

PHYSICAL CULTURE

Published Monthly and Primarily Devoted to Subjects Appertaining to Health, Strength, Vitality, Muscular Development and the Care of the Body. Also to Live and Current Matters of General Interest.

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PHYSICAL CULTURE

DEVOTED TO HEALTH, STRENGTH, VITALITY, MUSCULAR DEVELOPMENT, AND THE CARE OF THE BODY

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July, 1909.

No. 1.

THE EDITOR'S VIEWPOINT

THIS is a period of the year when outdoors should be especially inviting. To be sure, the sun is at times too hot for comfort, and under such circumstances shady nooks are attractive, but at this time it is easy to cultivate the outdoor habit. It is usually less comfortable indoors than in the open air, unless the day is so excessively hot that we need the shelter of thick walls to protect us from the penetrating rays of a scorching sun.

As a rule, there is less sickness during the summer than any other time of the year, and this is solely because of the outdoor life, favored by the season. It might be well

SUMMERTIME

to mention, however, that over-eating at this time of the year is perhaps more baneful in character than during the colder seasons. There is not so much oxygen in the air, you do not need so much food, and naturally excessive feeding is productive of ailments of all kinds.

Do not acquire the idea, however, that exercise is not necessary or beneficial at this period. If you want to feel vigorous, full of vim, and life, the use of the muscular system is very important during this season. Exercise, for instance, will make one's appetite more normal. Frequently there is a burning sensation in the stomach that is mistaken for appetite and a moderate amount of activity will accelerate the functional activity and entirely eliminate this false hunger. Then, too, if one is inclined to suffer from the heat, and if the clothing becomes sticky and uncomfortable the moment the temperature begins to rise, active exercise once a day, to cleanse the body of this surplus perspiration, will materially add to one's comfort during hot weather.

There are many forms of recreation that are inviting at this time. Base ball, lawn tennis, and numberless games can be enjoyed with great benefit. Walking, cycling and horseback riding, are also especially pleasant when the grateful odors from flourishing vegetation permeate the air. Then there is the invitation extended to us on a hot day by the ever-active ocean, the cool inviting lakes and the various streams that can be found in all parts of the country. Swimming is a splendid exercise. It is healthful and strengthens the muscles and nerves, and adds to the general functional vigor.

Now is the time to go back to the activities and the joys of boyhood and girlhood. Forget as nearly as possible the serious things of life. Become a boy or a girl again.

Run and jump and play to your heart's content. You will be amazed at the enthusiasm you can put into these old-time pleasures, and remember also that as your nerves are thrilled by these simple joys, the body is actually made younger and traces left by the cares of years will fade away from your features. The suppleness and activity of youth will slowly begin to return—and all these wonderful changes can be brought about simply and easily. To be sure, you must lay aside your so-called dignity, forget for the time being the responsibilities with which you may be invested, and enter into your new-found pleasures with all the enthusiasm that you can arouse. But the rewards will be worth all the efforts you may expend.

THE statement often has been made that the world owes every man a living, or in a modified form, that it owes him the opportunity to make a living. I will not discuss the justice of this claim, but it appears to me that no one can question the justice of the statement that the Government owes to every growing child the influence and the environment necessary to bring him or her to healthy, vigorous adult life.

WHAT WE OWE TO THE CHILD

We at least owe to every child starting in life, the health and strength necessary to give proper impetus to a human career. The Government has evaded this responsibility. It has placed it on the shoulders of the parents, and when the parents fail to perform their duties, the children are compelled to shift for themselves, or to take whatever may be offered to them that promises the bare necessities of life. The importance of proper consideration for the child-life has never been recognized. The average child grows up like a weed in a garden. If he is in the hands of loving parents, to be sure, he may secure all the advantages that could be expected, though the science of rearing humankind is in its infancy. We are just beginning to realize its importance.

Every child who has become motherless or fatherless should be educated, trained and cared for by the Government. There should be nurseries and training schools devoted to this one particular purpose. There is nothing so important to a nation as the character of its inhabitants, and all the money that may be spent in beautifying and making more vigorous the bodies and in strengthening the minds of these future citizens will be saved over and over again through lessening crime and insanity, even if we do not consider the improved qualities of citizenship of any value. Every community owes to its children the opportunities necessary to develop them into vigorous manhood or womanhood. The responsibilities cannot be shifted to the parents. Where the parents are incapable, or unequal to the task, these children should be in charge of officials who are able and conscientious, and who are capable of performing the duties that would be required of them under circumstances of this nature. If we are to consider the question coolly and unpassionately, merely from a financial standpoint, then we might well ask, what is a strong, honest capable citizen worth to the Government? I believe firmly if it was figured strictly in this way that it would pay over and over again to give the attention to every growing child that is required to properly develop body, mind and soul to the highest degree of attainable efficiency.

DR. WILLIAM T. BULL, who recently died of cancer, was one of the world's most noted surgeons. He was unable to save himself from the terrible disease that caused his death. Apparently, in his case, he was not able to eliminate the ailment with the knife. Dr. Bull died last March. Mrs. Bull, his wife, was attacked a short time ago with serious symptoms of appendicitis. Being the wife of a man who was so

APPENDICITIS ATTACKS THE WIDOW OF A NOTED SURGEON

noted for his surgical knowledge, one might infer that she would have immediately resorted to an operation. You would hardly believe that anyone familiar with surgery could possibly consider that any other means would be safe under the circumstances. It is well to note, however, that there was no operation performed in this case. The doctor when questioned about her ailment, said that she had been suffering for four days and that it was not likely that an operation would be performed—that she had already passed the worst of the attack. Such a statement as this, if it were to come from a surgeon, would be considered very unusual. As a rule, when you are contorted in the agony of appendicitis, a surgeon has but one suggestion to make and that is an operation. This physician also stated that Mrs. Bull had experienced several attacks of appendicitis previous to this one. The layman will naturally wonder why Mrs. Bull has never turned to an operation. Is it not rather convincing evidence, after her having been in close association with a surgeon so expert as her noted husband, that she realized that the appendix, after all, has its uses, and that every means should be adopted to avoid the use of the knife?

Appendicitis, in most cases, is nothing more than an old-fashioned stomach-ache, and as Dr. Rodermond recently stated in our pages, a large number of operations have been performed for this complaint upon a false diagnosis. In nearly all cases the very prompt use of very hot wet compresses in the form of towels or sheets will quickly relieve symptoms of this dangerous ailment. This is especially so where the flushing treatment is also adopted for cleansing out the refuse from the colon, the main sewer of the body.

IN SOUTH DAKOTA a law has recently been enacted, which will be in force on July 1st, having for its purpose the annihilation of the quack doctor and the patent medicine faker. If a similar law could be passed in all the states throughout this country it would be of very great advantage to the thousands of poor victims of these

SOUTH DAKOTA AFTER PATENT MEDICINE FAKERS

scheming charlatans. This law prohibits all kinds of advertisements referring to sexual diseases. No newspaper or publication of any kind can be issued in that State that carries advertisements of this character. This will certainly compel the quack doctors located in that State to seek pastures new, and though in a very few instances the law may interfere with legitimate practitioners, in most cases it will materially reduce the activities of the quacks whose one and only object is financial gain. The poor victims of diseases of this kind naturally turn to advertising quacks for relief. As a rule, they are ashamed to go to their family physicians, and they are nearly always "worked" to the limit. If their ailments were cured in all instances there would be no occasion for especial complaint, but in many cases there is really no earnest effort made to effect a cure. They simply endeavor

to get all the money they can out of their victims, then after they have "worked" them to the limit, they pass the sufferer on to another quack, and the game frequently goes on in this manner indefinitely, or until the victim comes to his senses.

NO one can escape the breathing of consumptive germs. Anyone living in a civilized community is sure to breathe these germs. The accuracy of this statement cannot be questioned. The most emphatic advocates of the germ theory will admit its truth, and if these germs cannot be avoided, then is it not plain that the only

WE ALL BREATHE way to avoid the disease is to build up sufficient strength to
CONSUMPTIVE insure immunity? The circular of the Indiana State Board of
GERMS Health, on Consumption, states that "even though the lungs be weak, still the germs cannot get hold if the person by right living keeps up his vitality, which means—retains his resist-

ance. It is likely that no one escapes taking the seeds (germs) of consumption into his body. They are also carried into us by the air we breathe and by certain foods we may eat. Why, then, does not everyone have consumption? This would be the case, would it not, if there were not residing in the healthy body a resisting force."

This circular states further: "If it were not for the resistance which the consumptive germ meets in the body, we would all have consumption. The word resistance is a term which covers our ignorance. We do not know fully what it is, nor how it acts, but we know pretty well how we can acquire it and how it may be lost."

In other words, the writer of this circular knows how this resistive force can be acquired and how it acts. Now, if this knowledge could be furnished to everyone, and if, instead of emphasizing the germ theory, we were to strongly insist upon the development and maintenance of the high degree of vigor essential to make one immune from consumption, we could then depend upon securing results that would be of inestimable value to the individual and to the race.

Remember that in building the vigor essential to make one immune from disease, you are not only freeing the body from the possibility of disease, but you are developing a higher degree of manhood or womanhood, you have a stronger functional system, a better nervous organism, and the entire body is in an improved condition, mentally and morally, as well as physically.

It is time that we were rid of the germ superstition. Let us take what knowledge may have come to us through the investigations of these scientists, but let us also realize that the knowledge which is of real permanent value is that which assists in developing the strength and health necessary to make us immune from consumptive and all other disease germs. Please note that this authority says that they use the word resistance to cover their ignorance. That is a plain, and at the same time an important, admission. Through the aid of the microscope, they have made numerous discoveries, but if a thousand years were to be spent in an investigation of this character it would still fail to give us the important knowledge that has to do with the building up of bodily resistance that comes with superior vigor. Dr. Joseph D. Harrigan in a recent letter to the "New York Herald," supports the theory of spontaneous development of disease. His statements are interesting and follow herewith:

" . . . As one who looks upon disease from all sides and not merely obtains a glimpse of its effects through the narrow eyepiece of a microscope, I most earnestly protest against the

restricted ideas in vogue of recent years, engendered by the bacteriologist, concerning the causes of disease.

"The finding of bacteria in disease conditions is the same as the finding of albumen, sugar, phosphates, etc. Its value is neither more nor less. The harping on the 'invasion of the body by disease germs' displays an extremely limited vision in scientific matters. One might just as well harp on the invasion of the body by albumen, sugar, etc.

"The all round doctor is the one to judge whether or not there has been an invasion. But the all round doctor has permitted himself to be shoved quietly to the rear by bacteriological specialists, whose sole idea of disease conditions is gained from a microscope and 'germs.' The subtle forces of nature, as bona fide, actual causes of disease, are ignored, except as mere adjuncts to germs. The idea that these forces act directly to produce disease never appeals to them. . . . Between the two possibilities, viz., 'invasion of the body' and 'spontaneous generation' in the body, the latter is by far the more acceptable.

"We have spontaneous development of light, why not also life? That is, of course, from the pre-created chemicals—hence, naturally, only relative in both cases.

"The bacteriologist—the doctor's assistant—is making too much, is magnifying the value of the finding of bacteria in certain disease conditions, to the total exclusion from consideration of the natural forces through which these bacteria were brought into existence and developed.

"There is little wonder that no progress is being made in remedying disease conditions. Plague, cholera, tuberculosis, pneumonia, typhoid, etc., still continue their harvest as though the bacteriologist never existed."

A RECENT bulletin of the Department of Agriculture blames infected vaccine virus for the foot and mouth disease among American cattle that attracted so much attention recently. It has been stated that the Government was forced during the period of existence of this disease to spend over \$300,000.00 in their efforts to stamp out the complaint, and that the cattle-raisers and

THE CATTLE SCOURGE FROM INFECTED VAC- CINE VIRUS

cattle-dealers through interference with transportation were compelled to incur an expense of many times this amount, but please note at the same time that this so-called infected vaccine virus has been used on thousands of human beings.

The statement is made that the foot and mouth disease cannot be communicated to human beings, but what proof is there at hand for a statement of this character? Suppose the disease itself cannot be contracted. Is it not easily possible that the germs of this disease may appear in various other symptoms? Is it not possible that they may lie dormant in the body for months or even years? This certainly represents a deplorable state of affairs.

The Department states that K. Mulford & Co., of Philadelphia, made an importation of vaccine some time ago, that this vaccine was used to infect a large number of calves, but that these calves were afterwards killed. Now the product of this vaccine virus was bought by Parke, Davis & Co., of Detroit, and after making use of it in the regular manner, these calves were sent to the Detroit Stockyards. They had passed through the vaccine stage and had acquired the foot and mouth disease. It is stated that from the Detroit Stockyards the scourge spread until the foot and mouth disease was prevalent throughout a part of the country. It was only by the most stringent measures that the threatened epidemic was suppressed. Now this vaccine virus, in addition to containing the foul poison of the cowpox disease, was also infected with the foot and mouth disease, that for a time threatened to be a terrible scourge throughout the entire country.

Senator Dolliver has stated: "That the investigation revealed that this virus used upon calves in the District of Columbia communicated the foot and mouth disease to them. . . . There could be no more horrible situation than the compulsory

vaccination laws of the United States at present with the free and unregulated amount of infected virus to be sold and distributed everywhere among our people."

It would be interesting to know whether the children have been vaccinated with the foot and mouth disease or with cowpox poison, or both, in those parts of the country where vaccination is compulsory. When will civilized communities begin to realize the necessity of developing resistive powers that will forever eliminate the vaccination idea? There is only one method of properly developing immunity from disease and that is through strengthening the body. Vaccination, anti-toxin, and similar methods weaken the body and really ultimately lessen its resistive power to disease. When the real nature and cause of disease is fully understood, there will be no need of distributing weakness and disease through vaccination and other similar methods.

DR. ALEXIS CARREL, of the Rockefeller Institute, claims the credit of a new idea in surgery that at least represents a distinct step in advance. It is certainly experimentation carried to extremes, but at the same time, this is an age of experiments. Dr. Carrel claims that he recently replaced an injured knee joint with a similar joint from a dead man, that he made an interchange of a human artery

**THE NEWEST
IDEA OF SURGERY**

and a jugular vein, that he substituted the kidney of one cat for that of another, that he grafted a dead dog's leg upon a living fox terrier. He claims that he successfully used in animals arteries that have been kept alive in refrigerators for sixty days. Theories of this kind certainly present opportunities for daring surgery. If this science can be so perfected that it would be capable of taking diseased organs from a living person and introducing instead perfect organs from an animal, or from a person not long deceased, there might be possibilities in this direction that would indeed be startling in nature.

As we have stated on many former occasions, surgery has its uses. It has saved thousands of lives, but the rash experimentation of present-day surgery should be eliminated and the tendency to cut on the most trifling excuse should be condemned in the most scathing terms by every reputable member of the healing profession.

Bernarr Macfadden

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Developing a Powerful Physique

The Science of Physcultism

WEIGHT-LIFTING WITHOUT WEIGHTS—THE DEVELOPMENT OF THE BODILY POWERS THROUGH PHYSCULTISM, THE SCIENCE OF ACQUIRING STRENGTH THROUGH SPINAL DEVELOPMENT

By Bernarr Macfadden

LESSON No. VI.



THE exercises presented in the illustrated supplement appearing with this issue will be found especially valuable for strengthening the biceps muscles of the upper arm, in addition to their value as a means of straightening and strengthening the muscles and ligaments of the spine. Those readers who have followed the instructions given in previous lessons must have secured enough additional strength through following the exercises described to fully realize their value, and must surely be able to testify to the effect that a strong spine will add to the strength of every part. Not only will it add to the strength of the muscular system, but I am fully convinced that it will also add to brain power.

To the average individual this may seem a radical statement, and yet if one will follow my process of reasoning one must surely acknowledge that the spine will very materially affect the mental strength. Mentality is affected through the strength of the spine indirectly by the blood. As I have often maintained the condition of the blood is very materially influenced by the nervous vigor of the entire body. In other words, if you have strong nerves, if you have an abundant supply of nervous energy, all the various blood-making organs perform their work much more satisfactorily and consequently the quality of the blood is much better than it would be if

these organs were weak and were not supplied with a sufficient amount of energy. Now there is no especial need of an extended argument to prove the influence of the quality of the blood upon the brain. In other words, if the blood contains all those elements necessary to perfectly nourish the nerves and all the tissues of the body, it is easy to understand that the brain will be more perfectly nourished, it will be able to work quicker and better from every conceivable standpoint. The brain will be clearer, and one will be able to reach a definite conclusion more speedily.

In other words, one has a better and a stronger brain under the influence of the pure blood that is supplied as the result of strengthening the spinal column. Therefore, I would advise every brain worker who is desirous of making himself more capable in his particular capacity, to take a thorough course of exercise carried out in accordance with the instructions given in connection with this series of lessons. One will thus add materially to mental ability. Whether a lawyer, a doctor, a business man—or regardless of what one's profession may be, one will become more efficient in his particular walk of life, and will be able to increase his earning power, if one gives the time required in adding to his general vigor in accordance with the lessons that are being presented to readers each month. Not only will one become more successful, but I can promise each student in advance that life will be broader, that it will offer more that is pleasing in nature, and that the entire aspect of one's earthly career will be

greatly improved as a result of the stronger physical powers that can be easily developed.

Exercise Number 28 is very plainly illustrated in the two photographs 28A and 28B. Assume the first position shown in 28A and raise the body to the second position shown in 28B. Retain this position for a moment, then return to former position, repeating the exercise until a distinct feeling of fatigue results. After tiring the muscles, take the same exercise with the position reversed, that is, with the left hand on the floor instead of the right. This exercise is of especial value in strengthening the muscles of the sides and back. It affords vigorous exercise for the muscles of the region ordinarily termed the "small" of the back. It also tends to materially assist digestion by accelerating the activity of the various important organs that have to do with the blood-making process.

Exercise Number 29 is especially intended to bring into active use the muscles all along the spine from the base of the skull to the sacral region. To perform this exercise, one should secure an ordinary bath towel. Place the central portion around the back of the head, as shown in the illustration, then catch the two ends in the right hand as indicated in illustration 29A. Now, resisting the movement slightly with the strength of the right leg, raise the body upward until almost erect, as shown in illustration 29B. Repeat the exercise until there is a distinct feeling of fatigue all along the spine. After resting a moment, the same movement should be taken with the towel placed under the left leg, the ends of the towel being grasped in the left hand. This exercise, as can be readily realized after giving it a trial, involves vigorous effort on the part of the muscles of the neck and back. In fact, it is one of the best exercises that I have illustrated up to the present time for vigorously using all the muscles of the spine. Between what might be termed each "half" of this exercise, that is, while resting before changing from right to left

leg, it is well to take several breathing exercises, drawing in the breath to the fullest capacity and expanding the abdominal region. This exercise naturally forces one into rather a cramped position, making it difficult to breathe deeply and fully.

Exercise Number 30 is comparatively simple to perform and can really be taken at any time during the day, if one does not find the time in the morning or evening. It can be taken at any time while at work provided you are not compelled to endure the annoyance connected with the inquiries of curious spectators. In taking this exercise the head should, first of all, be moved forward until the chin rests on the chest. Now, with the head in this position, place the left hand on the back of the head as shown in the illustration and pull forward as hard as you can. Relax and repeat, continuing the movement until there is a decided feeling of fatigue, then rest a moment and take the same exercise, pulling with the right hand. In this exercise the muscles of the neck should as nearly as possible be relaxed. It might be termed a species of stretching exercise, that is, you should allow the ligaments and muscles of the spine to stretch as much as possible while you are pulling the head forward in this manner.

Exercise No. 31 is quite plainly indicated in the two illustrations that are presented. Lie on the floor near enough to an ordinary table so that you can grasp the end of the table with the hands as shown in the illustration. Now, with the body rigid, pull the upper part of the body up as far as you possibly can, as shown in the illustration 31B. Return to former position and repeat until the muscles are thoroughly tired. This exercise is especially valuable for strengthening the biceps muscles of the arm, and, to a certain extent the muscles of the hips and small of the back are called into play compelling the body to assume a rigid position. Any table heavy enough or strong enough to hold the weight of the body can be used for this purpose.

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Trudgeon Stroke.

Some Important Information About Swimming

VALUABLE HINTS TO BEGINNERS—SWIMMING A SPLENDID EXERCISE FOR GENERAL BODILY DEVELOPMENT

By Oscar Schleif

There is probably no better exercise to be found than swimming. It not only develops muscular vigor, but it is of very great value in adding to the general vital and functional strength of the body. It is especially commendable at this time of the year, and should be indulged by all those who are desirous of adding to their physical capital.—Bernarr Macfadden.

THE city of Philadelphia has recently made free instruction in swimming a part of the municipal service. This has called attention to the fact that such recognition and help might to advantage have been given long ago. The daily drowning accidents, which play so large a part in the newspapers during the summer, demonstrate one feature of this need; there are, however, others which will bear dwelling upon. Among these others are cleanliness, exercise, and the development of courage and self-reliance.

