contact with the wet skin for some time, the wool will *slowly* suck up the moisture, and being *slow* in drying, will retain the greater quantity, and in case the evaporation should at all be increased—as for instance, on account of physical exertion—will *become saturated* with it. In this condition the garment will lose its porosity, or air-holding capacity, the air having been replaced by water, and will no longer offer protection against a rapid conduction of the heat of the body. The latter will become chilled, and a “cold” will be the result.

Flax is a *quick absorbent* of moisture in whatever form, and has the ability of *drying quickly*. There is no other material used for clothing equal to flax in these respects. Hence for the purpose of outer-clothing it will answer only in a dry climate; but for *underwear* it possesses *all the qualities* needed in order to provide for *dryness* of the air surrounding the body. It will absorb the vapor as quickly as excreted by the skin, and will give it off quicker than any other material.

It is essential, however, that it should be *manufactured* into a *porous fabric*. Ordinary linen is almost entirely deficient in this respect, and fails to provide for a sufficient protection against the

loss of heat by radiation. This is especially the case when an increased evaporation or perspiration causes the linen to absorb more moisture than it can eliminate. Being a rapid absorbent, it will become even much sooner saturated with moisture than a woolen garment. It is for this reason that it has failed to receive that recognition for the purposes of underwear to which the physical properties of the material of which it is made entitle it.

This defect in the manner of weaving linen for underwear has been recognized and corrected in the fabric called *Linen-Mesh*, which is a uniformly porous and pliable material woven from the best and especially selected linen thread. In appearance resembling knitted material, it is much more uniform and durable than the latter. It is indeed a masterpiece in the art of weaving linen.

For the purposes of healthful and comfortable underwear, Linen-Mesh has no equal.

The Wilhide Exhaler ❧

A MECHANICAL AID TO DEEP BREATHING.

Too much cannot be said in favor of the very great benefit that is to be derived from systematic deep breathing. In this way the object in breathing, the introduction of oxygen and the purifying of the blood is more fully accomplished. This should be resorted to systematically, and the habit cultivated by every one, as a powerful adjunct to health-culture.

It has been found that much more can be accomplished in this direction by some mechanical aid, which has led to the introduction and use of breathing tubes. As originally made these were somewhat cumbersome and complicated, with valves that were liable to get out of order; but there has recently been put on the market what is known as "The Wilhide Exhaler." This is very simple and so constructed as to have a graduated exhaust, easily adjusted, and adapting it to the use of those whose lungs



are weak and to the strong and vigorous. In reality it is a Lung Gymnasium, can be carried in the vest pocket, is dust proof and always ready for use.

In using the Exhaler a deep, full inspiration of air is taken in through the nostrils, the only proper way to inhale, and the air is exhaled through the tube, which is held between the lips. In the use of this the respiration is retarded, and as the air cannot escape through the small aperture, which can be regulated to suit the needs of different cases, the pressure that is brought to bear forces the air into the unused cells of the lungs, expanding those that may have been wholly or partially collapsed, and in this way strengthening these cells, and also the bronchial tubes, and all of the air passages in the lungs; and it has been found that by this means the lung capacity has been greatly increased, as indicated by a chest expansion of several inches more than could be made before the Exhaler was used. It also has a very beneficial effect upon the throat and vocal organs, rendering them stronger and greatly increasing their elasticity. Clergymen, public spea-

ers and singers who have been troubled with weakness or failure of the voice, have fully recovered by the use of this ; and in many cases teachers of vocal culture have found these of great value to many of their pupils.

Not only does the use of this benefit the lungs and increase the breathing power, but it has a most decidedly beneficial effect upon the digestive processes, as by the deep breathing secured in the use of the Exhaler the entire internal muscular system is strengthened, as can be done in no other way. The abdominal breathing will very effectually overcome a tendency to torpidity of the bowels and constipation, and piles and hemorrhoidal troubles have been overcome, and displacement of the womb cured by the fact that in this way the viscera is raised to its normal place and condition relieving the great downward pressure. In fact, it is believed that there is no system equal to this for exercising the internal muscles of the trunk, from the throat to the pelvis ; so that not only will the blood be purified and the removal of many morbid conditions be effected, but the lungs will be strengthened, digestion improved, and the entire system benefited, as perhaps in no other way.

The experience of others confirms the statement made by Dr. Buckley, the editor of the *New York Christian Advocate*, when he says : "That to this instrument I owe more than all medicines or outdoor exercise, and were I compelled to choose between the use of the tube for one and a half hours a day and all other exercise and medicine without it for the removal of pulmonary diseases, experience and observation would lead me to prefer the tube."