With the lack of recognition of the exercise itself it is natural that there should have gone a total lack of progress in the matter of teaching methods. It is easily possible that a larger number of drowning cases may be rather due to inefficient instruction than to total lack of instruction. That there is something

radically wrong with the present methods there can be no doubt. Inefficiency in swimming is the rule rather than the exception. Recently the writer, during half a season's daily attendance at one of Brooklyn's most prominent baths, failed to find a single swimmer familiar with the trudgeon stroke, or one who could in the modern acceptance of the word be called a speed swimmer, or, again, one who at any time attempted more than a few lengths of the tank at a stretch. A winter's attendance at one of the prominent universities showed a similar absence of attempts at distance swimming. It is vain to argue that these swimmers do not care for distance work. They do not care for it because they have not acquired sufficient "form" to really enjoy the effort. With the mass of self-taught swimmers the matter stands even worse. They as a rule are able to bear so little

exertion that they cannot even remain warm in the water, unless, as at the seashore, the surf does the work for them, or they supply the necessary warmth by diving and gymnastic work. In any inland bathing

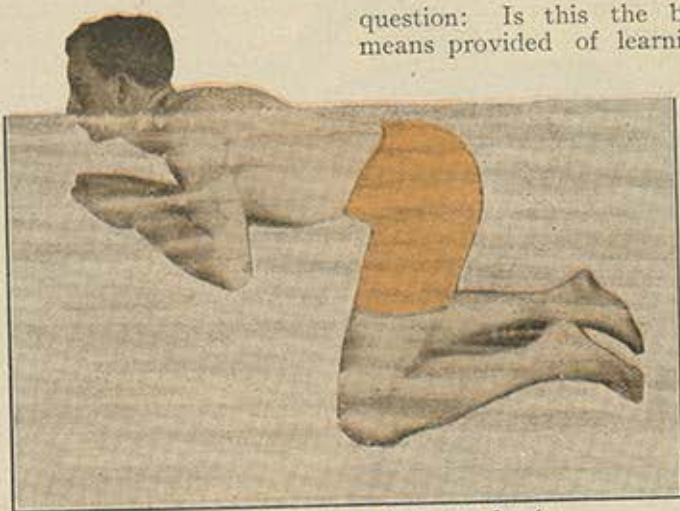
place it is a common sight, as soon as the water turns slightly cool, to see the ruck of bathers sitting or standing about on shore, with but one or two in the water. This may be bathing, but it certainly is not swimming, nor the way to gain a mastery over the water.

The question suggests itself: Why are amateur swimmers, even when they have good examples before them, so generally unsuccessful in their endeavors? It is true that there are also people in plenty who walk, run, or stand badly, but these things are learned in early childhood, and are not, as is the case with swimming, the result of mature effort, and they are not so likely to be a matter of life and death to be exploited, since they do not, like swimming and open-air bathing, carry him into immediate danger.

Physical disability is not the cause, since the best teachers of swimming seldom fail to carry the pupil at least considerably beyond the point which he would reach without such help. But if they often fail of a higher point of attainment (and many who have not this help fail altogether), must we not conclude that it is the method which is at fault? The principle underlying the present system consists of imitating, or trying to imitate, the motions of a proficient swimmer. We may venture the

question: Is this the best possible means provided of learning the art?

Herbert Spencer has said that the most effective method of learning an accomplishment is to practice that accomplishment itself, and not other actions intended to achieve the



Position at beginning of Breast Stroke.

result indirectly. Whether, however, the initial step of any art can thus be acquired, seems doubtful. We do not learn to walk before learning to stand, and we do not acquire the erect posture until we have learned to creep. Similarly, there is an initial accomplishment to be mastered before we can swim. The fact is not adequately understood that before making satisfactory progress through the water we must be able to keep the body afloat. Occasionally a swimmer learns to swim under water before he can keep afloat, but it is evident that he cannot progress far in this way. Since we must learn to float before we can swim in the proper manner, it is evident that the under-water swimmer too, like the ordinary pupil, is trying a short-cut over the necessary preparatory step. He who uses a rope, board, or other artificial means to keep himself afloat, is also postponing the acquisition of this necessary step. On the other hand he who dispenses with artificial helps, is trying to learn floating and swimming at one and the same time, and is thus substituting a complex effort for what should be a simple one. He is in the position of the piano pupil who tries to play with both hands before he has gained control of one, or who attempts full chords before single notes. Not only is the difficulty of floating added to that of swimming, but the floating is at

tempted in the most difficult position, supposing that the ordinary breast-stroke is being tried.

This difficulty of combining two tasks explains the immense waste of effort in the quick and splashing motions generally accompanying the early attempts of these trying to learn without artificial aids. All this waste of effort is made in the attempt to keep afloat; once the body is at ease on the water the slightest movement is sufficient to propel it forward. The difficulty of the novice who uses artificial sustaining power, is much the same. As soon as he removes these aids his beautiful deliberate motions deteriorate into the same jerky efforts. He has not learned to float, and must make up the deficiency before his newly acquired art is of any use to him.

If we acknowledge that floating must precede swimming, we can see at once where modern methods of teaching swimming are at fault. They fail to inculcate the most important point, first, and, by using artificial means to sustain the swimmer, stand directly in the way of his becoming familiar with the natural buoyancy of the water. Nor are these methods serviceable in making him loose his fear of the element, as is shown by the considerable number of proficient swimmers who are afraid to venture far in deep or rough water unless they have the assurance of assistance close at hand. The person who has first familiarized himself with the water by being in and under instead of on it, here has a considerable advantage over the routine swimmer.

In taking the acquisition of floating as a starting point we find the method of

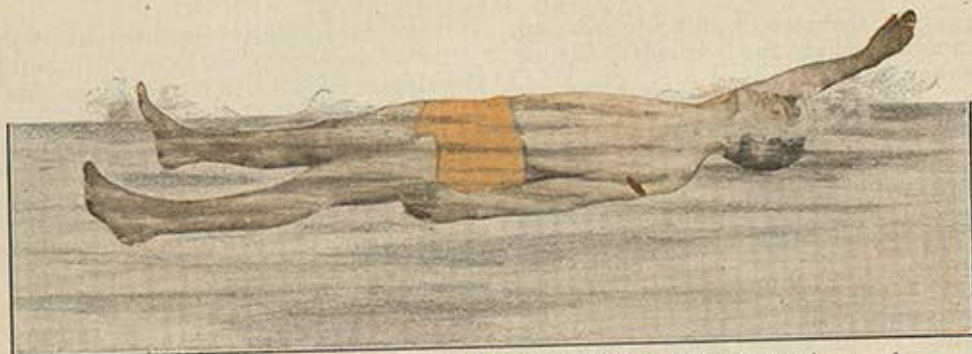
instruction similarly inconsistent with what we would suppose to be the natural development of floating. Every animal, including man, floats naturally back up, this position bringing the lungs nearest the surface, and the heavier parts to the lowest depth possible. Incidentally it throws the face under water and is therefore of use only in so far as it demonstrates the buoyancy of the water. Almost anyone can float in this manner, provided the lungs are kept inflated. It is therefore the easiest floating position, especially as it requires no balancing. Advancing to the breathing position, we find, again, that the one generally taught, that is, face up, and the body balanced near the surface of the water, is by no means the easiest. Both the squatting or the upright position are less difficult to learn, for they bring the heavier parts to the greatest depth, and do not require as nice a balance. Especially is this true as regards those whose bodily weight is not evenly distributed and who may be obliged to raise their hands out of water or to don a heavy upper garment in order to obtain an even distribution of weight above and below the lungs. From either the sitting or the vertical position one can gradually gain the horizontal posture by letting the legs come up; this is likely to save

the swimmer from many a disagreeable nose-full of water. The latter can but discourage him and is always the fate of those who try the horizontal position without some intermediate efforts, or without a considerable experience in swimming on the back.

In the consideration of the various strokes from



Natural Position for floating, with head submerged.



Back Stroke, alternate arm action. Right arm above water, feet submerged.

the learner's point of view, the matter of balance is seldom taken into account. Artificial aids hinder rather than help the pupil in acquiring proper balance, and without this balance a successful method of breathing is impossible. Balance can be best taught in floating, then in the breast- and the back-strokes, in the crawl, and last of all in the side-strokes. It is the matter of balance which makes the acquisition of the overhand strokes so difficult for many swimmers; the larger the portion of the body which is lifted out of the water, the more difficult it becomes to keep the submerged part stable.

Whether the crawl is an easier method of propulsion than the breast-stroke we have as yet no means of ascertaining. The breast-stroke has the advantage to the beginner that it allows him at all times to see where he is going, and in this way gives him more confidence; it is therefore likely to hold its popularity as the first stroke to be acquired. Its chief disadvantage is in the strained position of the neck. The back-stroke is one which should receive more attention, as it is much speedier than is generally supposed. The alternate is probably to be preferred to the simultaneous arm-action. The difficulty in both is the effort of keeping the nostrils free from water, and, on sunny out-door days, the exposed position of the eyes; also, the awkwardness of turning in trying to look ahead. The back-stroke is best adapted to the long-limbed, especially to those having long arms, for in this stroke the arms are extended to their full length, and every inch adds to

the amount of leverage which can be obtained.

The crawl stroke, the most modern of all the strokes, and one which has well-nigh caused a revolution in speed swimming, is still so new that a description of it is never out of place. This is especially true since its form is yet changing, almost from day to day, and its most advantageous variation has not yet been determined. The swimmer lies face down, or very nearly so, and the arms are thrown forward above the water alternately, and drawn back alongside of the body, the feet meanwhile being either held motionless in a horizontal position, and as close to the surface as possible, or flapped up and down alternately, once, twice, or an indefinite number of times with each arm movement. The arm-motion is short or long, according to whether short or long distance is attempted, and the sweep or curve-motion of the hand is also varied in character. In short dashes breath is taken only when necessary, but in distance work it is usually taken at each stroke, and the body slightly tilted or rolled accordingly, while the "under" arm may also be thrust somewhat deeper into the water. The head is generally submerged with each stroke, and with some of the fastest swimmers lies so deep that the mouth never comes to the surface, the breathing being accomplished in the little hollow formed by the rush of the head through the water. The impetus to be gained from the leg-motion, when tried independently of the arms, is probably not sufficient to propel the body any faster than it is already

going at the slowest point of the arm movement, but it counteracts the resistance of the feet being dragged through the water, and to that extent must make the work of the arms easier, and ultimately more effective. The crawl stroke has been used to advantage for distances of several miles, and it is likely, therefore, that it can be used for indefinite distances. Even if it should not, however, be adapted to such work, it is still a desirable acquisition for every swimmer, both on account of its speed and the greater independence from the legs in case of disabling accidents.

The trudgeon stroke is also still a novelty to many swimmers. It is similar to the overhand side-stroke, with the exception that the under arm is brought forward out of water, and the body is therefore slightly rolled. The distance of the hands beneath the surface may be varied for either hand, and the character of the kick, which is best made just after the "upper" arm paddling movement, may range from a breast kick to a wide "scissors" kick, but it is advisable at all times to keep the legs as near as possible to the surface. Combinations of the trudgeon and the crawl have been attempted, but they do not seem to be as fast as the crawl proper. A changing-off in the stroke, however, is often very desirable, and in "lap" swimming it offers a solution of the difficult proposition of trying to do physical and brain-work at the same time by counting one's own laps, for the swimmer who can do every third lap, or every fourth lap, in a different stroke from his customary one, will find no trouble in remembering how many laps he has covered. The change from one side to another is equally de-

sirable, though few swimmers are able to swim equally well on both sides.

All speed strokes have their use, even for the swimmer who is not able to keep them up for indeterminate distances, for the old maxim "Slow and sure wins the race" is no longer in as great repute as formerly, especially as regards swimming. The body seems to lie higher on first entering the water, and it is possible that the continued pressure may gradually diminish the amount of air in the lungs, so that it would be natural for a swimmer to move more quickly through the water at the beginning of a distance trial. It is also possible that the nervous energy required in balancing the body, may become more quickly exhausted than the muscular energy, and that a saving up of the latter would not materially affect the former. Most swimming records have been made at diminishing speed.

In regard to both the healthfulness and the danger of swimming, a distinction must be made between the exercise itself, and the action of the water. A comparatively long immersion, especially in cold water, may prove harmful, where the exercise alone would not have been excessive. In cold or cool weather the warming-up will occur much more promptly if a rubber cap is worn. Adjusted with a strong rubber band, this keeps the hair dry, and in no way interferes with freedom of movement. A tight-fitting swimming suit of warm material will be found to preserve the bodily heat better than a pair of trunks. The advice to leave the water before a feeling of cold is experienced, is as trite as that to the effect of leaving the table while still hungry, and is about as likely to be followed. Certainly, however,



"The Crawl"—nostrils just clear, or slightly submerged.

common sense should tell us to leave the water *after* the chilly feeling comes on, and not to wait till a fit of shivering proclaims a still greater distress of the body. Beginners are more likely to suffer in this respect than are advanced swimmers, since they are obliged to take frequent rests while in the water, whereas the experienced swimmer can keep moving.

Tank swimming may to the uninitiated appear as a milder form of the sport, but in reality it is not so. The small body of water becomes more quickly and more irregularly agitated than a larger open-air surface, and the increased liability of running into someone does not conduce to ease of movement. The "turns" that can be made at the end of a tank seem at first to give a slight rest to the swimmer, but when continued they are really a more vigorous exercise than swimming itself. To the beginner the turn is a

valuable illustration of how the swimming kick should be made, for if there is one point above all others in which the learner fails, it lies in not presenting the soles of the feet and the palms of the hand, squarely to the water. The football kick is the one which should *not* be used.

"Plunging" has its value in giving balance and lung-control. Holding the breath under exertion, as when swimming under water, has been much criticized on account of the strain upon the heart, but it is to be remembered that such an accomplishment is likely to prove exceedingly useful in case of emergency, and in rescue work. Against such contingencies every swimmer ought also to be prepared by having made previous trials in ordinary street costume, and under such other disadvantages as cold or rough water, any of which he is at some future time likely to encounter.

Cheap, Simple and Healthful Recipes

By EDITH M. BATES-WILLIAMS

Vegetable Stew.

Cut your vegetables into rather large pieces, as for ordinary stew. Have the beets and carrots a bit smaller and put them on first to boil, in salted water, as they take longer to cook. When half done add the cabbage and parsnips, and finally the potatoes and onions. Allow this to boil down until there is not much liquid left, and then add a large tablespoonful of olive oil or butter. Salt and pepper to taste. This is a good proportion of vegetables to use: One small cabbage, one medium-sized beet, one large carrot, two parsnips, five medium-sized potatoes, and three small onions. This quantity will serve five or six people.

Whole-Wheat Muffins.

Two cups of whole-wheat flour, three teaspoonfuls of baking powder, one level teaspoon of salt, two tablespoonfuls of olive oil or butter, and one tablespoon of molasses. Add warm water to make a thick batter and bake quickly. Have the oven hot and the pans warm. An egg may be used, and the water replaced by milk to make the muffins even more wholesome.

Escalloped Potatoes.

Butter well a good-sized baking dish. Pare and slice four or five large potatoes, and one onion. First put in a layer of potatoes, then a little minced onion, sprinkle with salt, pepper, and white flour, or bread crumbs. Now make another layer of potatoes, onion, etc. Repeat the process until within about an inch of the top of the pan. Place several pieces of butter here and there, and pour about a quart of milk, or all the pan will hold, over all. Bake rather slowly for about an hour. When browned on top it is done. If the milk boils down add a little while it is still in the oven.

Neapolitan Sauce.

Put one-half cup of olive oil in a stew pan, and add a level teaspoon of salt, mince several onions, and allow them to brown slowly. Then add the contents of a medium-sized can of tomatoes, or preferably, an equal quantity of the fresh, ripe vegetable. Mix thoroughly and add teaspoon of sugar, pepper and more salt if needed. Cook a moment longer. This sauce is excellent on lima beans, spaghetti, or Boston baked beans. It is also nice on mashed potatoes.

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The Church and the Purity Movement

By B S Steadwell

SHALL THE CHURCH ASSUME THE RESPONSIBILITY OF FOSTERING THE MOVEMENT THAT STANDS FOR PERSONAL PURITY?

There are signs of a reform in the church. Broad-minded ministers are beginning to acknowledge the importance of the purity movement. They are gradually realizing that it is their duty to assist in spreading the valuable knowledge that is being promulgated by those who are interested in personal purity. No reform is more tragically needed at the present time than that which stands for the enlightenment of our young men and young women on this vastly important subject. Mr. B. S. Steadwell, the editor of "The Light," is one of the most splendid champions that we have in the interest of this cause. His little magazine is doing a splendid work. He is awakening Christian workers everywhere to the value of purity-knowledge in the building of strong manhood and womanhood. Those who might desire a copy of his publication will no doubt receive a sample copy gratis if they will communicate with B. S. Steadwell, Editor "The Light," La Crosse, Wisconsin. The following article was recently published in a recent issue of this valuable periodical with a view of giving Christian workers some practical information as to the best method of spreading purity-instruction. I am certain that it contains much of interest to our readers.—Bernarr Macfadden.

EVERY month we receive a number of letters at this office from persons who are enthusiastic and apparently anxious to do something to raise the moral standard in their community, and almost without an exception their one question is, "Just what can we do?" Now, there are a hundred things they can do, and do well, and which would be about all anyone might do if in their place. They can carefully distribute the best purity literature. They can arrange for lectures on purity by competent speakers. They can gather about them young lives to influence for righteousness and purity. They can co-operate with purity organizations in their city or state. They can present, in a judicious manner, purity pledge cards for signing. They can further organized effort through mothers' meetings, boys' purity bands, the White Cross and White Shield. They can push the matter of civic righteousness—the passage and enforcement of good laws, the closing of all evil resorts. They can do all possible to suppress the bad theatre, dance and other harmful and degrading amusements. They can see that all news-stands are purified from bad literature. They can stand firmly for "no saloon." They can assume the proper relation and attitude toward the "felled"

woman and the fallen man. They can encourage and support rescue work. Thus we might go on indefinitely. But none of these things will they do. Simply because they have a sort of hazy idea that there is some great plan, some magic method by which their community can be purified, individually and socially, in a remarkably short time. They forget that the natural order is preparation of the soil, seed sowing, cultivation and then harvest. They want a very large yield and want it at once from very feeble seed sowing.

A second reason or excuse why pastors and others do nothing for purity is the fear that they may make a mistake. They wish to wait until they have such perfect equipment that a mistake is impossible, and so they continue to wait, and wait, and wait, and the longer they wait the less secure do they feel with respect to their preparation for this special work, and as someone has said recently in *The Light*, the biggest mistake possible to make is to delay and to do nothing. Gladstone said: "No man ever became great or good except through many and great mistakes." Wayland said: "The only people who make no mistakes are dead people. I saw a man last week who has not made a mistake in four thousand years. He was an Egyp-

tian mummy." If you are in earnest do not fear mistakes half as much as you fear idleness.

Of course, common sense is necessary in this as in every work. A certain amount of preparation is essential. The one may be acquired and the other secured very quickly by one who is in earnest and sincerely asketh of the Father. A minister wrote us some time ago stating that he had had enough of purity work. He had preached a very plain and powerful sermon on social purity to his congregation and they were up in arms about it. The whole town was stirred—but stirred the wrong way. He had sown good seed, but upon unprepared soil. Probably not two persons in his congregation had even heard that there was such a thing as a purity organization, a purity periodical or a rescue home. They thought their pastor had done an unheard-of thing. Had he taken the precaution of sending to his leading people a copy of some good purity periodical and other purity literature and thus prepared their minds and hearts for the truth, his own sermon would have met a more kindly reception.

Sometimes it is necessary to shock people into activity. Some years ago we had a pastor in La Crosse, who was very little interested in purity work. Did not see the necessity for it. His wife was less interested. But one day he came very hurriedly to our office and reported that an orphan girl who was a member of his church had suddenly disappeared and he was much excited, as they feared something bad had befallen her. I went with him at once and we searched the city for clues. We found where the girl had been in very bad company, and that a ticket had been sent her from a brothel-keeper in St. Paul. Then, by telephone and telegraph we traced her to St. Paul and located her in a house of shame that she had deliberately entered. Her pastor

went at once to get her to come home, but to his horror she would not, but took advantage of the opportunity to tell him some things about the coldness of the church and how she had been mistreated. He never lacked interest in purity work after that.

One pastor writes that he has his church simply on fire for purity work, and he began three years ago by relating to them a case of rescue in connection with a rescue home in his state. Now, each year they take up a collection for this same home, and each year he gets a number of the annual reports of the home for distribution among his people. From the interest thus aroused a majority of his members have gone on and studied about the white slave traffic and other phases of the social evil, subscribed for purity publications, bought purity books, until to-day there is not a man, woman, boy or girl in his congregation who is not familiar with this whole subject, and best of all, every mother and every father in his church is able and anxious to properly instruct their children in the "story of life," and not to lie to them as formerly. This pastor writes that there is a wholesomeness about it all that is refreshing to behold, and a faithfulness to the Church he has never seen elsewhere.

The church, when once aroused and awakened on this subject, will be all sufficient to solve the problems connected with impurity in all social and individual life. Her principles, religious atmosphere, the power of prayer and the guidance of the Holy Spirit, all fit her for this service. But few people doubt her ability to cope with it successfully. Will she undertake it? Why does she delay? She has already undertaken it and during the past two years has spoken in no uncertain tone from many quarters. It now remains for individual pastors and Christian workers to "go forward" with the work.

The Cure of Dyspepsia

Dyspepsia is cured by muscular exercise, voluntary and involuntary, and cannot be cured in any other way, because

nothing can create or collect gastric juice except exercise. . . . Nature only can make it.—Dr. W. W. Hall.

Jesus as a Physical Culturist

By Harry G Hedden

RELIGION AND PHYSICAL CULTURE STAND FOR SIMILAR IDEALS. CHRIST LIVED THE SIMPLE LIFE

The principles of practical Christianity that apply to men and women here and now are practically identical with those which are being advocated by this publication. We stand shoulder to shoulder with every organized force that is working for the betterment of mankind. We invite every religious organization to investigate the work of the PHYSICAL CULTURE magazine. It stands for a better and nobler manhood and womanhood. The author of the article which follows has endeavored to prove that Jesus Himself was a physical culturist—that He might be termed a pioneer in advocating the simple life.—Bernarr Macfadden.

BEFORE we take up the study of Jesus Christ as a physical culturist, it will probably be very interesting and highly profitable for us to consider briefly the Bible as a book of human health. Why not so study the Bible? Is not health in harmony with God's purposes? Is not health in harmony with Nature's laws?

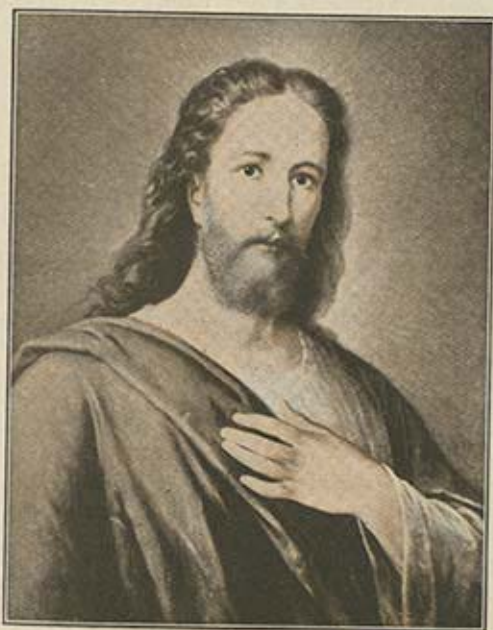
For centuries, enthusiastic theologians have used—or misused—the Bible as a club with which to belabor one another in the arena of doctrinal dispute. For what purpose? Principally for the purpose of either defending or destroying profound theories concerning puzzling questions which the mind of man is not capable of grasping fully and settling perfectly, and which in any event have but very little vital relation to man's highest welfare.

To be sure, it would be extremely unfair to claim that all this doctrinal disputation has been useless,

that none of it has been beneficial to man—in fact, it would be deplorable folly to make such a claim. Some of the world's greatest benefactors have been men who devoted their whole life to the promulgation of some doctrinal idea; and some of these fierce disputes have resulted in great good for mankind. Nevertheless, a very large per cent. of these disputed questions are evidently non-essential; and a very large percentage of these doctrinal

wranglings are even nonsensical. At any rate, a study of the Bible as a guide for right living is both interesting and uplifting.

They greatly wrong the Bible, who consider it as a book of laws intended to deprive man of liberty and enjoyment. They greatly wrong Christianity, who imagine that it is a philosophy of shriveling sentiment, a system of restraining precepts tending to make a man's life narrow and void of happiness. They greatly wrong



Head and bust of Christ by Heck, showing shoulders of a breadth that would accompany a superior physique.



From the painting—"Christ Raising the Daughter of Jairus,"—by A. Keller.

Christ, who think that He came into the world to bind grievous burdens upon men and to make them slaves. They greatly wrong God, who look upon Him as a mighty maker of arbitrary and merciless laws, which He has established for the purpose of frightening men into being good and punishing them for being bad. To be sure, God has made stern, unswerving laws; but He has made them for the good of man, for the guidance of man out of the dismal swamp of sin and sorrow, of wickedness and weakness, into the bright and healthful uplands of righteousness and strength, of virtue and of joy. Christ came into the world to make lighter the burdens of men, and to set them free from the slavery of ignorance and sin. He came to teach us how to gain true liberty, and to help us to grow, through obedience to the laws of right living, into the very highest form of freedom. Christianity is a system of inspiring precepts, a philosophy of ennobling sentiment, which tends to make a man's life broader, deeper, and overflowing with supreme happiness. Finally, the Bible is a book of laws intended for man's greatest development, for man's perfect liberty, for man's most sublime joy.

What of the Ten Commandments, the

great code of moral laws given to the Hebrew people in an age of long ago? Were these intended for the Jews alone? Were these laws arbitrarily established at the time they were first spoken or written? Underlying these statutes are principles of law, which existed at the time of this world's beginning. These laws were not created for any special people; they were created for all mankind. Furthermore, careful study proves or at least suggests, that these laws are very largely laws of health, and that, as such, they are of vital importance to every human being.

Again, what about the ceremonial laws of the Jewish people, those laws having to do with religious rites and national customs peculiar to the Hebrews as a peculiar, exclusive people? Were these entirely ceremonial? Were there no helpful principles back of the ceremonial practices, no valuable truths back of the many symbols? To be sure, many of those ancient customs would be worthless to us to-day, and insofar as they were merely formal as practiced by the people, they were valueless then. Mere formality, without law and without life, is always worthless. We must concede these facts. Nevertheless, we can learn many practical, helpful, wholesome les-

sons by studying the principles underlying customs and ceremonies which often seem to be merely formal, meaningless, and lifeless, and often are such.

Let us consider for a moment a concrete example of one peculiarly Jewish law, which is of scientific value to all mankind. Scientists tell us that those kinds of meat condemned by the Jewish law of diet are to a great extent unwholesome, and that those commended by this law are the most healthful kinds of meat. Is it not at least reasonable to assume that this law of diet was based partly, if not principally or even entirely, upon science and rational consideration. At any rate the law contains much of scientific sense.

This law condemns the use of pork as a food. Why? Merely because God wished His chosen people to distinguish themselves formally and ceremonially from the Gentiles? If so, then perhaps God condemned drunkenness for the same reason. Was pork healthful for the Gentiles and harmful for the Jews? If so, then perhaps intoxicating liquor was the same. Science tells us that pork is not a wholesome food. If religion were to tell us that pork is a wholesome food, then science and religion would be in war over still another point. The author feels, however, that there ought to be no war between true science and true religion. On the contrary, science ought to be deeply religious, and religion ought to be highly scientific; and both ought to be used for the betterment of the human race.

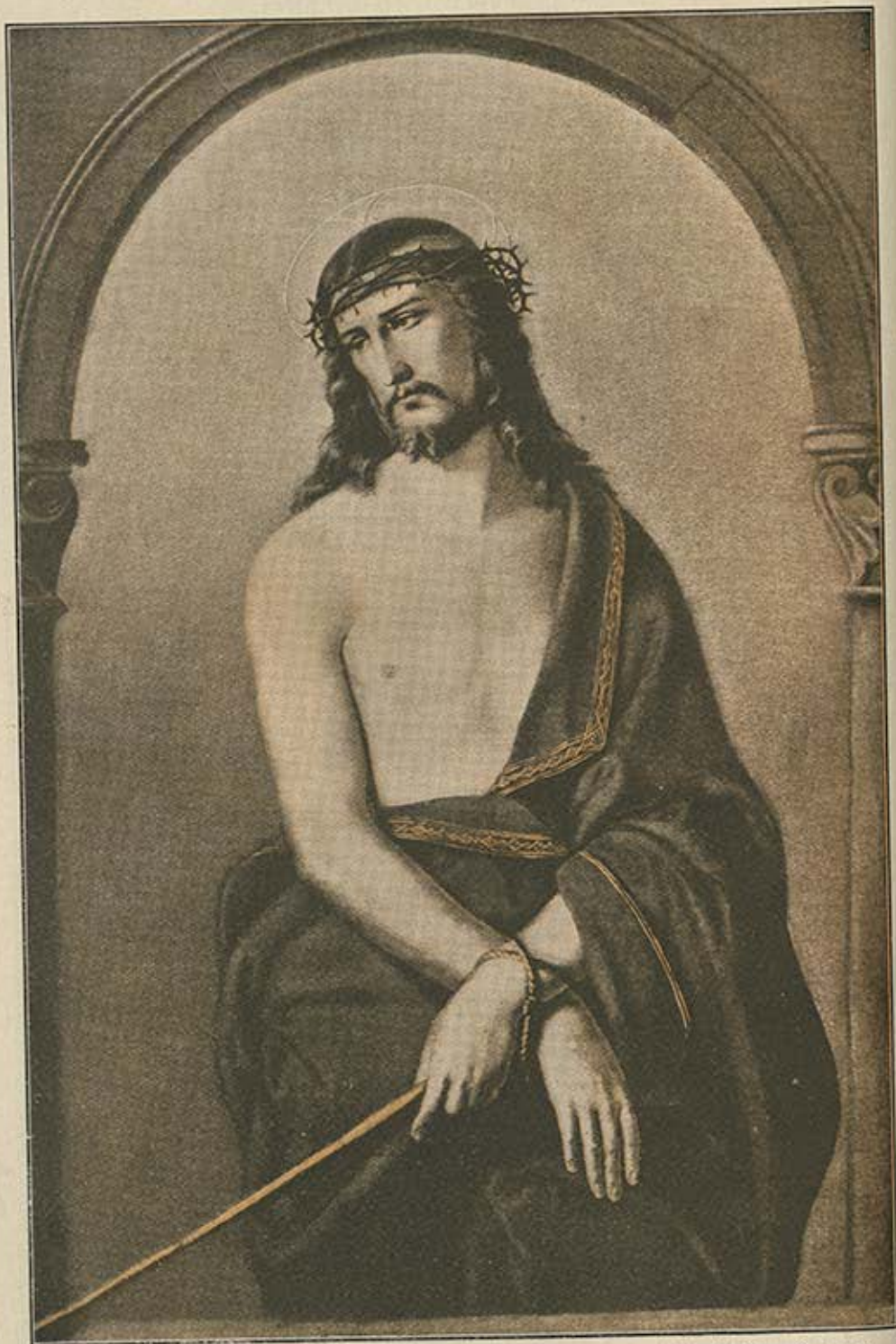
Seemingly overlooking the real significance of Peter's vision (Acts x:9-16), in which he saw "a certain vessel descending, as it were a great sheet, let down by four corners upon the earth, wherein were all manner of four-footed beasts and creeping things of the earth and

birds of the heaven." Some people try to make this vision a clear and positive demonstration of the divine approval of pork. Why not use it to justify our eating snakes, lizards, buzzards, and skunks? The purpose of this vision, very evidently, was to teach Peter that he was to preach not only to the Jews, but also to the Gentiles. It had no bearing upon the value or purity of pork.

Thus far, I have been trying to emphasize the great need of using the Bible



From the Painting—"Christ in Gethsemane," by Ekhiska.



A painting of Christ by F. Brockmann that depicts superior physical development.

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as a guide for right living. Surely, the supreme purpose of the Bible is to teach man his right relationship to God and to his fellow-man. In the Bible, therefore, we may expect to find precepts and principles and examples of the certain reward of living in harmony with Nature's laws of health, and the inevitable penalty of living in disobedience to those laws. We have already considered some of these precepts and principles; now let us call to mind a few striking examples.

In the lives of such men and women as Abraham, Jacob, Joseph, Moses, Joshua, Samson, Samuel, Ruth, Esther, David, Solomon, Elijah, Jezebel, Daniel, Zacharias, Elizabeth, Mary, John the Baptist, Peter, Paul, James, and John, we have examples of healthful and un-

healthful habits of life, obedience and disobedience, the rewards of righteousness and the evil consequences of sin, examples of right living and of wrong living. In addition to all these examples, and many others, we find in this precious Book, the world's one example of the perfect life, perfect in obedience to the laws of health and purity and power, perfect in love toward God and man, perfect in loyalty to truth, perfect in service to mankind. Let us study, therefore, carefully and conscientiously, the life of this perfect man.

One of the biographers of Jesus, in writing of His boyhood, gives us this suggestive statement: "Jesus advanced in wisdom and stature, and in favor with God and men" (Luke 2:52). Do all boys grow that way? Do all have a



"Raising of Lazarus," from the painting by L. Dei Pionabo.

chance thus to grow into strong, pure, useful manhood? Does the average young man of to-day so live as to please God and serve men?

What was the purpose of Christ's life? Why did He do the things He did, teach the things He taught, live the life He lived? Why did He come into the world, anyway? He came to teach us God's laws and God's love, to teach us to worship God not in a merely formal way, but "in spirit and truth," to help us to gain the highest possible development as men and women, to lead us into perfect freedom, sublime service, supreme happiness, to give us "the life which is life indeed."

"Think not that I came to destroy the law or the prophets: I came not to destroy, but to fulfill." Christ came, then, to fulfil the law; and He did fulfil the law. Thus He lived a perfectly pure and sinless life. There is abundant evidence that Christ lived also a very healthful life in every way. In fulfilling the law, He gained both purity and power. Fortunately, that false and foolish idea that Christ was physically weak and effeminate is rapidly coming to its long-deserved destruction. Thinking people are more and more coming to consider Christ as a superb specimen of strong, rugged manhood. Gentleness is not opposed to strength; neither is sympathy a certain indication of weakness. True gentleness and true sympathy are natural expressions of true strength. The same Jesus who had compassion on the multitudes, who gathered about Him in loving tenderness the little children, and who, in deep sympathy, wept at the grave of Lazarus, also fought and conquered all the fierce temptations of the flesh, drove from the temple the greedy money-changers, hurled at the hypocritical Pharisees those stern and terrible condemnations, and finally laid down His life in His loyalty to truth and in His love for man. Yes, Jesus obeyed, fulfilled, and expressed God's laws, Nature's laws, of right living, of growing into perfect manhood.

In the second place, Christ came into the world to teach love; and He taught love in its truest, purest, noblest sense. His life was a constant expression of love

supreme. When asked which was the greatest commandment, Christ did not say, "Thou shalt not kill," or "Thou shalt not steal." No, He did not quote one of the Ten Commandments. Instead, He set forth that great principle, which underlies all the Ten Commandments and all the laws of justice, purity, and right living. "Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind, and with all thy strength. The second is this, Thou shalt love thy neighbor as thyself. There is none other commandment greater than these." Of course not. If a man loves God as he ought, loves his neighbor as he ought, and loves himself as he ought, will he sin against himself, against his neighbor, or against God? Will not all those who strive earnestly and sensibly to obey this law of love seek diligently to learn the laws of health and development and struggle bravely to live in harmony with those laws?

Christ came to do more than to teach us law and love. He came to set us free from the slavery of sin and to lead us into freedom in the truth, to give us that true liberty which law and love and knowledge produce. "Everyone that committeth sin is the bondservant of sin." "Ye shall know the truth, and the truth shall make you free." What stronger ally of slavery and sickness and sin is there than ignorance? What more deadly enemy of law and liberty and love? Is it not knowledge of the truth that sets us free from the enslaving power of perverted passion? Is not prudery, which is both product and producer of ignorance, one of the most monstrous foes of purity?

Christ wants us to be pure, not prudish; He wants us to be masters of all our appetites and passions, not their slaves. Let us rejoice that the most earnest Christians, the strongest, noblest, purest, most useful men and women in the world, are coming to see that it is both a sacred duty and a sublime privilege to teach the purposes, principles, and powers of the sexual element of man's nature. Let us rejoice that "the pure in heart" are able to "see God" in the human body, in marriage, in mother-

hood, in fatherhood, in childhood. Let us rejoice that we are learning how to live, and how to love. Let us be deeply grateful for the laws of love and life, let us be very conscientious in studying and in teaching these laws. Let us seek truth earnestly, and follow truth faithfully.

In a powerful discourse upon a few of the Ten Commandments, Christ set forth in a strong, striking, and helpful way the great importance of right thinking, the deep need of purity of heart. He taught that it is sin not only to commit murder, but even to be angry with a person. He taught that it is a sin not only to commit adultery, but even to look upon a woman lustfully. He taught that it is not the deed alone, but also the motive back of the deed that counts; that it is not alone the overt act, but the thought of the heart, even though not expressed in outward act, that either harms or helps. "He that is faithful in a very little is faithful also in much: and he that is unrighteous in a very little is unrighteous also in much."

In fulfilling the highest laws, in expressing the deepest love, in pointing out the principles of the truest liberty, Christ has revealed to us the secrets of the fullest, freest, noblest life possible, the life of greatest health and happiness and helpfulness, the life most natural, the life most powerful, the life most nearly perfect. All He taught He lived.

How about Christ as a physical culturist? Am I wandering from my subject? No, I am staying as close to the subject as I can; and I sincerely hope that I have thus far presented a life pleasing and inspiring to every man and woman truly interested in the highest development of manhood and womanhood.

To be sure, I have not said anything about the work which Jesus did, and I have not related any incidents to prove that He was a physical culturist. I must not take the time or ask the space either to set forth specific incidents indicating the physical-culture life of Christ, or to describe in detail the work he did. I shall try, however, to present briefly and helpfully both His work and His habits of life.

As He went about among the people of Palestine, healing the afflicted, comforting the broken-hearted, commending the humble and condemning the haughty, cheering the oppressed and chiding the oppressors, sympathizing with the sorrowful and rejoicing with the glad, He warned men against sin and weakness and held ever before them righteousness and strength. He tried to lead them away from the dark paths of sickness, sorrow, and despair, out into the sunny highway of health, and happiness, and hope. He "came not to be ministered unto, but to minister." He "went about doing good."

What about the habits of Jesus' life? Evidently, very evidently, He lived a simple, outdoor, natural, healthful life—a physical culture life, if you please. He loved Nature. He loved the flowers, the birds, the brooks, the mountains, and the hills. As he walked from village to village, he watched the farmer sowing his grain, the shepherd tending his sheep. He lived a very busy life; but He took time to rest. Before He began His public life, He worked at the carpenter's trade. When He began His public life, He had a strong, healthy body, a body capable of enduring hardship, exposure, and other severe demands upon His strength.

Surely, as in the Bible we find the laws of health and right living, so, in the life of Jesus, we find the one perfect example of a life lived in harmony with these laws. The principles He lived and taught, His apostles emphasized and enlarged upon. So, in the Bible, the greatest of all books, we find principles opposing everything which tends to defile or deform the body and supporting everything which tends to develop and ennoble the body. Obedience to these principles tends to make a man more a man, a woman more a woman. To those who are seeking health and happiness, purity and power, I commend this priceless Book. To every man and woman, to every boy and girl, I earnestly commend the life and teachings of Jesus Christ, the carpenter of Nazareth, the peasant of Palestine, the Saviour of the world, the perfect man. In Him, are law, and love, and liberty, and life.



Horace Fletcher, the world renowned mastication expert—a scientist whose original research has aroused the attention of the entire civilized world.

An Interview with the Mastication Expert

By Herbert M. Lome

HOW HORACE FLETCHER IS CONDUCTING HIS PROPAGANDA OF "DIETETIC RIGHTEOUSNESS" ON THE EAST SIDE OF NEW YORK CITY

Physical culturists everywhere are greatly interested in mastication. Horace Fletcher is recognized throughout the English-speaking world as the mastication expert. He has made so many elaborate experiments and has given to the world so much valuable knowledge on this one important subject, that he well deserves this title. He is a splendid example of well-preserved manhood, and his own fine physique furnishes remarkable proof of the superior value of his theories. The following interview will undoubtedly be of interest.—Bernarr Macfadden.

IT is a far cry from the Saibante Palace on the Grand Canal, Venice, to East Thirty-first Street, New York, for the first is one of the show places of the famous Italian city, while the second is or was, a typical section of the tenement house district of the malodorous East Side. Also, there is a vast distinction socially and as to environments between the Waldorf-Astoria Hotel and the Phipps model houses, which are to be found below First Avenue and within a block or so of the East River on the street just named. Yet Horace Fletcher, "the man who has taught the world to masticate," has vacated in turn both the picturesque palace and the famous hostelry for one of the "model houses"—all to the end of furthering the propaganda of "dietetic righteousness," with which his name is identified.

Mr. Fletcher and his associates—of which he has several—are now engaged in devising plans whereby people in general and children in particular may be taught the methods ordained by Nature for the right way of eating and assimilating food. Naturally, a good deal of the information needed for these plans, can only be obtained by experiment, and hence much of the current work is on these lines. Also, Mr. Fletcher believes that those with limited incomes are if anything more in want of "Fletcherism" than are they who are more happily-placed in a financial sense, for the reason that there is an economic phase to the proper mastication of nutrients, which is of great importance to the man or woman who has to scheme to get the most satisfying returns for dollars and cents spent for table pur-

poses. It is claimed that the adoption of the Fletcher principles will save the table provider anywhere from 25% to 50% of the total expenditures. The importance of the movement from this view-point alone then, will be apparent. This is saying nothing about the other praiseworthy considerations involved.

Just a word about the Phipps houses, in view of the bearing which they have on the plans of Mr. Fletcher. When, a few years ago, Mr. Phipps, a wealthy and philanthropic man, determined to erect these buildings, East Thirty-first Street, or at least that section of it in question, had an unenviable reputation in police circles and among the officials of the Board of Health. Morally and hygienically it was of evil repute. It was representative of some of the worst phases of the worst life of the East Side. Now Mr. Phipps seems to have thought that much of this lamentable condition arose from surroundings and environments. So he determined to strike at the root of the evils with the aid of his architects. The results took the form of the houses which bear his name. They are handsome, spacious and hygienic throughout. The internal fittings and arrangements would do good to the soul of the most ardent physical culturist. Every room in every flat is lighted by one or two windows. The walls of halls and rooms are artistically painted instead of being papered. The floors are of hard-wood, and rugs and carpets are the exception. While the flats are small, there is no suggestion of "stuffiness" in any one of them. Flowers and cheerfulness abound. The houses furnish proof positive that mankind takes color from its surroundings.

With the erection of the structures, the tone and reputation of the neighborhood began to improve forthwith. At present, East Thirty-first Street or at least that part of it under discussion, is one of the most orderly and reputable in the city. The houses too, because of their beauty, comfort and reasonable rates, have attracted the attention of writers, artists and teachers, with the result that a small colony of such are to be found within them. As the majority of these persons are in sympathy with Mr. Fletcher's principles and stand ready to aid him when the occasion arises, he appreciates the benefit of having such neighbors.

But the main advantage of the location appears to be this: that while the residents round about are precisely those to whom the propaganda for economic reasons, most practically appeals, at the same time they are willing, even anxious to receive the instructions which are given to them or their children at the Fletcher class-rooms. Not always does the reformer thus meet with the support of those whom he is seeking to benefit. On the contrary, he but too often has to overcome prejudice and suspicion before he can convince the community of his sincerity. With Mr. Fletcher, however, it seems to be different. That he is so pleasantly placed in this respect is, in the writer's opinion, the result of the sensible methods used to bring the teachings of "Fletcherism" before the classes and meetings. But more of this later.

Mr. Fletcher has two flats in the Phipps houses, one of which he uses as a meeting hall and class-room, and the other, on the floor above, for residential, reception and study purposes. The first flat mentioned is numbered 13, and the reformer will tell you with a chuckle that he signed the lease for it on a Friday. Which goes to show that he isn't superstitious. It was in the upper flat that a representative of PHYSICAL CULTURE was recently welcomed by the "mastication man" and that too, in a characteristically cordial and whole-hearted manner. If Fletcherism did nothing else but produce hale and wholesome personalities such as that possessed by its founder, it would be worthy of praise and experiment.