The Exhaler may be used by any one, at any time or place, in pure air, except within one hour after a hearty meal. A good position to assume is a recumbent one, lying flat upon the back in bed, with the head about level with the body, with the tight clothing removed, and covered up warmly, with the windows wide open to let in plenty of pure air. Relax the whole muscular system and begin the use of the tube with the regulating cap removed, and after a few deep breaths adjust the cap and regulate the exhaust so as to secure some resistance, the amount depending wholly on the strength, in this way forcing the air into the cells that have not been fully used. The breath should be taken deep enough to round out the abdomen, but not long

enough to become painful ; then breathe out through the tube with gentle pressure. It can also be used standing erect, with the chest raised, or sitting erect, as may be most convenient. To begin with, it would be well not to use the tube more than from three to five minutes at a time, increasing this until it is used from fifteen to thirty minutes two or three times a day. This is for those with moderate breathing power, who wish to increase it, Consumptives and those whose lungs are weak and considerably affected may have at first more cough and soreness for a time. and as a result of the expansion of the weak and congested lung cells there may be some spitting of blood, and heavy mucous matter may be increased, but this need give no anxiety ; use the tube a little more moderately, but do not give it up, and it will soon be found that there is an increased strength, less congestion and pain, less raising of mucous matter, and if the trouble has not been neglected too long, full recovery may be confidently looked for. This has been the experience of many who have used it.

In case of colds, whether severe or slight, a careful and systematic use of the tube will prove a most effective remedy. After confinement in the home, the study, the office or the shop, the use of the tube for a few moments at any time will afford wonderful relief, clear up that tired feeling and refresh one very greatly. In cases of insomnia and sleeplessness, after using the tube for a few moments, turn on the side, assume a comfortable position for sleep and begin to breathe with regularity, taking moderately short breaths, expiring with moderate resistance, and in many cases the lower jaw will relax, the tube drop by your side and be found there in the morning after a night of quiet and refreshing sleep.

Wherever there is a tendency to weakness of the lungs, bronchitis, asthma, catarrhal trouble or taking colds easily, the Exhaler should be used, not only as a remedy, but a preventative measure.

It will also be found that the use of this tube will lead to much better breathing habits, and children, especially those who are inclined to be weak and delicate, should use it.

The price of the Exhaler has been reduced from \$1.50 to \$1.00,

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There has never been as much interest in the subject of the promotion and preservation of personal health as exists to-day. Men and women everywhere are seeking information as to the best means of increasing health and strength with physical and mental vigor. It is being realized more and more fully that this must be sought, not in drugs, but in a knowledge of the Laws of Life as relating to Food and Diet, Breathing, Exercise, Rest, Recreation, Sleep, Mental Conditions, Personal Habits, &c.

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Dr. Wright's Syringe consists of a strong, well made, four quart rubber bag or reservoir with the usual set of hard rubber tubes: infants, rectal, vaginal and irrigator, and two extra long, soft rubber flexible tubes, by the use of which the water is easily carried past the rectum and into the sigmoid flexure, and by the use of the longest tube may be carried up to the transverse colon. The water is then discharged where it is needed and the cleansing is made much more perfect than it can be in any other way. The tubing and the outlets are extra large, securing a rapid discharge of the water, which reduces the time required to less than one-half that usually taken, which is a very great advantage over other syringes. This new syringe will prove a most important help in the taking of "The New Method" treatment as recommended by Dr. Forest and will prove curative in many cases when all other methods fail.

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WASH out the starch from wheat flour, and the gray, elastic gluten is left. The proportion compared with the starch is small, as only about eighteen pounds can be obtained from a barrel of flour: so it is evident that only a manufacturer of wheat starch can produce gluten in any considerable quantity.

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MAKE YOUR OWN HEALTH FOODS.

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Men's Garments are made of No. 50 (heavy weight) or No. 70 (medium weight). We recommend No. 50 for winter wear, and No. 70 for summer.

Shirts, all sizes, 34 to 48, price,	\$3.25
Drawers, all sizes, 30 to 48, price,	3.25
Union Suits, all sizes, (made to order only) price,	6.50
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Night Shirts are made of a light fabric especially adapted to the purpose. If No. 70 or No. 50 is preferred, please state.

Pajamas, all sizes, price per suit,	\$7.50
Youths' Garments are made of No. 50, heavy weight, or No. 70, medium	
Shirts and Drawers, all sizes, 24 to 32, price,	\$2.25
Night Shirts, all sizes, price,	4.00

Ladies' Garments are made of No. 50, heavy weight, or No. 70, medium weight.