The picture which goes with this article will give the reader an idea of the facial looks of Mr. Fletcher, but it fails to yield a hint of the curious charm of his expression, his conversation, his voice and his mannerisms. And above all, you feel when talking to him, that you are in the presence of an embodiment of absolute health. The effect on the writer was exhilarating, something like that which one experiences on a bright May morning at the seaside. And the more you talk to Mr. Fletcher, the more emphatic does the spell of this wonderful healthfulness of his become. That this is no flight of fancy on the writer's part was proven by the fact that several persons who had met Mr. Fletcher, confessed to similar sensations.

Somebody has said that Mr. Fletcher looks like one of the Cheeryble Brothers in *Nicholas Nickleby*. The simile is apt. There is the same halo of white hair, the smoothly shaven and benevolent face, the ruddy complexion, the sturdy figure. But it is doubtful if either of the Brothers possessed the superb physique or the abounding health with which their prototype is blessed.

"I've got exactly an hour's leisure between engagements" said Mr. Fletcher, "and that hour belongs to you. Tell me what I can say to you or do for you?"

He led the way into his little library and pulled forward a big, comfortable Mission chair. All around were evidences of the busy life of the propagandist. Book-shelves, paper racks, piles of manuscript, books and pamphlets by the hundreds, a desk covered with the belongings and impedimenta of the literary man, proof-sheets, works of reference, maps and so forth were on every hand. Across the hall, was the reception room and here again, the furniture was few as to articles, plain in design and solid in execution. There were no carpets on the floors and the painted walls were bare save for a few choice etchings and engravings. Yet the total effect was that of comfort and completeness. Somehow or other, the flat appeared to reflect the personality of its tenant.

Came a ring at the hall-door. Mr. Fletcher excused himself and answered the summons. There was a brief conver-

sation with somebody outside and he presently returned beaming as to face and laden as to right hand. "I have the best of neighbors" he said with a smile "here's a good soul who has just received some real country butter from somebody. The first thing she does is to bring me some of it, for she knows how fond I am of just this kind of butter." And with another burst of sunshine illuminating his features—the Fletcher smile is just like sunshine, you know—he put the gift in the tiny ice-box in the equally tiny kitchen.

"Now" said he "what do you want me to talk about? The status of the movement and why I have deserted Venice and Fifth Avenue for the East Side? Something about the scope and meaning and effects of the principles which I advocate, eh? Why, my dear sir, the latter phase of the subject alone would fill a half dozen numbers of *PHYSICAL CULTURE*. Dietetic righteousness is closely identified with considerations of morality, intellectual and spiritual development, economic conditions, the attitude of the individual toward the community and the law and so forth. But let us go back to the first of your queries."

Mr. Fletcher thrust his hands into his trouser pockets and lolled back in his chair. "It was in 1898 that we began our propaganda for improved human efficiency based upon those means of dietetic reform with which my name is identified. For three years it made no progress, whatever, in fact and apart from a few, it was laughed at whenever it was mentioned. However, we who had tested the truths concerned were not discouraged, but continued to do all in our power to advance especially among men of scientific note. The outcome was and is, eminently satisfactory. My claims for the new theory of mastication and nutrition have been substantiated by experiments conducted at the University of Cambridge, England; at Yale University; at the McLean Asylum, for the Insane, Waverly, Mass.; at Battle Creek, Michigan and at several other times and places in this country and abroad. These demonstrations were so conclusive in regard to the remarkable economy in nutrition that waited on the system, that

many persons were induced to privately follow the simple directions for securing the benefits promised; and in every instance with profitable results. From this period dates the general popularity of 'Fletcherizing'—to use the term with which I have been honored. As indicative of the manner in which the propaganda is now regarded in certain quarters, the Chautauqua Association has made arrangements with me to the end of my delivering a series of lectures; the subject has received the endorsement of the Roman Catholic Benevolent Brotherhoods, and Father M. J. Higgins, of the Roman Catholic Church of the Immaculate Conception, Philadelphia, has issued a circular in which he says that: 'We feel that 'Fletcherism' is worthy searching investigation by the great lay organization of the Church, the Knights of Columbus, and also by the Conference of St. Vincent de Paul and the Total Abstinence Beneficial Societies, with a view to introducing its benefits to all our people . . . Our people should be made acquainted with the wonderful benefits to be derived from this great economic truth, and the results will be of inestimable value to everyone who aims to secure health and the happiness which waits on it.'

"Then again, the publication, *The Christian Endeavor World*, has made me one of its associate editors. This means that the interest of the influential body of Christian Endeavorers will be enlisted in the movement. The basic principles of the movement have been confirmed by physiologists and physicians the world over. In some instances the confirmation has been without qualification; in others it has taken a tentative form. But only in one or two instances has an attempt been made to contradict it, and then unsuccessfully. I have had the gratification of being entered among the 'men of science' of the Carnegie Institute, and the American Association for the Advancement of Science is, so I am told, to elect me as a 'fellow'. Lastly, there is the general interest which the public is evincing in the matter, and this is most gratifying to me. That the public is so interested is, I believe in a great measure due to the man-

ner in which the movement has been treated by the press of this country and abroad. In this connection, I desire to express my appreciation of the way in which the editor of *PHYSICAL CULTURE*, Mr. Bernarr Macfadden, has consistently handled our dietetic reform. From the first to last, he has preached the gospel of thorough mastication, and—if my recollection serves me right—he has declared that no one can become an athlete or even enjoy normal health if he neglects to properly use his teeth. In this he is absolutely right, and in this too, he and I are one. *PHYSICAL CULTURE* has done its share in the dietetic reformation which is now at hand."

Mr. Fletcher paused and drummed with his fingers on the arm of his chair thoughtfully. "I hope" he went on, "that *PHYSICAL CULTURE* readers will not think from what I have just said that I am vain-glorious in regard to the growing success of the movement. I am not, I assure you. That which I have told you about the endorsements which have come to me personally, are only gratifying to me because they prove that the world at large is waking up to its dietetic duty to itself. That is all—the personal equation does not enter into it in the slightest as far as my own feelings are concerned.

"Now as to your next question. Well, I have located myself and my quarters on East Thirty-first Street because, so it seems to me, that it is here and in localities like it, that we shall find the most fertile field for our propaganda. Theories and experiments may be successfully conducted abroad and on Fifth Avenue, but the practical application of both is only possible right among the people whom they are supposed to benefit. Now I don't hold rosy and impracticable ideas about spreading the truth among our people here about. I don't expect to drop in casually on the 'submerged' and make everything sweet and lovely for them by telling of my dietary ideas. Nor would I expect them—the 'submerged' to use a very silly term—to adopt my beliefs or accept me if I used these tactics with them. I am going to work in a different fashion. I realize that all constructive work has to be engineered by

trained experts. Consequently, I know that the only way that I shall be able to do that which I desire, will be by working through and with specialists. I am therefore, placing myself in touch with all the existing agencies for constructive work among the people, and so I shall try and get my ideas before the latter through familiar and accepted channels."

Mr. Fletcher went on to say that special attention was being paid to the children of the neighborhood for a variety of reasons. "Ten years ago" he said "I thought that the mental and moral qualities of a child could be developed by mental and moral influences alone. To-day, I know that mental and moral qualities have their roots in the physical nature and that they cannot be normally and harmoniously developed unless the physical basis be sound. Therefore, we propose to do all in our power to give the child a healthy physical organism by teaching it how to 'Fletcherize' its food. To repeat somewhat, a healthy physical being implies correct nutrition and this last implies a proper method of mastication. One cannot exist without the other. My individual part of our plans is, to devise methods by which every child in our jurisdiction shall naturally and inevitably come to a knowledge of the method ordained by Nature for the taking of food."

Once each week—on Saturday,—the youngsters of the neighborhood are invited to a "party" in the lower Fletcher flat. They sing, recite and have a good time in general. Then one of the teachers—almost always a lady—gives them a little talk about the wonders of the mouth and the throat and the digestive organs, all in an entertaining and "party" way, you know, and the proceedings wind up with the serving of food and dainties approved by Mr. Fletcher. The children are told how to masticate the goodies. These same "parties" are so popular among the local little ones, that the rooms are invariably crowded to the halls.

Usually on Thursdays, there is a meeting for the grown-ups, at which a talk is given by Mr. Fletcher and a sort of reception follows. Often, the rooms are not

large enough to accommodate all the would-be participants.

"This is but the beginning of things," remarked Mr. Fletcher after he had finished telling about the "parties." "We are working on a definite plan. A section of the neighborhood is chosen, a sort of census taken of the children therein, our influences are brought to bear on the youngsters in the way described and careful records are to be made of progress and results. After a time, we shall take another section and in this way, we shall work from the centre of the trouble out to its circumference, so to speak."

The visitor reminded Mr. Fletcher of the third query put to him. The propagandist threw out his hands with a gesture of despair. "It is impossible to put the contents of a hogshead in a pint-pot" he said with a laugh. "You cannot print a title of that which I would say to you in the space at your disposal. But say this: That food properly masticated is the beginning of health of mind, body and soul. Our wrong acts are in the great majority of cases, due to the auto-intoxication which comes from lack of dietetic righteousness. Make no mistake about this; the seat of most immoralities is in the improperly used digestive track. Eat as you should, and the sins of the spirit will begin to disappear in sympathy with the going of the sins against the body. This is the whole matter reduced to its simplest terms."

He rose and led the way to the flat below. The partitions in the rooms facing the street had been removed so as to give space for meetings and social gatherings. Very neat and home-like the place looked with its rows of folding chairs, its little dais, and its pictures. At the far end was a sort of graphic chart of "profitable felicities" and "unprofitable felicities." Among the latter were coffee, tobacco, alcohol and so forth. Mr. Fletcher next showed the visitor into another room in which were several pieces of gymnastic apparatus. He wheeled the weight-lifting machine into place and proceeded to adjust the chain and handle.

"I am sixty years old" he said with a quiet smile "let us see how much a sixty year old man can lift who masticates his food as it ought to be masticated."

He bent down, slowly straightened up and released his hold on the handle—all without apparent effort.

The register on the machine showed that he had lifted six hundred and sixty pounds!

Mr. E. L. Arnott, an enthusiastic advocate of "Fletcherism," has written some greatly condensed instructions which he entitles, "How to Learn Fletcherism." For the information of those who are not familiar with Mr. Fletcher's theories they will be of very great value. Mr. Arnott's instructions are as follows:

Do not take more than one-fourth to one-half teaspoonful of food into the mouth at one time, especially the first week or two.

If you take a larger amount of food you will have much more difficulty in learning Fletcherism.

Do not take any more food into the mouth until this has been swallowed.

Chew the food industriously.

Some Fletcherites take about two motions of the jaw per second.

All particles of food should be broken up and reduced to a liquid or liquefied form.

Learn to return the food from the back part of the mouth for further chewing before swallowing.

Do not swallow the food until it loses its original taste.

This does not mean that the food shall lose its taste or flavor entirely, but it should be chewed until it loses its original taste.

Do not try to swallow at all; just keep chewing the food and enjoying it until it disappears by involuntary swallowing or by "swallowing itself."

If you do not have time to chew your food properly it is better to eat a smaller amount or not to eat at all until you do have sufficient time.

Soft, mushy foods should be chewed and insalivated almost as thoroughly as solid foods, to insure good digestion.

If a piece of whole wheat bread or shredded wheat biscuit or baked potato is chewed long enough it will become as sweet as sugar; in fact the starch will be changed into sugar by the action of the saliva in the mouth.

The last taste of the food is the best.

The habits of a life-time can not be changed in a day; you must have perseverance and determination if you wish to succeed.

Do not read the papers, or think about business, or engage in conversation, so as to engross the attention, when you are learning Fletcherism.

If you were engaged to run a steam engine or a complicated machine you would give it considerable study and attention; so you must give proper study and attention to your own nutrition if you wish to obtain good results.

Do not be so greedy as to swallow your food prematurely.

Do not be too lazy or too indifferent to masticate your food properly.

Do not eat when not really hungry.

If you eat when not hungry the food will not be absorbed and assimilated readily, and hence poison toxins will be thrown off into the blood.

Do not be afraid to wait a day or two if necessary for a good appetite.

If you do not have will-power enough to skip a meal at first, then take only a little ripe fruit, or a little fruit juice, when not really hungry, at meal time.

Some Fletcherites do without breakfast entirely, as a rule, or take only a little ripe fruit, say half of a banana, or a little fruit juice, at breakfast time.

Do not eat between meals.

If hungry between meals take a drink of water.

Do not be alarmed if your appetite is appeased before you have eaten or "Fletcherized" very much.

Quit eating promptly when your appetite seems satisfied.

Do not eat something more just because it is there and might have a good taste to it.

In case of eating dessert, it is better to have this at the beginning or middle part of the meal. If you first eat until your appetite is satisfied, and then eat the dessert extra, you will thereby violate the principles of Fletcherism, and you will not feel so well.

Do not eat "to keep up your strength;" your natural appetite will attend to that in due time.

Highly seasoned and spiced foods are

likely to over-stimulate the appetite or sense of taste, causing you to eat too much.

If only a small quantity of such foods is taken into the mouth at one time, and if the original taste is chewed out of it, the danger of over-eating will be reduced to the minimum.

Taking large quantities of food into the mouth at one time will over-stimulate the taste buds, causing an abnormal or unnatural appetite.

Most people eat entirely too much.

Fletcherites often thrive and grow fat on one-half the amount of food they formerly used.

You derive strength not from the amount you eat but from the amount you assimilate.

When the food is reduced to a liquid in the mouth the work of the stomach is cut in two.

When you become thoroughly accustomed to "Fletcherizing" you will require little or no more time for a meal than you formerly required when you bolted your food.

Do not use the mouth as a funnel to deluge the stomach at meal time.

In drinking coffee, tea or milk do not take more than one-half teaspoonful at a time; retain this in the mouth until it loses its original taste.

In drinking water at meal time do not take more than one teaspoonful at a time; retain this in the mouth until the chill is taken off of it.

Do not drink much water at meal time.

It is well to drink six to eight glasses of water during the day.

Do not drink more than one and a half glasses of water at one time.

Do not drink much water for half an hour before meals or for an hour or two after meals.

Be master of yourself; do not be a slave to wrong habits.

It will be a good plan to keep a copy of these rules on your table for a week or two and read them carefully at each meal.

These rules have been condensed from the works of Horace Fletcher and other authors, and also from the writer's personal experience in learning Fletcherism. They must be followed carefully in order to secure good results.

Rounding Out Unsightly Hollows

THE CAUSE OF THESE DISPLEASING DEFECTS, AND SOME VALUABLE SUGGESTIONS AS TO THE BEST MEANS FOR REMEDYING THEM

By Charles Merriles

A WELL-
rounded,
harmoniously pro-
portioned body
should be possessed
by everyone.
Where unsightly
hollows and other
defects exist, there
are in nearly all
cases some physi-
ological causes for
their existence.
The enjoyment of
a high degree of
health, as stated in
a previous article
by the writer, in
nearly all cases in-
dicates the posses-
sion of at least a
well-formed and in
many cases a
beautifully devel-
oped body. Where
displeasing defects
appear—such as
those noticeable
about the collar
bones of some
women when
garbed in decolleté
dress—their un-
fortunate possess-
ors endure a vast
amount of needless
discomfiture. They
spend sleepless
nights worrying
over their appear-
ance, when a social
function involves
a display of their
physical defects.

In nearly all in-
stances, where one
part of the body is
angular in outline,
other parts have



Exercise Number 1.—Assume position shown in illustration, hands resting on hips. Now bring arms and shoulders far back as possible, then as far forward as possible, hands to remain on hips. Repeat exercise until muscles are thoroughly tired.

similar defects. These defects are brought about, as a rule, by one or two causes. It might be well to mention that the leading cause in practically every instance is defective assimilation—the inability of the assimilative organs of the body to absorb the food elements needed to thoroughly nourish all parts of the body. The blood does not contain those virile elements of nutrition that are necessary to round out and make symmetrical all parts of the body. This may be regarded as the cause in the majority of instances, though the secondary cause in most cases is the lack of exercise necessary to develop and make symmetrical all parts of the body. For instance, where the muscles around the shoulders and chest have received little or no use, if one is not possessed of very superior vitality these parts of the body will become thin and angular in appearance. In other words, they

will become bony and displeasing, and when the edicts of society require one to expose these defects to the eyes of friends and acquaintances, it is indeed a cause of much mental discomfort.

Now where unsightly hollows are caused by defective assimilation, the remedy to be applied is two-fold. To a certain extent, of course, it should be dietetic in nature. One should be careful to avoid unwholesome foods or complicated dishes. By all means avoid overeating. Eating beyond one's appetite and beyond the digestive capacity is one of the principal causes of emaciation, and the angular defects that accompany it.

The necessity for a keen appetite, when desirous of gaining in weight, is especially important. The food should be thoroughly enjoyed, because one should remember that if the appetite is thoroughly roused by the keen enjoyment of food, it is not only more perfectly masticated, but under such circumstances the stomach is in a far better condition for digestion. Appetite, too, it should be remembered, indicates that

the digestive organism is in a condition at that particular time to assimilate food. The digestive secretions necessary to the assimilation of food are furnished abundantly, and the process of making blood rich in those elements necessary to nourish the body is carried on satisfactorily in every way.

If you find it difficult to secure an appetite, I would certainly advise that you wait until it comes, even though you eat no food for several meals or even several days. Fasting will not hurt you, in fact, in nearly all cases of mal-assimilation, fasting is a certain means of giving the digestive organism the vitality essential to make the proper kind of blood. You must remember that the entire organism is maintained by the blood. Therefore, upon the quality of this liquid depends the character of every part of the tissues of the body.

It is hardly necessary for me to go into details as to the value of mastication. If you desire to create good blood and are suffering from digestive disorders, you will indeed be disappointed if you expect to accomplish anything of import-



Exercise Number 2.—From position with shoulders far back and down, shown in illustration at the left, raise shoulders as far upward as possible, as indicated in illustration at the right. Repeat exercise until muscles employed are thoroughly tired. This is a splendid exercise for filling in hollows around collar bones.

lowing should not require any special effort. Your food should simply go down your throat without the necessity of a mental stimulus on your part.

Of course, there are all sorts of diets, and it would be impossible to give any information of especial value on this subject in the space allowed the writer. If

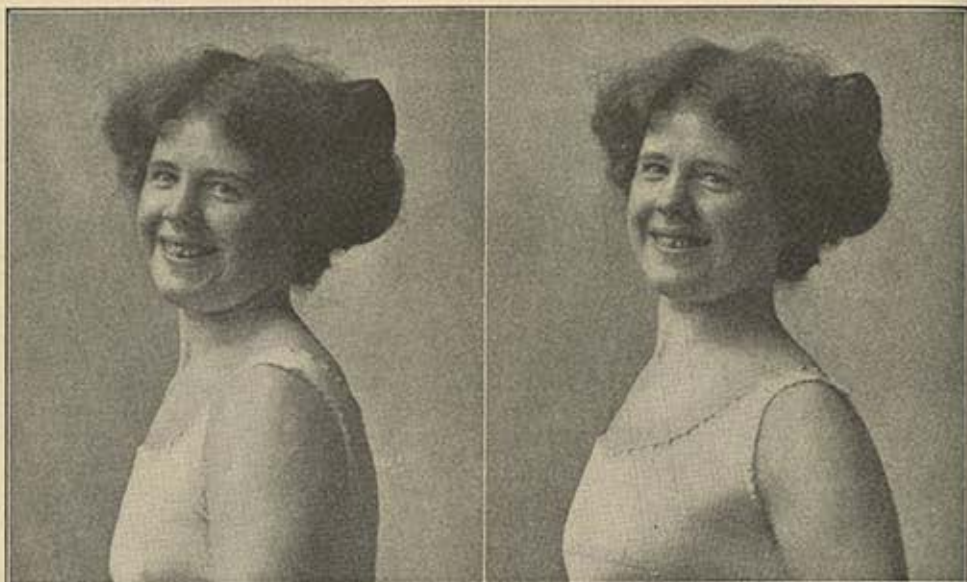


Exercise Number 3.—With dumb bells or some other light article grasped in the hands, bend far backward as shown in illustration. Now bend forward and touch the floor, keeping the knees as straight as possible. Now, with elbows rigid, raise arms high overhead, to position shown in illustration. Repeat until muscles are thoroughly tired. Especially valuable for securing the strength of the back necessary in building general vitality.

ance without properly masticating your food. Every morsel of food should be masticated to a liquid or chewed until it is swallowed involuntarily, that is, swal-



Exercise Number 4.—With arms in position shown in illustration, strike out vigorously, reaching forward as far as possible. Bring arms back energetically. Repeat the exercise until the muscles are thoroughly tired, breathing fully and deeply at frequent intervals.



Exercise Number 5.—Bring shoulders far forward, as shown in illustration at the left. Now bring them as far back as possible, as shown in illustration at the right. Return to former position and repeat exercise until muscles are thoroughly tired.

you simply confine your nourishment to plain, wholesome foods, will avoid over-eating, will simply eat when you can thoroughly enjoy your food, as a rule you can depend upon satisfactory results being secured. By all means avoid white bread and white flour products of every kind. This so-called food clogs the bowels and interferes with their functional processes.

It is positively necessary, in order to accomplish results in remedying lack of development, to take a certain amount of exercise. There are two kinds of exercise that are needed to bring about results. There are first, those forms of exercise, which build up general constitutional strength, in other words, which incline to expand the lungs, increase digestive power, and strengthen the muscles around the waist. Then there are exercises that are especially intended for developing the muscles and ligaments that surround or adjoin the defective parts themselves.

As to the general exercises that would be of value, in this instance, almost any system of movements that will bring into play all the muscles of the body can be

used advantageously. Many of the exercises that have been given in the editor's articles on "Developing a Powerful Physique," which is now being published, can be recommended, provided one is strong enough to take them. All those movements that are designed to increase the strength of the spinal column for the purpose of adding to the supply of nervous energy throughout the entire body, are most commendable.

The spine might be termed the mainstay of the body. Its strength or weakness means a corresponding condition in the entire bodily organism, and any exercise that will add to the general vigor of this particular part will add to one's digestive and assimilative power, in addition to improving the quality of the blood and materially assisting in the removal of physical blemishes.

With this article are presented various exercises that will be found especially valuable in remedying defects about the shoulders and neck. These exercises are especially valuable for developing the muscles of these parts, and if combined with deep breathing and various other exercises for constitutional upbuilding,

together with a reasonable diet, pleasing results can be effected.

It is well to note that it does not take very long to bring about a decided change in one's condition when endeavoring to remedy defects of this nature. Very often in three or four weeks angular outlines will begin to smooth out and assume a harmonious appearance. Remember, of course, when beginning these exercises, that there is a possibility of stiffness ensuing. The muscles are apt to

become sore. If, however, they are rubbed slightly and the exercise continued moderately, this soreness will soon disappear.

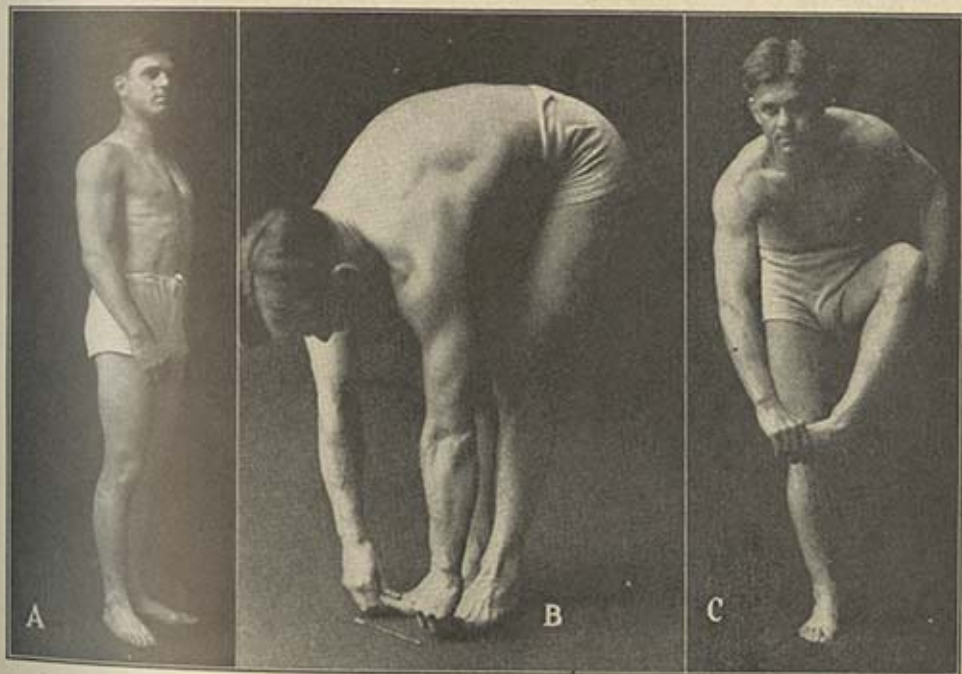
Almost any exercise that will develop the chest can be recommended in filling out hollows of the upper part of the body. Chest development also adds materially to the general vital vigor.

An article will appear in the next issue entitled: "The Cause of, and Remedy for, Wrinkles."

Some Novel Stunts

Many of our readers have suggested that from time to time we publish feats of strength, which, while easy to perform, would be of a novel character. Complying with this request, we will publish, as space permits, a few feats that will be

interesting, as well as instructive. Some of the feats we propose illustrating are comparatively easy to perform. Others, although quite difficult, will reward the efforts necessary to perform them by adding to one's strength and agility.



Stunt A.—Stand with the left side close against the wall. Now try to lift the right foot out from the body without changing the position of the left foot. As it is practically impossible to perform this feat, it furnishes quite an amusing stunt.

Stunt B.—Jumping over a lead pencil. Place a lead pencil immediately in front of you, as shown in the illustration. Now grasp the toes in the manner shown, and attempt to jump over a lead pencil. You will find it an exceedingly difficult feat, though not by any means impossible. With practice, it can usually be accomplished.

Stunt C.—Grasp the toe of the left foot with the right hand. Now endeavor to jump through the loop thus made by the left arm and right leg, with the right foot. This is a feat of agility that requires considerable practice, but almost any agile person can perform it in time.



From Photograph Copyright by Underwood & Underwood, New York

Workmen risking their lives to put up a framework which projects over Fifth Avenue, New York City, nineteen stories from the street level. The great Flatiron building, the home of Physical Culture Magazine, is seen at the right in the distance.

Iron-Workers of the Sky

By Herbert W. Farnum

I question whether there is a legitimate occupation that requires more nerve and muscle than that which is exhibited by the structural steel workers. They go to their dangerous business with a careless nonchalance, which at times brings terror into the hearts even of the onlookers. Constant proximity to danger is liable to breed contempt for it, and it certainly seems so when one views these men moving hither and thither hundreds of feet in the air and apparently without a tremor of fear. The author gives us some details of these workers that will doubtless be read with interest.—Bernarr Macfadden.

SUSPENDED midway between Heaven and Earth, walking and climbing over narrow beams and dizzy girders, exposed to all the winds that blow, and with only their steady nerve and calm, sure-footedness to stand between them and the eternally relentless shadow of death, the builders of sky-scrapers ply their hazardous task. In the winter, there is no spot so cold as up there in the currents of Arctic air; in the summer, no place so blistering hot as upon the unsheltered sun-heated iron. But cold and heat alike they ignore, and keep on with their busy, perilous toil. Courage they possess, to an



From Stereograph Copyright by Underwood & Underwood, N. Y.

A fearless workman on the edge of the Times Building, a twenty-six story skyscraper, looking north over New York City and Central Park.

unlimited degree, but courageous they need not be, for they know not the sense of fear. Daring to the last extreme are they, with the daring of recklessness. They laugh in the face of Death, and only pause in their sportive mockery when Death, in his turn, suddenly claims one of their number, snatches and bears him away.

The cloud-scaling aeronaut is another who invades the sky, but he takes his risks usually for the sake of the sport, at discreet intervals, and then with the eyes of an applauding public upon him. The structural iron-worker, however, lives his whole life in danger, and never knows on



From photograph Copyright by Underwood & Underwood, N. Y.

Constructing the steel framework for the metal cornice of a great skyscraper, New York.

what day or what minute a misstep of his own, a false move by some fellow-worker, or the falling of a girder above him, may snap off the thread of his life like the winking of an eye. Indeed, frequently enough, he sees others killed at his very side, for skyscrapers and great

suspension bridges are not usually erected except at the cost of more or less human life. But even in the face of such frequent, almost constant reminders of what each day may be his own quick fate, he sticks to his work with unconscious scorn of the danger that constantly menaces him.

The skyscraper builder, as a type, is a modern product, growing out of the modern necessity for the skyscraper itself. We will grant, if you please, that this latter day giant of the builder's art, is a sheer monstrosity, devoid of architectural beauty, and typifying the one-sided mechanical development of a frenzied civilization. But be this as it may, and accepting the artificial civilization that we have, the tall building is an economic necessity because of the excessive value of land. When land values in a great city rise to such a point that a single small plot may be worth upwards of a million of dollars, it follows that to make it profitable for business purposes, the owner must secure rentals from as many floors as possible. Consequently these floors are placed one above the other to such a height that only the ingenuity of modern building methods would have been capable of answering to the demand. It matters not that the congestion inevitable in a district covered by such buildings is opposed to all the claims of sense or health, or that the lower floors are essentially dark and almost inaccessible to currents of fresh, pure air, for irrespective of everything the necessities of business cannot, must not be disputed. And so we have the skyscraper, a triumphant monument to the genius of the modern engineer and to the dauntless spirit of the hands which have hoisted and welded its material elements into place.

In the past, stone and brick buildings have actually been what they appeared to be, namely, symmetrical, dignified piles of brick or stone. But the modern structure, while seeming a stupendous edifice of marble or brick or stone, is really a steel building, the masonry being only a veneer. Up to seven or eight stories, stone or brick buildings will stand, but this elevation marks the limit at which such buildings for business

purposes are practicable. A building of twelve or fifteen stories would require such thickness of wall in order to sustain the enormous weight, that they would take up too much space, leaving very little room inside for use of the occupants. Furthermore, the amount of stone or brick required in such walls would be extravagantly excessive. Consequently, when the stern pressure of economic necessity first made its demands for greater height in business buildings, the use of iron was resorted to. Iron, being capable of sustaining a much greater load per square inch, was first introduced in the form of columns, either cast or wrought, to carry the floor loads and relieve the walls. Afterwards a set of wall girders was introduced at each floor, to carry the story-height of stone or brickwork above that floor, making each story of masonry self-supporting, as it were, and carrying the entire load not on the brick or stone, but down through the columns to the footings or foundations. As will readily be seen, this plan offered also the advantage that all of the walls could be made of a uniform and minimum thickness, leaving more space for the interior, and making the entire structure lighter. At the present time, however, the use of iron in tall building construction is almost entirely discarded, giving way to steel, which is both cheaper and far stronger. The use of steel likewise enables the builder to secure the same degree of strength in a much lighter structure.

This is the age of steel—of steel, steam and electricity. And just as the great, massive, stone pyramids of Egypt stand as eternal monuments to a more primitive period, the cloud piercing business buildings of to-day may at some future time be regarded as the most fitting symbol of our age and scheme of life. It is to be hoped, just as it is to be expected, that future developments of the human race will be away from the mad effort to erect these cloud-capping towers of steel and stone, and in the direction of some genuine culture of the race itself, culture of the full physical, mental and moral possibilities of the human. It is to be hoped that the crowning glory of the Twenty-first Century will not be office

buildings that will make man dizzy when on top, and dislocate his neck when viewed from below, but that rather it will be a standard of perfect health for all the people, a realization of the Greek ideal, a race of sound physiques, strong muscles and unfrazzled nerves; perhaps more than this, if possible, in both brain and body culture, but full this much at least.



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Working on the roof of a new skyscraper looking away over New York City across the Hudson River into New Jersey.

Perhaps some anticipate still further, indeed, unlimited developments along the lines of present tendencies, and believe that our great-great-grandsons will see business houses three hundred stories high. But there are certain natural and inevitable limitations to the erection of tall buildings, and these limitations are already making themselves felt. As a matter of fact, the limit of practicable and profitable building in this direction has almost been reached even now in the down-town "financial" section of New York City. The very highest "freak" buildings at the present time are erected merely for advertising purposes, an insurance company or other large business corporation frequently being willing to spend a large amount of money for the notoriety of having the "highest building in the world."

Aside from the mechanical limitations, which multiply faster and faster with the increasing elevation of the buildings, having to do both with the problems of weight and wind-bracings, and which make it problematical whether man will ever be able to build much above fifty or sixty stories, or at least not more than seventy-five,—aside from these restrictions of a structural nature, there are the still more important limitations involved in the natural requirements for light and air. Offices which are almost totally dark except for the harsh illumination of electric lights, and which have no good air supply, will bring only low rentals, if they are occupied at all, as some of the landlords in New York have learned to their cost. The difficulty is a serious one, and to-day the wise builder of a skyscraper on a certain plot usually takes the trouble and goes to the additional expense of buying the lot next door to make sure that his tenants will not be entirely deprived of air and light by the erection of another similar structure on that site. Consequently, it is a common thing to see a twenty or thirty story building next door to a little squatty one of three or four stories.

But if these structures are representative of our time, it is doubtful whether very many of them will stand throughout the centuries as do the pyramids. Iron and steel will rust in time, and it

would be difficult to predict the condition of these buildings in two or three hundred years. But it cannot be denied that for the present they are strong and mighty, for otherwise they could not stand. They may seem frail only by comparison with the pyramids, and even though they are made no heavier than necessary, yet the total weight, not only of the steel, but also of the brick or stone, is still tremendous. But the masonry is applied to the frame of steel very much as plaster or shingling might be laid upon a wall. Its function in adding to the strength or supporting power of the building is practically *nil*—in fact, it often happens that the work of covering of the outer walls with thin stone or marble face is begun at a point far above the street. Consequently one may sometimes see, in the construction of such a building, some five or six stories extending upwards from the eighth or tenth floor, white with a fresh stone covering, while the several stories underneath are bare, and still further upwards, perhaps some twenty-five floors above the ground, the iron workers are still engaged in hoisting up material and welding together the firm, elastic and yet unyielding skeleton of steel.

It need scarcely be said that in a very tall building the frame-work of the upper stories is not so heavy as that of the lower floors. In the heavy foundation work, there is sometimes an iron weight as great as twenty tons per single girder, whereas the smaller pieces at the dizzy top, when gazing up from below, often look like so many little sticks. And the process of building, to the curious on-looker, is all a muddle of noise and confusion, though to the men themselves all is as orderly, well arranged and effective as the intelligence of shrewd man can make it. In the midst of the dozens of ponderous steel beams, upright and horizontal, already fastened in position, there are gigantic derricks raising still other mammoth girders to their final resting places between heaven and earth, engines operating the derricks, elevators going up and down, forges heat the rivets with which to make the whole structure one; clamorous, deafening automatic hammers, which do in one

minute the work of many hand-wielded sledges, and scores of men working like busy ants through the din, the smoke and the steam.

And these men are hard and strong. They are like the material upon which they work; they are men of iron, in sinew, in nerve and in spirit. The veriest fraction of self-confidence lost would leave a man unfit for service, and a source of danger to the others. For the safety of each individual depends not only upon himself but upon the steadiness of nerve and accurate judgment of his fellows. Just here lies the objection to green hands. With a crew of tried and experienced men there are seldom any mishaps, a rather remarkable fact considering the perilous nature of the work. But it is on those structures employing unseasoned men that the fatalities chiefly occur. The new Blackwell's Island Bridge in New York City, connecting Manhattan with the Borough of Queens, was erected at a cost of something like seventy lives. The building of some big bridges has been known to cost as much as one human life per day, on an average, a fact said by some to be due to the work of green hands. However, the green men become seasoned in the course of time, those that survive, and the longer they work the safer they are, both as regards their own welfare and their danger to their fellows. And if the work is the work of the man, it must also be said that it is of a nature to make a man out of any one, if he lives through it and sticks to it.

It must be said also, that a great deal depends upon the foreman, for when the latter is a cool, careful and calculating captain of his crew, the accidents are very rare, or as one may say, only of the utterly unavoidable nature. With a less cautious and less wide-awake foreman, however, things are much more likely to "go wrong," and when they do, a widow somewhere may be left to pay the price. Some of the large buildings are put up almost without accident, while others seem to be cursed continually by some ill fate.

Occasionally a fifteen or eighteen-story building will sacrifice the lives of a dozen men or more, whereas, in the case

of the fifty-story tower of the Metropolitan Life Insurance Building overlooking Madison Square, in New York City, it is claimed that not a single fatality occurred in the putting up of the great steel skeleton. Great was the boasting thereat, but the hand of Death was not to be entirely foiled with this building, for after the tower, stone-work and all, had practically been completed, an exceptionally careful workman fell from a scaffolding some four or five hundred feet above the stone pavement. He was engaged in fastening the scaffolding when he leaned over too far, slipped, and went diving down through space. Two or three stories below he glanced against a balcony, which sent him careening out over the street. Horrified men and women in the neighboring park held their breath and stood rigid as stone as they watched him, for an instant seeming to pause, poised in the air, and then commencing the descent which became ever swifter the farther he fell, until he ended his flight on the sharp stone curb of the other side of the street, at the feet of the beautiful church of which Dr. Parkhurst is the pastor.

Many indeed are the violent deaths in this hard, rough trade, and still more are the hair-breadth escapes. Favorite themes for talk among the men outside of their working hours, are their various experiences in dodging death and their recollections of disasters, which others had failed to dodge, deaths from falling timbers, derricks or girders, being rammed by derricks or girders, the breaking or tangling of ropes or chains, the slipping of scaffolds, the collapsing of buildings and a score of other accidents. They tell of men killed by a fall of a few feet, and of others who lived after falling a hundred.

Some of these men are married, have homes and children, who share in the risks of their father's occupation. But for the most part they are not married, and drift about from one part of the country to another, wherever the prospects seem brightest, always attracted by the bait of the highest wages to be had. Perhaps it is just as well that they are not married, considering the lives they lead. Yet it is not to be denied that

such hardy, vigorous and courageous stock would be of value in bringing up the physical average of the next generation. If only there could be arranged some form of adequate insurance for the wives and families of these, and they were not impelled so much to the roving or migratory spirit, it would be well for them to marry. Their wages are good, for the work is such that every one cannot do it. It happens also, more frequently than otherwise, that a building is wanted in a hurry, so that the men are compelled to work Sundays and overtime, the result being that the usual wage of about \$24.00 per week runs up sometimes as high as \$75.00 for seven days.

With all their rough exteriors, their boasting, death-mocking surface, their hearts are as tender and warm, as generous, as true as those of any men upon this earth. None more ready to help a fellow in need, none more free with offerings to the gray-haired beggar, to sisters of charity or to Salvation Army appeals. In common with other workers of the "rough-and-ready" type, men who do the heavy and useful work of the world, who are not afraid of using their hands, bruising their hands, or soiling their hands, they are the "salt of the earth." And even in the midst of the decadent life of the modern city, so long as there are men like these, engaged in strenuous, hardening, open-air occupations, in which they are compelled to grapple hand to hand with the elements and forces of nature, just so long will there be still some hope for the survival of rugged manhood and some strength of character in the city. Unfortunately, however, for the city, these workers are not usually city-bred men, but come chiefly from the woods, the fields and the smaller towns.

Perhaps in many cases their habits are not all ideal. Perhaps their food is a handicap. But their hardy, active lives enable them to overcome to a great extent even such drawbacks. Most of them smoke, but only when away from their work, and the constant open-air helps them to withstand somewhat the pernicious effect of this habit. But alcohol no man can endure. Perhaps a few of them drink, but not if the foreman knows it. And if they do drink, they do

not work long thereafter. The work requires a man in full possession of his faculties, quick of hand and foot, quick and clear of eye, and even quicker to think. The stupor of alcohol, even in the very slightest degree, together with the shattered nerves and loss of muscular control which accompany it, will not only unfit a man for his work, but will make him a menace to the others. It sometimes happens that a man will be required to untangle a rope on a derrick, or adjust a pulley, suspended out over some hundreds of feet of space, or perhaps some one must go out to an out-standing upright over an aerial iron walk of some four inches wide. The reader may well hold his breath at the thought, and certainly, no drink-doped man is fit for the task.

The handling of iron throughout the ages has been a marked factor in the development and strengthening of the human race. It has been largely through the use and perfection of iron that man has learned to use his hands, and with it has learned to use his mind. A tool is an extension of the hand, the organ of manipulation, and with the continued and varied employment of both tools and hands has come still further intelligence with the further ability to devise new tools, until the most primitive of these have finally evolved into the most complicated of modern machinery.

It would appear that in the continued working and handling of iron, something of the strength and firmness of the metal seems to communicate itself to the nature and constitution of the man; and this applies more or less to all who have to do with it, from the men who mine the ore all down the list. The men who roll out steel rails from tremendous masses of scorching, sizzling, white-hot iron, are marvels of strength, speed and endurance. Even the village blacksmith, with his modest little forge, is known in both song and story for his sterling strength and virility. But the men who climb their way up into the very sky on the iron-work which they build, joining the giant steel girders with rivets almost as bright and white-hot as the blazing-liquid sun, are perhaps the most unique of them all.

Is Health Improved by Love?

THE LOVE ELEMENT IN HUMAN LIFE IS A POWERFUL STIMULUS, THE CHARACTER OF WHICH FEW UNDERSTAND

By Thomas Stanley Moyer

The subject dealt with in this article is somewhat unusual, and yet it is capable of furnishing a mine of information. Every normal human being is liberally furnished with what might be termed the instinct of love. If it is abused or perverted, one will suffer severe penalties. You are commanded to love and to be loved, and if you put off compliance with this edict too long, you are bound to severely suffer. The author has treated the subject briefly and forcefully, in a manner that should be of interest.—Bernarr Macfadden.

FROM love to a vigorous liver, from a vigorous liver to buoyant health! Does the comparison suggest the ridiculous? It need not. We hope it does not.

Compare your semi-fossilized bachelor of fifty summers with a *paterfamilias* of an equal age, and you will begin to see suggestions of certain truths in this same climax. Similarly, consider the matronly woman of forty with her brood—with her amply-developed body—with her fully rounded life!

If you want the highest health you must fall in love and be married! Within you is a negative health factor only to be aroused by a positive one in a member of your opposite sex.

If you doubt the tremendous and direct physical influence of the other sex upon you, note the sensations that quiver through your being on meeting—even casually or hurriedly—certain men or women attuned to a like nervous tension as yourself. So strange and inexplicable is this force that individuals are at times temporarily much affected by the approach of their true positive or negative—in some instances they are intoxicated by exhilarating pleasure, in others the reverse. You must have noted the phenomenon. Your heart leaps; your nerves tingle; your eyes brighten instantly; your being is aroused in its every fibre, as surely as though you were an electric battery awaiting a finger touch to vitalize you. The finger-touch, in such a case as the above, is a very interesting law, whether definable or no, that can be utilized to almost infinite results.

The wife of Robert Louis Stevenson kept him alive for years and years by sheer force of love—her love replenishing his—her vital affection keyed exquisitely to his own. This mystic, invisible, and indescribable strength imparted to a man by a woman, and *vice versa*, is a factor of vastly too great an importance to be overlooked by any physical culturist.

Personally, the author of this article (and most physical culturists will agree with him), does not believe in physical wrecks being made "whole" by means of the physiological regeneration of a marriage, if otherwise they would be degenerate; but such cases illustrate very emphatically the power of love-magnetism and physical association of opposite sexes upon the body.

For instance—before marriage a man may possess poor digestion, disordered nerves, and the whole gamut of weaknesses. Invariably, a well-regulated marriage puts flesh on his bones, fire in his eyes, and endows him with a distinctly higher bodily poise in general.