Vests, all sizes, high or low neck, long $\frac{1}{2}$ to $\frac{3}{4}$, or no sleeves, price,	\$3.00
Drawers, all sizes, knee or ankle length, price,	3.00
Garments to order, excepting combination suits, 50c. extra.	
Union Suits, all sizes, knee or ankle length, made to order only,	6.00
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Night Gowns are made of a light fabric especially adapted to the purpose. If No. 70 or No. 50 is preferred, please state.

Misses' Garments are made of No. 50, heavy weight, or No. 70, medium weight.

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Children's Garments: Shirts and Drawers, sizes from 18 to 22 inclusive, price each,	\$1.75

Infants' Garments are made of No. 100.

Shirts in three sizes, each,	1.25
Hosiery: Ladies' Hosiery, linen foot, black cotton top.	
All sizes, per pair,	.50 and .75

Gent's Half Hose, linen foot, black cotton top.

All sizes per pair,	.50
Gent's Half Hose, all linen,	.75
Piece Goods: No. 50, heavy weight, 30 in. wide, per yd.,	\$1.00
No. 70, medium weight, " "	1.00
No. 100 light weight, " "	1.00

Anklets and Wristlets, per pair, .12 $\frac{1}{2}$

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5. These Biscuit contain as large a per cent of nourishment as any other cereal food, with the exception of the highest grade of oatmeal.
6. The Biscuit dispenses with the use of cathartics, aperient waters and dyspepsia tablets, so injurious to the health.
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To any person sending us the name of his dealer who does not keep the "INDIA DIGESTIVE BISCUIT," we will send to both our booklet and prices. Mention this book when you write.

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Every woman should have a symmetrical, well developed form with neither an excess of fat, nor a want of it, not a fat abdomen and hips, nor a small bust. Either of these conditions is undesirable, and should be avoided. Both can be fully regulated without drugs or dieting by the use of

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Constituents of food; tables (from Pavy); food and physical development; wheat and other cereals, wheaten vs. white flour; the fruits; the vegetables; meat as an article of diet; pork eating; milk, butter and eggs; sugar, salt, pepper and other condiments; drinking at meals; tea, coffee, etc; food, intellect and morals; food combinations, etc.; two meals or three; dietetic rules; hints on cooking.

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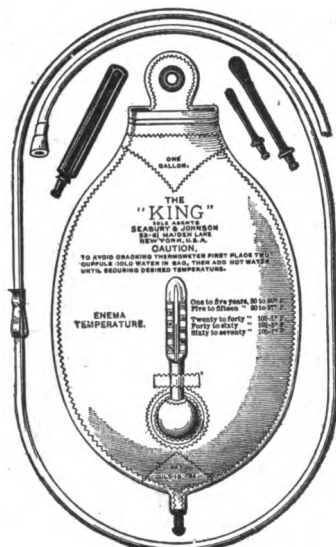
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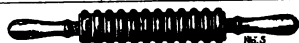
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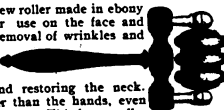
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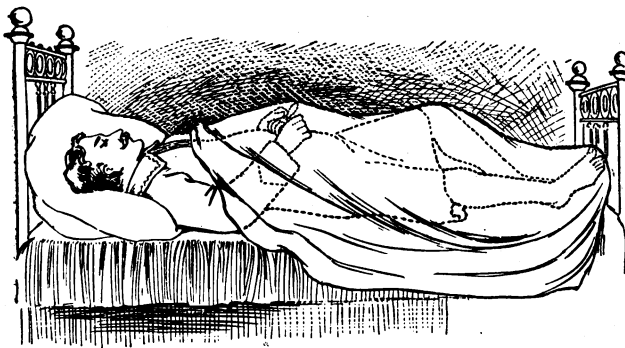
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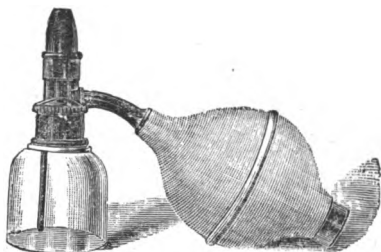
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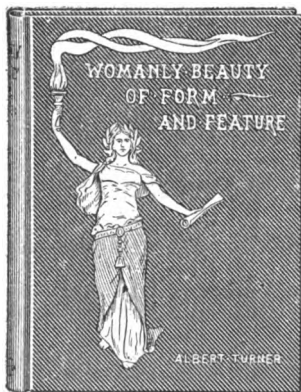
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