Carry the law to those who have good health and every right to enter wedlock. The already strong man or woman finds his or her latent powers roused and redoubled. Every great man has possessed a being mated to him, with very few exceptions. Herbert Spencer—great Victorian that he was—failed utterly in this one great duty. With the love influence his genius would have been doubly developed. Most men dream of greater success on falling in love, and begin actually to succeed after marriage. Parenthood carries on and further exemplifies the self-same law.

Not that all marriages improve the body, some lower both the mental and physical. But such unions are never—most emphatically *never*—built upon the highest principles. The union must be a union physically adjusted. Marry the girl that makes you tingle when you get within a block of her! The law that causes such intuitions and feelings of exhilaration is a higher and more infallible criterion than all others put together.

Then, too, hand in hand with awakening love comes desire and ambition. These impulses act directly upon your bodily functions—revivifying them. The lover generally carries his body in a more erect manner than the callous and *blase* bachelor. It is good then for the disposition of his bodily organs, that he is in love.

A man thoroughly infatuated shuns debauch and gluttony. This leaves him nervous energy to apply to his aims in life. Lovers are proverbially "lean." The earth's "lean" men of nervous tem-

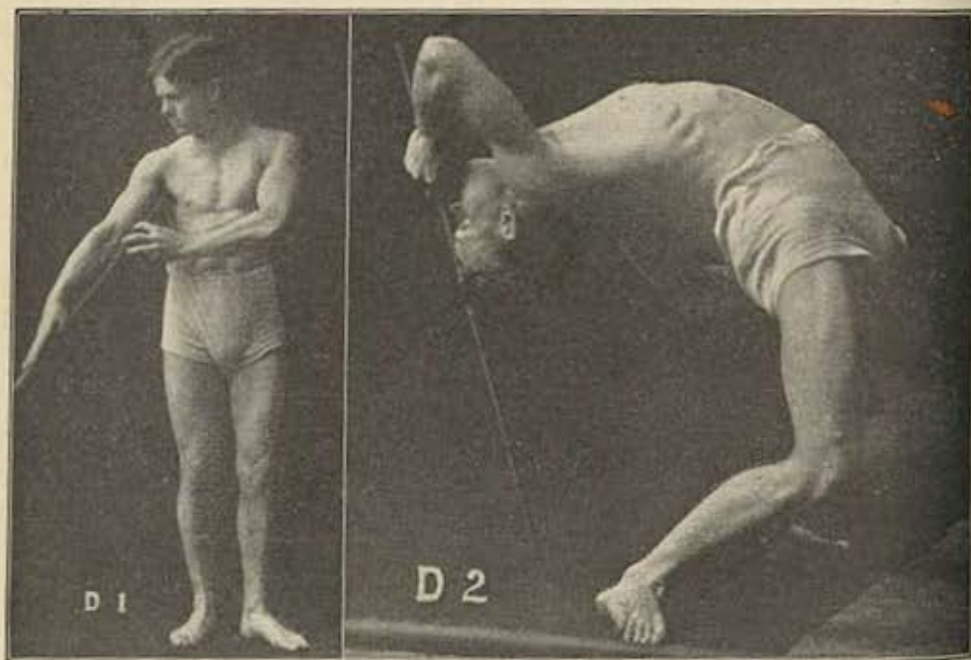
perament, from Julius Cæsar downward, have ever been the world's doers, the world's great. Get in love and be a lover! Marry and make dreams human realities.

Observe the great lover! Usually he is possessor of great strength—(nervous strength)—funds of energy.

Reverse the foregoing laws! Build up your nerves and body in order to become a greater lover; that is to say, a greater acquirer of the most exalted things of life—honest pleasure—highest hope—best accomplishment!

If you are a weakling, centre your hopes upon some true woman. You may not care a snap of your finger for her now. But build! Do not lean on her strength! Equal her strength; exceed it; and then complete your life by making her part of it! The dilettantism, which Carlyle despised so much, is nowhere more despicable than in this neglecting of the very foundation of lasting *strength and a perfected destiny!*

Another Novel Stunt



Stunt D.—Secure a stick that is a little bit longer than the arm. Measure the arm as shown in illustration, D 1, by placing the stick under the arm and noting the point touched by the ends of the fingers. Now grasp the stick at this point with the right hand, as shown in illustration, D 2. Then hold the stick so that the hand touches the lower part of the nose, bend backward and try to touch the floor as shown in D 2. This is a comparatively easy feat to perform, and is a splendid movement for making the spinal column more supple.

Strengthening Weak Lungs—Curing Consumption

Vitality-Building Through Physcultopathy

THE VALUE OF EXERCISE IN VITALITY-BUILDING AND THE CURE OF CONSUMPTION

By Bernarr Macfadden

ARTICLE V.—(Concluded).

EXERCISE is absolutely essential to the creation and maintenance of the vitality necessary to increase the strength of weak lungs or to cure consumption when it has once fastened itself upon you. While many have been able to recover their health with little or no exercise, they would have gone on towards health and strength more quickly with the aid of the vitality-building influence of exercise. To be sure, there is a possibility of being too enthusiastic. One is liable to take too much exercise, but as a rule the error is made in the opposite direction.

Consumption itself is in fact a disease confined for the most part to those following a sedentary life. The existence of this ailment indicates lack of activity. The blood is hampered with large quantities of impurities, catarrhal poisons. To a certain extent the cleansing organs of the body, those particular depurating

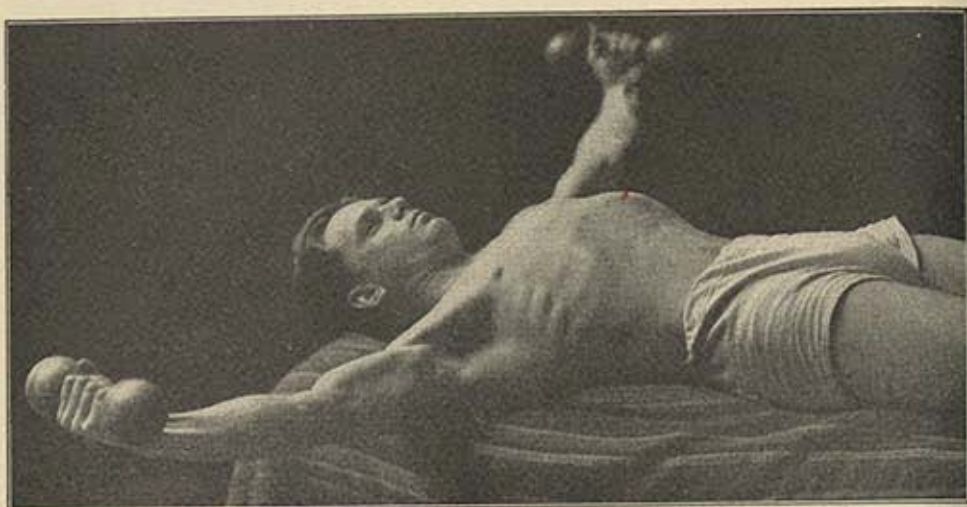
functions which are depended upon for cleansing the blood of the various elements that are inimicable to life and health, have failed to perform their duty, and this failure is caused in many cases simply and solely because of an inactive life.

The exercise of a muscle accelerates the flow of blood to that particular muscle. It brings new life and health to the part. It carries away the dead and worn-out cells. In other words, it removes the poisons that are remaining there and are a frequent cause of weakness and actual disease. Carry this same stimulus to all parts of the body, to the great muscles of the body, and we find that as a result there is new life and new strength in every part. The blood is rich in virile elements, and the tissues of the body are imbued with vim and strength. They are capable of manifesting life in its most vigorous sense.



Exercise Number 1.—With arms stretched far back, as shown in the illustration, elbows rigid, bring the arms upward until high overhead. Repeat until there is a distinct feeling of fatigue of the muscles of the chest, which are brought into active use by this exercise.

Exercise Number 2.—With arms in the same position as in previous exercise, bring them down outward to the sides on a level with the body, elbows rigid, until they touch the sides of the body. Then bring back to former position. Repeat until muscles involved are thoroughly tired.



Exercise Number 3.—With arms as shown in illustration, elbows rigid, bring dumb bells up and touch them together immediately over the chest. Repeat the exercise until there is a distinct feeling of fatigue.

Exercise Number 4.—Bring arms from position illustrated obliquely upward and touch the dumb bells together immediately over forehead. Return to former position. Then bring arms upward and touch the bells together immediately over abdominal region. Repeat the exercise, changing position with each alternate movement as described, until fatigue ensues.

It should be remembered also that the exercise of the voluntary muscles increases the strength and activity of all the great vital organs of the body. When you exercise, the lungs, for instance, are called upon for more blood, they work more vigorously, breathing is greatly accelerated, more oxygen is brought into the blood, the heart is compelled to beat faster, the whole functional system is awakened and forced to properly perform its duty. The body is not really thoroughly alive, it is not possessed of all the elements of life and health necessary to a proper performance of its functions, without a certain amount of regular exercise.

In endeavoring to remedy weak lungs or to cure consumption, the exercises essential to bring into activity the muscles around the chest walls are of much importance. They do not by any means represent all that is essential, for all parts of the body should be strengthened, every organ should be made to properly perform its office through the stimulating influence of active movement. All exercises, however, that bring into play the anterior and posterior muscles of the chest walls are, of course, inclined to ex-

pand the chest. They accelerate the activity of the lungs to a very great extent, and they increase the absorption of oxygen that is freely supplied when one is really breathing properly. They greatly facilitate the elimination of the carbonic acid poisons that the lungs are continually eliminating, and thus the blood is more thoroughly purified. The elements of life and health are absorbed, the poisons are eliminated and life itself is brought into a body that has been slowly but surely dying for the want of the activity essential to the proper use of the muscular system. Vitality is only another name for strength, in fact, one might say that it is strength itself. It represents vigor on the part of all the important blood-making organs of the body, and strength in these organs is absolutely essential in order to cure this dangerous disease.

In the last issue I spoke of the value of breathing exercises. They are very important in nearly all cases of consumption. When the air is rich in oxygen, deep breathing will very materially add to the general vigor of the body. As previously stated, deep breathing cannot be expected to bring results if it is the

cause of actual pain; when the inflammation of the lungs is so serious that a deep breath will cause pain, then do not breathe so fully, breathe only to that extent that you can without pain. Gradually, as previously mentioned, this breathing can be made more and more complete and finally you will be able to expand your lungs thoroughly without pain. All this will mean that you will use more lung tissue, in other words, you absorb more oxygen, you eliminate more poison, and as a result the blood contains more of the elements essential for building that degree of strength and health needed in strengthening the lungs.

I am illustrating in this article various exercises that can be taken with advantage for developing the muscles of the chest. It should also be borne in mind that almost any exercise that will bring into active use all the muscles surrounding the chest walls, both anterior and posterior, will be of very great advantage.

In building the vitality necessary in remedying consumption there is perhaps no better exercise than walking. Walking increases the general functional vigor. It adds to the strength of the stomach, it helps materially in the digestion of food, assimilation seems to go on more satisfactorily, when one is in the habit of taking long walks.

Those not accustomed to taking an exercise of this kind may find it difficult to walk a very great distance. I would advise, however, that the distance traversed be gradually increased. Begin with a walk that will slightly fatigue you. Gradually increase this distance each day. If you will follow the directions previously given you as to diet, outdoor sleeping, etc., you will be amazed by the very speedy increase in your strength. Although you may not be able to walk over a quarter or half a mile on the first day, gradually day by day you will be able to add to this distance, and in a period as short as three or four weeks, I have found persons hardly able to walk at first to become capable of covering several miles without serious fatigue. In order to obtain the best possible results from walking, however, it is necessary that it be performed in a proper manner. Another very important factor is the use of a proper form of footwear. The shoes should be made to fit the feet, instead of the foot being forced to fit the shoe, as is so often the case. Even if one is unable to procure suitable shoes in one's immediate vicinity, recourse may be had to one of the reputable firms of shoe manufacturers selling shoes by mail, some of whom pay particular attention to the physiological aspects of making shoes fit the feet.



Exercise Number 5.—From position illustrated, bring arms downward as far as possible, and then return to former position. Bring upward as far as possible. Keep your elbows rigid during this entire movement, and repeat until muscles used are thoroughly fatigued.

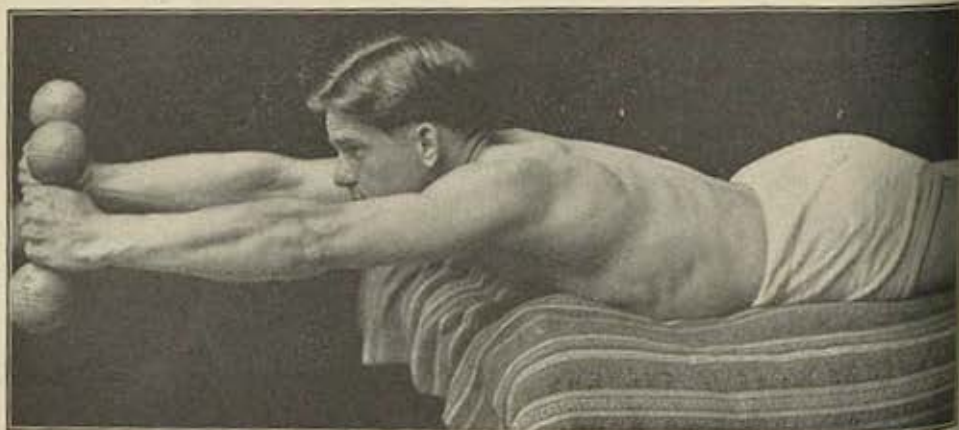
Exercise Number 6.—From position illustrated bring arms far forward, with elbows rigid, touching dumb-bells together in front of head; then bring far downward, touching dumb-bells together over the hips. Repeat this movement until there is a distinct feeling of fatigue.

Another aspect of footwear worthy of attention is the style of heel adopted. Many of those who have performed much walking are warm advocates of the better grade of rubber heels, and regard them as essential to enjoyable and beneficial walking.

As you increase your distance, walking strengthens you and adds to your general vitality. You can really measure the strength you are adding day by day by the increase in distance covered in your walks. It would be well while taking these walks to follow a suggestion I have made in previous articles about harmonious breathing. You will find that this method of breathing will very materially add to your endurance. This suggestion is very easily followed and simply requires you to inhale while taking so many steps and exhale while taking the same number of steps. For instance you start out on a walk. You should inhale while taking say eight, ten or twelve steps, and exhale while taking the same number of steps. After you have walked a short distance you will probably find it necessary to breathe more actively and for instance if you are taking twelve steps, at first you will have to reduce the number of steps while taking in and forcing out the breath to six or eight. At the same time always remember the necessity of taking the same amount of time to inhale as you do to

exhale. This period of time can be more easily measured by steps, as instructed.

Running is, of course, splendid exercise for one suffering from lung trouble, provided that you are not too weak. Of course, this exercise is entirely too strenuous for one whose muscular energies are deficient, and even those who are fairly strong should begin the exercise with a fair amount of caution. Running will compel you to take deep breathing exercises. It is perhaps one of the most advantageous exercises from the standpoint of its stimulating powers upon the functions of the body. The lungs and heart are excited to a very great degree of activity by running. It will compel you to breathe deeply, and there need be no special instructions about it. You instinctively draw in all the breath you can, and if you continue to run very long, the intake and outgo of the breath become very rapid. However, the same suggestion of breathing at stated intervals can be adopted with very great benefit while running as well as while walking. In fact, one possessing ordinary strength, by following this suggestion as to harmonious breathing, can usually acquire the endurance necessary to run a mile in a very few days, although he might not be able to run more than an eighth of the distance when beginning. Remember, however, that running should be performed with a great deal of cau-



Exercise Number 7.—From position shown in illustration, bring arms downward as far as possible, then upward as far as possible. Repeat the exercise until there is a distinct feeling of fatigue. In performing this movement, when the arms are up as far as possible, it is a good plan to hold them there for a brief moment before continuing.

tion, and in the beginning it might be well to try a run that is but little more than a walk, gradually increasing your speed as you add to your strength.

I would suggest that a dry friction bath be taken as a part of the exercise required in this vitality-building process. I consider this friction bath of especial importance. The skin, as the reader no doubt well knows, eliminates a great deal of poison. The pores should, therefore, be active, they should be ready to receive any of the foreign elements that are brought to them for elimination, and should be able to properly perform their functions. In order to secure what might be termed a "live" skin, the dry friction bath, is of very great value. In fact, several years ago I was told by a man who was at that time nearly seventy, that he had actually cured himself of consumption when he was about twenty, solely through the aid of dry friction baths. He stated that at that time he was practically given up by physician, relatives and friends, and that he turned to this as a last means of saving his life, and the vigor manifested at the time that I saw him indicated that he had not only saved his life but that he had secured benefits that were unquestionably of very great value to him from every standpoint. He stated that he continued the habit of taking the dry friction baths up to the time that I saw him. His method was rather drastic—he stated that he used an ordinary horse-brush. I am inclined to think that would be too rough for the average human skin, though you must remember that the ability of the skin to adapt itself to conditions is indeed remarkable.

It is much better to take this dry friction bath with brushes as it is more valuable than using a rough towel. though, of course, a towel can be used with fairly satisfactory results. The best way to take this bath is to secure two small bristle brushes. When buying the brushes, rub them over the back of the hand, and if the sensation is not unpleasant you can depend upon it that you can inure the skin to their use. At first, of course, you will have to brush the parts rather delicately, though gradually day by day you can increase the vigor

of this dry friction bath and you will find the stimulus to the skin will be of very great value, and because of the increased activity of these parts the blood will be relieved of a great deal of impurities which would otherwise be manifested in the catarrhal discharge.

In previous articles I have not especially emphasized the very great value of sun and air baths in the treatment of this trouble. There is no question but that very great benefits can be secured from exposure of the skin to the rays of the sun, and if the sun's rays cannot be conveniently secured, the unclothed skin coming in contact with the air will aid very materially in increasing the general health and strength. In fact, I have often thought that one of the best methods of treating this trouble would be to have a separate institution for each sex located in some wild part of the country where there are no neighbors to be shocked, and where also the temperature would be of such a character that clothing would not be required. Under such circumstances, of course, the patient could go practically without clothing at all times. In fact, his wearing apparel could be taken away from him with perhaps an exception of something light which could be thrown over the shoulders if required. This, as you can readily see, would excite extraordinary activity of the skin, and would very materially lessen the difficulties in eliminating the mucus or phlegm that often accumulates in such quantities in the lungs in this dangerous disease.

The sun possesses a strengthening power which is not realized by the average individual. The sun is really capable of adding to the strength of the human body almost as much as it will add to the vigor of plant life. You take a plant and keep it away from the sun and it will grow white and delicate, but place it where the sun's rays can shine upon it and it will take a new lease of life, grow lusty and vigorous within a reasonably short period. Of course, sun baths should not be recklessly attempted. An hour or two of the sun, when not accustomed to its rays will so seriously burn the skin that serious results may ensue, though as a rule the only ill effects are the pain

and inconvenience caused by the inflammation. All this, however, is not at all necessary. You can easily become injured to the sun if you will remain in its rays say ten or fifteen minutes the first day, and gradually increase the length of time up to an hour or two or even longer.

If in addition to sunlight there are bathing facilities to be had, it is a good plan to lie in the sun awhile and then bathe awhile, alternating from one to the other, though being careful, of course, not to take more than is of benefit. What is even better than bathing facilities, if you can secure a fairly strong water pressure and use an ordinary hose for taking what is ordinarily termed a percussion douche. Allow the body to become thoroughly warmed in the sun and then run this strong stream of water up and down the spinal column and various other parts of the back, arms and legs. The douche should also be applied to the front parts of the body in the same manner. This will be found to be a powerful stimulant and when taken from three to four times a day, after becoming injured to it, while taking a prolonged sun bath, splendid benefits can be expected.

Little has been said about fasting in this series of articles, as my experience with fasting up to the present time has not been advantageous in all cases of consumption. I have known some cases to secure splendid results from this method, though where the vitality is very low it is usually better not to take a prolonged fast. In nearly all cases a fast of from one to three days before beginning a new diet is advisable, though fasts beyond this period cannot usually be recommended.

As this is the last article on this very important subject, I would like to suggest what might be termed a daily régime that can be used to a certain extent as a guide by those who are interested in the theories set forth. First of all, remember the necessity for breathing pure air all the time, keep your windows wide open, with your head as near the outdoor air as possible, and at all times during the day and night secure as much oxygen as you can.

Immediately upon arising in the morning take enough exercise to thor-

oughly arouse the circulation. If you have time and are strong enough, use all the muscles of the body, though, of course, do not continue this exercise to exhaustion. It may be continued until fatigued, but remember the difference between fatigue and exhaustion is represented by your ability to recuperate in a few minutes. In other words, if in five or ten minutes after the exercise you feel vigorous and capable of taking still more, you have been merely temporarily fatigued. If you feel tired for an hour or more afterwards, you have continued to exhaustion.

Follow this exercise by taking the dry friction bath referred to. Follow this friction bath by taking a cold bath. It is easily possible to make very grave mistakes in the use of cold baths. You should recuperate a few moments after the bath with a feeling of warmth and exhilaration. In fact, in a proper recuperation you should be buoyed with a sense of the pleasure of life to such an extent as to at times have a feeling akin to intoxication, not the same feeling that comes from alcoholic stimulation, but the senses should be thrilled with the joy of life.

As to your eating habits, you have no doubt been able to solve this problem from previous suggestions, but remember, don't "stuff" unless you are on an exclusive milk diet. Then you can usually take all you desire, if taken in the small quantities suggested. Very frequently you can add eggs to this diet and can "stuff" with benefit. Try to enjoy everything eaten, enjoy it thoroughly. The more pleasure you can secure from eating the better chance you have for building strength. Pleasure in eating means additional facility in digesting, on the part of the digestive organs, which you should remember are a part of you. Sometimes during the day take a long walk and breathing exercises; if strong enough, a short run. Remember, don't clothe too heavily, only wear enough to keep warm and no more.

Don't worry. Cultivate a hopeful attitude. Simply determine that health will be yours and begin to work for it with an indomitable determination. If you are eating ordinary meals, as a rule

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you will find it better to wait until towards noon for your first meal, for you will then have a keen appetite and furthermore, the stomach will usually be cleaned of the mucus or catarrhal discharges that might have collected there during the night.

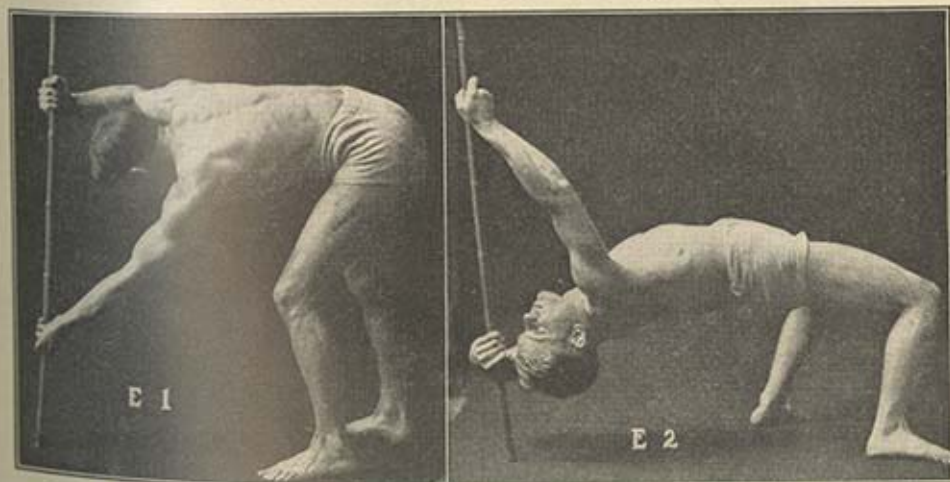
Remember, that one rule will not work with all cases. Every sufferer with this trouble should begin at once to study his individual case. You should learn what you can do and what you cannot do. You should study your digestive organism with a view of determining the quantity and character of the food needed to get the best results. If you follow a method of this kind day by day you will be learning the best methods for treating your own case, and figuratively speaking nearly every consumptive has a barometer that he can use to advantage in his own case. This barometer is represented by the amount of mucus eliminated from the lungs. When it permanently increases, your trouble is growing worse. When it decreases you are improving. This test, however, is of no value in what is usually termed "dry" consumption.

Be sure to remember my suggestion about the value of air and sun baths, and

sometime during the day give the skin the tonic effect of either one or the other or both. It would be a good plan to have some convenient method of hanging the weight of the body by the hands, and if this exercise is taken several times during the day, it would be very greatly to your benefit. The exercise of hanging in this manner strengthens very greatly the muscles around the chest walls, and of course, increased vigor of these parts will naturally assist in remedying this complaint. If you have no other means of hanging, you can place an ordinary towel over the top of a door and hang the weight from the top of the door, grasping the door over the towel to avoid hurting the hands. In all cases, hang as long as you can without severe fatigue.

Make up your mind to work for the vigor that is essential to your cure. Remember you must increase muscular vigor to add to functional vigor, and if you carefully follow the suggestions that have been made up to the present time, adapting them to your individual needs, slowly but surely you will secure the health and strength for which you are searching, provided you have not turned to natural methods too late to expect results.

A Good Test of One's Agility



Stunt E.—Secure an ordinary broomstick or any stick of a similar size. Grasp the stick as shown in illustration E 1, with the right hand upward, the left hand downward. Now turn the body slowly but surely, and bring the head under the left arm, twisting the body in such manner as to come up on the other side of the arm. This is a comparatively easy stunt to perform, if one is fairly strong and agile, though it usually requires some little practice.

"Whiskey, That's All"

By Oliver Allstorm

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All? Why, no, there's great deal more:

There's an arm that's weak and a head that's
sore:



There's a home that's filled
with grief and woe,
And a wife that's felled
with a savage blow.

All? Why, no, there's job that's lost;

There's an empty purse that can meet no
cost;

There's a watch to pawn and
a chair to sell;

There's money to borrow
and a thirst to quell;



There's an empty glass and a
fight or two,
And a fine to pay for an
eye that's blue.

All? Why, no, there's a
demon's curse;

There's a child to kick and
a wound to nurse;



There's home to break and a
wife to scrub—
And the song of her life is
rub, rub, rub;

There's a free-lunch served in a sample-room,
And some chores to do with a rag or broom;



There's the price to beg for
a burning drink,
And a place to sleep where
drunkards sink.

All? Why, no, there is half
untold:

There's a heart grown sick
and limbs grown cold;



There's a manhood gone and a substitute
That is half a fiend and half a brute;



There's a place to rob and
man to kill;
There's a prison-cell for a
man to fill;

There's a conscience seared with a wild re-
morse,

For the bright red drink has an awful
course;

There's a speedy trial, and a
verdict read,

And a wife that weeps as the
doom is said;



There's a curse and a prayer
while the gallows fall
And as for your whiskey
why, "that's all."

America's Decreasing Birth-Rate

FIGURES OF THE CENSUS BUREAU PROVE THAT THE UNITED STATES IS THREATENED WITH EXTINCTION THROUGH THE DIMINISHING BIRTH-RATE OF NATIVE-BORN

By Sidney Cummings

The facts upon which the following article is based have been taken from the reports of the Census officials at Washington. It appears to me that the conclusions set forth herein should be of startling interest. Are we so money mad that we have not a moment's time to consider those vital things that are necessary to the salvation of the human race? With all the influences towards degeneracy rapidly increasing, what can you expect but ultimate oblivion, unless we face the situation and take steps to find an effective remedy? It is to be hoped that this subject will soon receive the attention that it rightly deserves.—Bernarr Macfadden.

THE alarming falling off in the birth-rate of France, and the prospective consequences thereof, were told at some length in a recent issue of PHYSICAL CULTURE. According to the last census of that country, the deaths were actually in excess of the births, which meant that the French nation was dying out. Subsequent to publicity being given to the matter, a number of citizens, patriotic organizations and the Government itself, took steps to the end of awakening the people to the perils of the situation, which they had themselves created. That the lesson was to heart, is proven by figures which were published very recently, and which showed that the babies were at last somewhat in excess of those that had passed away in the interval.

It was also intimated in the article that unless a check was placed on the selfishness, the unhygienic methods, and the flying in the face of the most imperative laws of Nature, which are distinguishing features of certain classes in the United States, the latter would repeat the experience of France, and would gradually lose the power and position which it now occupies in the scheme of the world's existence. *This intimation had become an appalling fact according to figures which have been made public by the Census officials at Washington.*

It has been demonstrated by these gentlemen beyond the shadow of argument, that not only has the increase of population in this country been due to immigration, but that in addition and in spite of this immigration, we are to-day 20,000,000 souls less than we should be,

if the birth-rate had been of a normal sort. Furthermore, as the tide of immigration is slackening yearly and in the course of time will cease altogether or nearly so, it follows that in a numerical sense the United States is bound to degenerate. History teaches us that the dying out of a nation by reason of the falling off of the birth-rate, is a process which does not follow along arithmetical lines. It is apt to progress by leaps and bounds, unless indeed, steps are taken to nullify its depredations. It may also be noted that the extinction, wholly or in part, of nations in the past has to a very great extent been due to luxury breeding a distaste in their women to bear the pains or taste the joys of motherhood.

So seriously is the situation regarded by the Washington authorities that it is probable that an inquiry will be instituted for the purpose of ascertaining the reasons of the pitifully small size of the American families of to-day. In this respect, the example of the French government will be followed, and it is also said, that an effort will be made to enlist the interest and co-operation of those clubs and other bodies that by the nature of their declared policies may be expected to furnish help in solving the problem.

If the birth-rate of recent years had been equal in proportion to what it was in 1790, there should have been at the taking of the last census 39,500,000 children in continental United States. As a matter of fact there is less than 24,000,000. Therefore, instead of our having about 100,000,000 of people between the Atlantic and the Pacific, we have some-

where in the neighborhood of 80,000,000. There is another aspect to the question and an important one. From 1820 to 1908 the number of aliens coming to this country was 26,100,937. It is true that some of these returned, but until 1907 no official count was taken of such. Also, and during the recent "hard times" a much larger number of these sailed from the United States than ordinarily. But even after making all allowances in regard to these deserters, many millions of them remained, and on the basis of figures in the possession of the Government, it is evident that the newcomers who finally became citizens, were far more fruitful than were native born Americans, so much so indeed, that their families just balance the falling off in the native birth-rate.

Commissioner Watchorn, who is in command of the Immigration Station at Ellis Island, New York, has recently stated that he believes that the times are now at hand when there will be a continuous decrease in the numbers of immigrants. If there is one man who can speak with certainty on this subject, it is the Commissioner, and his utterances but emphasize the national danger which besets us.

Mr. W. S. Rossiter, the chief clerk of the Census Bureau has prepared figures, which are instructive in regard to the immigration question. We shall not attempt to quote them at length, but a summary will suffice. While the total population of the United States increased from 1790 to 1900 with rapidity, thanks to the flow of immigration, the relative populations of New York, Philadelphia, Boston and Baltimore increased even more rapidly. In 1900 their combined populations were approximately nearly fifty-eight times as great as in 1790 and formed 7.6 per cent. of the entire population. This extraordinary increase arose in all cases from immigration, as statistics show. To-day, the foreign born inhabitants constitute more than one-eighth of the total population of the United States. In the rural districts, one-tenth of the inhabitants are of foreign birth, and in the cities one-fourth. Within the past twenty-five years, Italy, Poland, and Russia have sent more im-

migrants to this country than have any other countries. In 1790 the majority of the inhabitants of the United States were of British stock. At that time large families were the rule. The population continued to grow along normal and satisfactory lines until the drift of population was towards cities, which were coincident with the coming of great prosperity. Toward the middle of the last century, immigration began to and continued with a swiftness never before equalled in the annals of history. As already stated the majority of the immigrants remained in the cities and there was almost an simultaneous falling off in the native birth-rate. The explanation of this is in all probability to be found in the fact that the newcomers took unto themselves the wholesome out-of-door labor, which before had been undertaken by American men and women. The allusion is more particularly to farm life and the hard work occupations of suburban districts.

This kind of thing brought about two results, one being a falling off in the physical powers of the city dwellers, and the other a bringing into being of the slothfulness and luxury which was responsible for a resort to unlawful means, to prevent the cares and responsibilities of a family. In other words, the unhappy conditions which have prevailed in France were in a way duplicated in the case of America.

Then after the close of the Civil War came wealth to the many and the weaknesses, even vices, which waited upon it. It is a rule of nature that when the outlets for natural energies are checked, such energies are diverted into evil and harmful channels. In other words, the energy is there and unless it is properly used, it will be misused. Now the prosperity spoken of, and the fortunes which waited on it, resulted in no small proportion of American men and American women giving themselves over to self-indulgence, being urged thereto by their misdirected energy. Self-indulgence, as its name implies, is the giving of pleasure to one's self irrespective of the rights of others, the demands of duty or the needs of the nation. Each of these is violated when a wife abetted, perhaps, by her

husband, deliberately prevents the intent of Nature and either reduces her family to a minimum or becomes altogether childless.

The figures of the Census Bureau give point to the foregoing. In every one of the large cities of the United States, and particularly in those in which a goodly proportion of the inhabitants is identified with great wealth; cities in which the society columns of the daily newspapers are filled to overflowing and in which the thousand dollar pug dog is greatly in evidence, are minus their due share of babies. And in those districts in which are found the homes of the rich, children are rare indeed, while in sections in which the tenement is crowded with the poorer classes and citizens of foreign birth, there are literal swarms of little ones. Evils, moral and physical are like unto water, in that they seep downward. So it is that the childless habits begotten in high places of the community, finally infects those classes which our British friends call the "middle" and "lower." The result, is that after a couple of generations, the normality of the descendants of the immigrants is no longer what it was, and they too yield to the promptings of selfishness in the way charged. In other words, they are unhappily "Americanized" in this respect.

From 1800 to 1900 the population of Europe, including the British Isles, but exclusive of Russia, increased 98.5 per cent., thus doubling itself during the century. During the same period, the population of the United States apparently increased 15 fold; but an analysis of its census reports shows that as already stated, immigration and the birth-rate of foreign born citizens are actually responsible for the increase of population. Towards the end of the century, these figures furthermore proved, that there was a marked decrease in native borns. The moral is as obvious as it is startling.

If we are to look to immigrants for the population-future of the United States, as it would seem that we must, it is plain that we must also look for a change in the characteristics of the people in a physical and it may be in an intellectual sense. There is no getting away from this conclusion. If, as the census officials

assure us, the old race of Americans is dying out through the causes given, and its place is being taken by foreigners, then the time will come, when the children of those who have survived the anti-children tendency, will dominate the destinies of the United States.

We have been assured that the tide of immigration was not an unmixed blessing. We have been told that the country was becoming overpopulated; that undesirable foreign elements were reaching us which would not assimilate with the native population. But in view of the figures from Washington we need have no fear of this unrestricted immigration. So far from its being liable to overwhelm us the fact is, that if it were stopped tomorrow the birth-rate would begin to fall immediately, and the United States of America would be set in the road which leads to final extinction. The unwise pooh-pooh this assertion. The careless will ignore it. But figures do not lie.—especially those supplied by the Census Bureau.

Some figures having to do with the decrease of the size of families in the United States will throw added light on the subject. In 1790 the average number of persons in each family were about 5.8; to-day the average is 4.6, a decrease of about twenty per cent. In 1790, families composed of not more than three persons represented only about 25 per cent. of all the families in this country. In 1900, families of this size represents nearly forty per cent. of the entire number of families. Again the number of married couples who are childless has increased eighteen per cent. during the past century. In five of the New England States and in New York State, the decrease of the birth-rate is nearly equal to that of France, which, when we remember that New York City is being constantly recruited by immigrants, furnishes a startling commentary on the unfruitfulness of the native population.

Sometime ago, the writer was looking up the birth-rates of New York City, and while so doing, found that on fifty blocks of Fifth Avenue there had only been one birth within six months. It is said that the "swell" districts of such towns as Boston, Philadelphia, Cleveland and so

on, are equally lacking in the prattle and the sweet and tender charms of children. God help the residents thereof, not only because of the sin which they have committed against the sacred ordinances of Nature, but also for the wrong which they have done themselves and the nation.

Thomas Robert Malthus, who in 1798 published a work which attracted a good deal of attention at the time, was of the opinion that the earth was in danger of becoming over populated, and when inquiring into the causes which made for a check on population, he came to the conclusion that such check was in the main, want of food and other material essentials. Yet, and as the census reports show, the very people who have material blessings in abundance are those who have the smallest families; on the other hand, the man of limited means, who works hard in order to keep body and soul together, is usually the father of a large brood. By which it will be seen that considerations of the sort in question hardly enter into the proposition.

In France, as already intimated, an

appeal to the sense, the sentiment and the humanity of the nation has not been without results. It is hardly conceivable that the women, and for that matter, the men of this country, are hardly less open to argument than are their Gallic sisters and brothers. If a reformation is to be worked at all, it must be along educational lines, not only in a moral, but in a physiological sense also. For it must never be forgotten that the woman who has deliberately rendered herself childless has wrought a wrong to her physical being, from which she is bound to suffer sooner or later. This article cannot end better than by quoting an authority on the question who says: "In the meantime the cold figures of the census and of the statistician remain, and we are forced to two conclusions as to the means of increasing our population, these are:

"By births.

"By immigration.

"If we reject both of these but one answer is possible. That is, 'Retrospection.'"

Crawling Through the Barrels



One of the stunts often required of those who compete in obstacle races.

Fruit for Strength-Building

By Bernarr Macfadden

THE VALUABLE PROPERTIES POSSESSED BY ACID FRUITS—HOW THEY SERVE TO MAINTAIN THE HIGHEST DEGREE OF PHYSICAL AND MENTAL EFFICIENCY



HOW few are the individuals who fully realize the dietetic value of acid fruits! They are regarded by many as merely a tasty addition to a meal. Their real food value is not fully understood, and their health-giving qualities are rarely fully known.

Apples, oranges, pears, peaches, lemons, strawberries, blackberries, raspberries—in fact, all the various acid fruits—are exceedingly wholesome in character, and are capable of furnishing a very large amount of nourishment in one's daily diet. Strange as it may seem to the average individual, almost any one of these fruits, lemons excepted, would fully and completely nourish the body for a prolonged and even an extended period, if one were for any reason compelled to secure nourishment entirely from food of this character. Of course, if one following a conventional diet were to attempt to live on one or more acid fruits, the weight would be very materially reduced and it would take the digestive organs some time to adapt themselves to the change. In other words it would require a considerable period for the organs of assimilation to acquire the habit of absorbing all needed nourishment if a radical dietetic change of this nature was made.

Acid fruits can truthfully be termed splendid antiseptics for the entire alimentary canal. In proper quantity and taken at times when thoroughly enjoyed, they actually have a cleansing,

purifying and strengthening effect upon the stomach and in fact the entire digestive organism. It is well known that the acids contained in fruits of this nature possess death-dealing qualities to germlife. They are also of value when fermentation is seriously interfering with the stomach and intestinal digestion. They act as a tonic to the digestive organism, and are cleansing and purifying to the system.

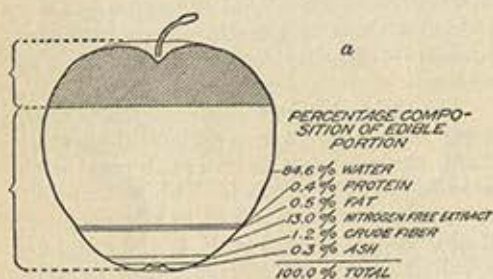
As a rule, it is better to eat fruits with your meals, in fact, a splendid dietetic habit to develop is to end each meal with acid fruit of some kind. This will enable one to avoid the stuffing habit, because, if able to enjoy acid fruit at the end of a meal, it is usually ample evidence that the stomach is not gorged. Sweet deserts are inclined to stimulate one's appetite and to cause over-eating. Acid fruits make a splendid dessert, as to a certain extent they cleanse the mouth and the oesophagus, besides providing a wholesome and nourishing addition to the meal and assisting in its digestion.

The question is often asked, can fruits of this character be eaten between meals? There are instances where they can be eaten with actual benefit, especially so when there are symptoms of fermentation or slow digestion, in the stomach caused by the inability of the digestive glands to supply a proper amount of the secretions requisite to the assimilation of the food. If there is a strong craving for some acid fruits between meals, provided that they are thoroughly enjoyed and that the after results of their use lessen the unpleasant symptoms of fermentation, as a rule, their use is most commendable. They

assist the digestion and aid in ridding the stomach of the mass of partially digested food that may have remained there because of weak or defective digestion.

In the use of acid fruits one should be guided by the appetite to a large extent. If they please the taste, in nearly all cases they may be regarded as beneficial. If they are not palatable, the reverse is usually the case. Although the taste with other foods may not be an accurate guide, when the appetite is abnormal, there are few instances where gratifying a desire for acid fruits will bring about other than favorable results.

Apples are perhaps the most easily secured of all acid fruits, and they can be classed among the best. There are various varieties of apples and when seeking acid fruits those that have a distinctly



The shaded portion of the apple shown above represent refuse. Twenty-five per cent of the apple is non-nutritious.

tart flavor will best serve the purpose. In fact, it is well to mention that sweet apples or any fruits that lack this tart flavor are usually not so easy to digest and not nearly so wholesome. This is more especially true if one has a desire for the tart flavor which is supplied by the acid in the apple. The food value of apples is very high, and I have known an instance where hard farm work was performed for a prolonged period on this one article of food—absolutely nothing else being used.

If desirous to secure the largest amount of nourishment from the apple, one should also eat the skin, as the peeling really contains more nourishment in proportion to its weight than the apple itself. This suggestion is of especial value if the apple is used to assist in the activity of the bowels. In fact, apples used at

meal-times, or before retiring at night, when the stomach is fairly strong, are in many cases a very valuable aid in remedying constipation and allied troubles.

Oranges also furnish a splendid article of diet, though, of course, they do not contain nearly so much nourishment as the apple. They are splendid for a weak stomach. They are especially valuable in breaking a fast, as the nourishment they contain seems to be absorbed very easily, and in nearly every case the mild acidity of the fruit is grateful to the stomach and intestines.

Pears and peaches are both excellent fruits and are of equal value to apples and oranges in their appetizing and nourishing qualities. As far as the peeling is concerned, the same statement can be made of these fruits as of the apple. The peeling is rich in nourishment and organized salts—which by the way constitute some of the most vital elements for the building of strength in the human body. Food that does not contain organized salts might be termed dead, as it does not seem to be able to fully nourish the system. Just what these organized salts accomplish in the human organism is not known, but their very great importance has been definitely proven.

Perhaps the most valuable fruit, from the standpoint of the acid it will furnish, is the lemon. Lemon juice furnishes a powerful antiseptic, which can be used at frequent intervals to the advantage of the stomach and bowels. Where there is serious inflammation of the mucous membrane and stomach, however, this strong acid often has an irritating effect, but, as a rule, the stomach may be relied on as a guide to the use of this fruit. In other words, if lemons taste good, if you crave the acid they contain, and it "sets well" in the stomach, you can rest assured that the fruit will be of benefit to you. For instance, I have known persons under certain conditions who could cut up and eat a lemon and relish it just as much as one would an orange under ordinary circumstances. Thus indicated that the system was badly in need of the particular elements furnished by this strong acid fruit. Lemons have a powerful cleansing, purifying effect, especially upon the

stomach. One of the best remedies in the world for symptoms of nausea and biliousness is the free use of lemons. Practically the same statement might be made of nearly all acid fruits, though, where the symptoms are at all serious, it is better to use the stronger acid furnished by the lemon. The juice of one lemon, squeezed into two glasses of moderately hot water and taken on arising, is a splendid stomach-cleanser.

We hear a great deal from the medical profession, and the literature of patent medicine manufacturers, of the value of blood purifiers. There are all sorts of concoctions that are supposed to purify the blood. Now there is no method, regardless of its nature, possessed of even a tittle of the value of acid fruits in purifying the blood. Acid fruits might be termed ideal blood purifiers, and for this purpose lemons are most valuable. This is especially true when the system seems to be in the need of the acid they supply. Functional disturbances are, as a rule, brought about by overfeeding, or else by the neglect to furnish to the system the particular elements needed to fully nourish the body, though in many cases, the error is made of neglecting to furnish the food elements found in various acid fruits.

Strawberries are especially valuable for the acid that they furnish. The seeds contained in strawberries are also of value in accelerating the peristaltic action of the bowels, and are a splendid remedy for constipation on this account.

It should be remembered, however, that strawberries are much more wholesome if eaten as soon as possible after having been picked. Strawberries, more than any other fruit, seem to develop poisons that are inimical to health if eaten when partially decayed. As a rule it is better to eat this fruit in season and to avoid it out of season. Usually, when procured out of season, it is picked green, transported a considerable distance and is several days old when it reaches the actual consumer. Under such circumstances a large amount of sugar is necessary to make it palatable, and the very unpleasant flavor of that part of the fruit which has decayed is partially hidden by the addition of the sugar men-

tioned. It is, therefore, frequently eaten with apparent relish, notwithstanding the decayed parts, and this accounts for the frequent unpleasant effects that result from eating strawberries out of season.

In the various acid fruits you will find a large amount of sugar, and this sugar is in a form that is easily digested. The ordinary commercial sugar has been boiled and reboiled so often and for such a prolonged period that a very large part of the nourishment which it contained has been destroyed, and that which remains has been made very difficult to digest. The sugar, however, that is furnished by fruits is easily assimilated by the digestive organs, and unquestionably furnishes very valuable nourishment to the system.

Blackberries are a splendid fruit, and the seeds which they contain are also valuable in accelerating the activity of the bowels. This fruit is very rich in acids, and can be commended at all times to one able to thoroughly enjoy it.

There are many other fruits of an acid nature, such as the apricot, cherry, currant, plum, that will be found of value. There are, perhaps, none that are of more value from the standpoint of their health-building qualities than grapes. Grapes are very rich in nourishment, they contain almost as many nourishing elements as many of the sweet fruits. In fact, grape juice is very nearly equal to milk in its nourishing qualities.

This publication has already referred to the value of the grape cure, which consists entirely of a diet of grapes. Patients simply live on grapes, alone, and are not allowed any other food whatsoever. No further treatment is given. Remarkable cures have been made through the aid of this diet. The best results are secured when the cure is taken at that particular time of the year when the grapes can be picked from the vine. On the Continent there are several of these "grape cure" establishments and they are liberally patronized at that period of the year when the grapes are ripe.

It is a mooted question as to whether or not one should swallow grape seeds, and whether or not the skins should be eaten. If one is suffering from inactivity

of the bowels it is better to swallow the seeds. If there are no unsatisfactory symptoms of this nature, the seeds can then be removed from the fruit before swallowing. However, one can rest assured that in any event no harm will result from swallowing grape seeds. The theory advanced some years ago by medical scientists to the effect that grape seeds and the small seeds of other fruits caused appendicitis, has been exploded. Appendicitis, you must remember, in practically every instance, is caused by an impacted colon which accompanies very serious constipation.

Though the grape cure is usually taken when the grapes can be picked ripe from the vines, it can be taken at almost any time when you can secure the fruit properly ripened, and I will assure the investigator in advance that by confining the diet for some days to this one article of food, splendid results can be promised. The stomach and the entire alimentary canal will be cleansed and purified and strengthened as a result of the use of this diet.

If the skin of the grape tastes palatable and you chew it thoroughly, you can eat it. If otherwise, I would not advise that it be used, though the most valuable qualities of the grape are found in the portion of this fruit situated immediately under the skin, and this substance should be thoroughly separated from the skin before ejecting it from the mouth.

In many cases an acid fruit diet may be substituted for a fast with very great benefit. In cases where this diet is used no other food except the acid fruit should be taken. One can eat two or three meals of the fruit a day, if desired. It is well, however, in some cases not to use fruits with too strong an acid, for one is liable to have the teeth "set on edge," though this can be avoided by not eating too heartily. Eat merely enough to give the stomach something to do and to encourage the flow of the digestive juices, which, of course, have a salutary effect upon the entire alimentary canal. These fruits, will as a rule, keep the bowels mildly active, assisting in the elimination of impurities, and will at the same time give a rest to the organs of digestion. Acid fruits are very easily digested, and

have a cleansing and purifying effect upon all the tissues of the bloodmaking organs.

To those in doubt as to whether acid fruits should be eaten raw or cooked, I would say in practically every case they should be eaten raw. I am satisfied that if properly ripened they are more wholesome raw, that they contain more nourishing elements and in this way they are as a rule more easily digested. This is especially so, if they are thoroughly masticated. Cooking, to a certain extent destroys some of the nutritive elements—especially the organized salts which supply such an important element of nourishment to the body. Very green fruit that is not palatable can in some cases be cooked with advantage, but, as a rule, where fruit is green it is not fit for food and should not be used. Any food, for instance, that requires a large amount of sugar in order to make it palatable, should not be used at all. If you cannot enjoy the fruit in its natural state, this indicates that you do not need the particular elements furnished by it, and it is not a good plan to use it when you are compelled to materially change its flavor by adding a large amount of sugar.

Fruits should be eaten with as little sugar as possible. If your taste demands sweet fruits, then use the sweet fruits, instead of acid fruits. If you need the acid fruits, you should have a distinct desire for them and should not change their flavor in the manner mentioned. However, in many instances a sweet fruit and an acid fruit may be mixed together in one dish, and will be found a splendid combination. For instance, chopped apples and dates will be found very tasty. Sliced peaches and dates, or any acid fruit chopped up and mixed with a sweet fruit will be found especially palatable. Such combinations, if eaten with cream or with olive oil, will be pleasing to the taste, and their wholesome character cannot be questioned.

Fruits should be masticated to a liquid in all cases. If you want a tasty and attractive dish of fruit, make a fruit salad. A proper mixture of this character, will be found far more palatable than if cooked, and will be more wholesome.

A great deal has been said about the germs that are found in various fruits and the danger of eating them, that is, the fruits in their uncooked state, but, germs are harmless unless they come in contact with fertile soil in the form of diseased or partially diseased tissue. If fruit is dirty, naturally it should be washed; if it is not dirty, I would not suggest washing. If it tastes good, you can eat it, germs and all, without the slightest fear of dangerous results.

I have tried as nearly as possible to make this article practical; in other words, to give information which will be of immediate value to the reader. I am not giving you any elaborate tables or other information that will pass out of your mind as soon as you read it. I am simply giving you the results of many years of personal experience as to the value of acid fruits as foods. I have purposely avoided reference to the sweet fruits, as they are worthy of an article especially devoted to them, and I expect to furnish this some time in the near future. I am appending a table taken from a report of the Agricultural Department some time ago, which clearly indicates the percentage of the various kinds of nourishment furnished by acid fruits. I have included cranberries, muskmelons and watermelons, though they can hardly be classed as fruits.

Many individuals claim that they cannot eat acid fruits without disastrous re-

sults; that they nearly always bring on indigestion in one form or another. As a rule, however, when such symptoms result, it indicates digestive defects which urgently demand attention. A radical change in diet is needed, and if it is not made in practically every instance there is possibility of a serious chronic trouble. When the digestive organs are unable to digest acid fruits that are really craved, what is needed in most cases is a complete rest for the organs of digestion, in other words, a fast. As a rule this fast can be broken with an acid fruit, of mild character, such as the orange, with benefit, and the entire dietetic régime can in most cases be radically changed thereafter and be made to include at least a moderate amount of acid fruits.

The more carefully this subject is studied, I am satisfied the more one will realize the value of acid fruit as a part of a rational diet. In fact, I firmly believe that a moderate amount of fruit of this character is absolutely necessary to maintain the highest degree of bodily vigor.

In the next issue will appear an article beautifully illustrated in two colors, entitled "The Value of Fruits as a Food." This subject is worthy of a great deal of attention at this time of the year, and Earle William Gage, the author of the article mentioned, will give our readers many interesting details that will be of great practical value.

ANALYSIS GIVING PROPORTIONS OF NOURISHING ELEMENTS CONTAINED IN VARIOUS ACID FRUITS

	Water	Mineral Matter	Nitrogenous (Muscle)	Fiber	Starch, Fat, etc.
Apples.....	84.6	.3	.4	1.2	13.5
Apricots.....	85.0	.5	1.1	...	13.4
Blackberries.....	86.3	.5	1.3	2.5	9.4
Cherries.....	80.9	.6	1.0	.2	17.3
Currants.....	85.0	.7	1.5	...	12.8
Cranberries.....	88.0	.2	.4	1.5	0.0
Grapes.....	77.4	.5	1.3	4.3	16.5
Huckleberries.....	81.0	.3	.6	...	17.2
Lemons.....	80.3	.5	1.0	1.1	8.1
Muskmelons.....	80.5	.6	.6	2.1	7.2
Nectarines.....	82.0	.6	.6	...	15.0
Oranges.....	86.0	.5	.8	...	11.8
Pears.....	84.4	.4	.6	2.7	11.0
Pineapples.....	80.3	.3	.4	.4	9.0
Plums.....	78.4	.5	1.0	...	20.1
Pomegranates.....	76.8	.6	1.5	2.7	18.4
Raspberries (Red).....	85.8	.6	1.0	2.0	9.7
Strawberries.....	90.4	.6	1.0	1.4	6.6
Watermelons.....	92.4	.3	.4	...	6.0
Whortleberries.....	82.4	.4	.7	3.2	13.3

Close of Second Edition of the Physical Culture Directory

FORMS OF THE SECOND EDITION WILL BE HELD OPEN
FOR ALL NAMES RECEIVED ON OR BEFORE JULY 7th

A REVISED edition of the PHYSICAL CULTURE DIRECTORY is to be published August 1st. All those who desire to have their names inserted in the forthcoming DIRECTORY should forward details to the office of the PHYSICAL CULTURE Publishing Company, before July 7th, 1909.

The second edition of the DIRECTORY is being issued to enable those whose names were not entered in the first edition of the work to be represented in the enlarged edition.

If you wish your description inserted in the second edition, please cut out the coupon below and mail it to us together with \$1.10, and we will enter any name you desire on our subscription list for one year, or we will renew your own subscription, as desired. If you desire only your name and address inserted in the DIRECTORY, send us twenty-five cents, and a copy of the book will be forwarded to you as soon as completed.

The edition of the DIRECTORY already published, being the first work of its kind, although offering room for improvement, provides a valuable nucleus for future editions. We earnestly

advise our readers to have their names and addresses listed in the DIRECTORY, in order to prove to those interested in the movement that they have many fellow physical culturists, and to point out to the skeptical the growing strength of the physical culture movement the world over.

Both editions of the DIRECTORY are sold at twenty-five cents each (special cloth edition twenty-five cents extra), including insertion of name and address only. Either edition will be sent prepaid, together with a year's subscription to PHYSICAL CULTURE, for \$1.10, including insertion of name and full description. The reader will note that it is necessary to forward a subscription in order to secure insertion of full description in DIRECTORY.

A combination offer has been made to enable those who subscribe to second edition to secure the first edition at a reduced rate, both books being sold, together with a yearly subscription to this magazine, at \$1.20. Those wishing a description of themselves inserted in the second edition may use coupon on this page.

COUPON

(PUT A CROSS OPPOSITE PROPOSITION YOU ACCEPT. WRITE VERY PLAINLY.)

Please find enclosed \$1.10, for one year's subscription to PHYSICAL CULTURE Magazine, and insertion of my name in PHYSICAL CULTURE DIRECTORY No. 2. Subscription to begin with..... Number

I enclose 10 cents extra (\$1.20, in all). Please send DIRECTORY No. 1, as well as No. 2. Cross this line out if DIRECTORY No. 1 is not desired.

Name.....
 Street Address.....
 City..... State.....
 Occupation..... Height.....
 Weight..... Color of Hair.....
 Eyes..... Age.....
 Married or Single..... Religion.....
 Condition of Health.....
 Education—Poor, Fair, Good, Superior, Very Superior.....
 Do you believe in the physiological laws of sex as advocated by Bernarr Macjadden?.....

The Vacation Season

HOW TO SPEND A VACATION PROFITABLY. PHYSICAL UPBUILDING ATTAINED BY "GOING BACK TO NATURE"

VACATION time is here. It is a period to which we look forward with a great deal of pleasure. It should be an occasion for laying aside all restraint, at least for this brief period in our lives. We ought to be ourselves absolutely. Vacations are of questionable benefit when spent in mammoth hotels where style rules, and where elaborate dinners of many courses are consumed. They give the mind a rest, and the change of scene, the meeting of new associates, may in some instances bring favorable results, but a vacation of this sort serves to encourage the gourmandizing habit. The stomach is usually filled to its complete capacity at every meal, and almost loaded to the point of bursting at the evening table d'hote dinner.

A vacation, to be of the greatest benefit, should furnish complete rest or recreation which is a source of constant pleasure. Gladstone stated on one occasion that rest was best secured through a change of work. He undoubtedly meant interesting work, and when your efforts are interesting they might more aptly be termed play. Whenever we speak of work, we usually mean the uninteresting efforts associated with hard, grinding, monotonous labor. Of course, when one divests himself of his usual responsibilities, the bodily organism has more nervous energy to spare. It can supply more force to the digestive organs and naturally they are capable of assimilating more food than usual, but at the same time

one should remember that there is a limit and should at least make an effort to avoid overtaxing the stomach continually. If this advice were heeded, the average vacation, even if spent in magnificent hotels, would usually result in physical and mental benefit. We must except, however, those so-called stylish resorts where the conventional requirements compel one to assume responsibilities equal in many cases to those that have been laid aside. You should take a vacation to secure recreation—a change from your usual work and environments. You should divest yourself absolutely of exhausting or straining responsibilities. Give the nervous system a rest, divert the mind, seek for pleasure which is not overtaxing, which is not injuriously stimulating, or productive of after-effects that are exhausting and depleting in nature.

The best way to spend a vacation is to leave all conventionality behind. Take a long walk or an extended bicycle ride. Take one or more companions with you if convenient to do so. Go to the seashore or to the mountains, avoid the stylish hotels, seek out the smaller places where a full dress suit is not required at dinner. If you are wise and have a proper degree of respect for your stomach, it is

at times not a bad plan to take some food along with you, though most hotels at least supply cereals, fruits, nuts and various other articles that are wholesome and desirable. As a rule, by carefully selecting your diet, you can find foods that can be recommended.



J. C. Wright, C. L. Wright, T. W. Wright.
All ready for a Vacation on Wheels.

Naturally you can hardly expect the cooking to be equal to what it is possible to secure at your own home, although you can be well-nourished on what you may select under such circumstances.

Some time ago we conducted a competition in which we requested readers to send us descriptions of their experiences during vacations they proposed to spend or had enjoyed. The following letters are replies to this query. I feel satisfied that they will be read with interest by those considering suggestions of possible sources of profit and pleasure for vacations this season.



A Vacation on a Wheel—in an Orange Grove near Monrovia, California.

Several Suggestions for Vacations

For the last few years I have been in the habit of taking an annual vacation.

Several years ago, with a companion, I spent eight days on a cross-country tramp. We paid no attention to roads but for the most part traversed foot-trails along the banks of the winding river which we followed during our tramp. We carried a knapsack of provisions, and of course slept out-of-doors. In those eight days we traveled two hundred and thirty-seven miles, and my companion returned home cured of malaria he had contracted in the swamps earlier in the summer.

Another vacation I spent with a party of Y. M. C. A. boys on a floating trip down the James and White Rivers in Missouri. Our party, consisting of fourteen boys and cook, were divided three to a boat among five boats.

Two very enjoyable weeks were spent floating down these two beautiful streams, fishing,

swimming and generally enjoying ourselves. We were all sorry when the "float" came to an end, but we returned to the city physically and mentally rested, sunburned youths. All our expenses, including cost of building the boats and our railroad expenses, amounted to less than ten dollars apiece.

Last summer, with two companions, I undertook a wheel trip, bound for the Pacific coast from Springfield, Mo. We had determined on taking a long vacation, regardless of time, and we chose a route that would take us through much fine scenery and natural wonders. We were well equipped for such a trip, carrying blankets, canteens, a camera, and other necessities and repairs. We traveled directly across Kansas, and over most of Colorado, New Mexico, and Arizona.

We climbed Pike's Peak; visited the Grand Canyon of the Colorado; the petrified forests; the ancient ruins of the cliff and pueblo dwellers, and also many of the now existing pueblo towns. At times we suffered from heat, from the cold and from thirst, but never before did we enjoy ourselves so much and have such abounding health.

The last four hundred and fifty miles, from Phoenix, Ariz.,



Riding across the "Bridge," Petrified Forest.

to Los Angeles, Calif., I rode by myself, my companions having given up the trip. Although I was several months on the way, only about sixty-six days were spent in actual travel, covering a distance of three thousand, three hundred and seventy-eight miles. My longest day's travel was one hundred and thirteen miles, and the shortest only nine miles.

I can think of nothing more enjoyable for the prospective vacationist than a week or two of wheeling. He will return more refreshed than if he had spent a month at some resort.

JULIUS C. WRIGHT.
1012 S. Olive street, Los Angeles, Calif.

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"The Gypsy," Pigeon's Nest.

A Mountain Camping Trip

I am an Alabama teacher, and am in the habit of spending my vacations on an apple farm in the mountains of North Carolina.

Last summer I tried a camping trip, and it was a grand success.

The party consisted of five—my brother, sister, cousin and myself (who are all more or less physical culturists), and the hired man.

Father lent us his covered wagon and horses for a week. The wagon bed was first filled with hay; then provisions, horse feed, saddle, tent, suit cases, bedding, fishing tackle, etc., were added.

Almost a day was occupied by the trip of sixteen miles over bad roads.

We camped by a beautiful mountain stream, far from the haunts of "civilization."

We three girls occupied the tent. The men slept in the wagon or on hemlock boughs by the camp fire.

Never, for one minute, did time hang heavy on our hands. The men spent much time fishing. Preparing meals, which was done out of doors, occupied some time. We cooked one or two meals a day—and then cooked little—chiefly corn hoe-cake, fish and postum. We lived largely on nuts and fruits.



"An Early Breakfast."

We spent an hour or two daily in the river. Wash-day had no horrors, for we took soap and soiled clothes with us into the crystal water, and washing became a frolic.

We had books, games, kodaks, hammock and chafing dish to amuse us. We wrote many letters and enjoyed walking to the quaint little Post Office to mail them. Every day I spent some time writing in my diary.

Our cameras furnished a vast amount of pleasure. I took my developing outfit, and made souvenir post cards of the camp, which we mailed to friends.

Nature furnished an inexhaustible source of joy.

There were more pleasures than we had time for.

We improved in health and spirits, and were sorry when the time came to leave.

We are going back to the same place next summer, but we expect to have a larger party and to stay three weeks. I am going to try raw food diet on the next camp.

I believe camping is about the healthfullest



A Happy Party.

and happiest—also cheapest—way of spending a vacation—for the right kind of people.

Elba, Alabama. MARY LOUISA HALL.

Gained a Farm from His Vacation

Having spent four years in college, during which time I had become interested in physical culture, I longed for a vacation—a few months of free life away from conventionalities—back to Nature—where I might live as I felt that one should live.

After due consideration I made a homestead filing in South Dakota, and a year ago I established my residence upon the land.

Several magazines, among them being *PHYSICAL CULTURE*, of course, came to me regularly, and many an hour was spent in the quietness of the claim-shack, in reading, in meditation and in self-examination.

I enrolled with a correspondence school for a Commercial Course. I found another student who proved to be a congenial friend,—without bad habits, and a vegetarian. We studied, farmed a few acres, went bathing and lived



Pigeon's Nest Camp on Big East Fork of Pigeon River, Haywood Co., N. C.



Preparing Dinner at "Camp Life."

strictly according to physical culture rules. With our bed—two blankets—strapped upon our cycles, we rode the country around Black Hills, Hot Springs and Wind Cave.

The eight months' residence quickly passed and I returned to civilization (?) with a fair knowledge of the Black Hills country; a stronger constitution, a diploma from the correspondence school, and a title to a quarter section of land worth \$1,600.

Moravia, Ia.

CYRUS HALL.

Fun and Health in a Boy's Camp

The first of July found a camp of boys located on a lake in northern Minnesota. The place was ideal. There is a clearing of about an acre in the midst of the pines; around this we pitched our tents in such positions that the sun could shine into them, either front or rear, nearly all day. The twelve tents had three or six-foot walls, open at both ends and provided with floors. There were a kitchen, mess, amusements, hospital, head director's and seven sleeping tents, all of which were amply large for their purpose.

At the shore of the lake was a large dock at which were five row boats, one sail boat and a

canoe. There was a swimming pool with a large raft for diving. About a mile away was a farm where we could secure fresh garden truck, milk, and eggs, and five miles away was the town of Grand Rapids.

I think the plan of every day life we followed was the best I ever saw. At six o'clock the first bugle sounded, at six-ten all were out for exercises, gymnasium movements and a short run; then the delightful plunge. At seven we were dressed for breakfast—at meals was the only time we had to wear anything but bathing trunks; at nine there were classes in manual training, mostly wood-working; and tutoring. At ten some of the boys went a mile and a half to the mail stage and at eleven we had another dip. At twelve-thirty, dinner. The afternoon was spent to the liking of each boy until three o'clock, then we had another swim, from this time until lunch at six we played games, after lunch we usually went boating or fishing, retiring at nine.

Every Saturday we went for a long sail and about every other week a part of us would go on a long tramp or canoe trip.

The camp broke September 1st. The benefits to the boys were many—some were none



The Noon Halt, en route for Camp.



On the way to the Camping Grounds.

were sick, all could eat three square meals each and every day, all could swim, all could run a mile, all could walk fifteen miles without a rest; all could row and paddle, most could sail, all could use carpenter's tools.

Working on these lines I think any boy's camp would be successful.

St. Paul, Minn.

M. D. CLARK.

A Vacation near Home

Having only one week of vacation, we decided to camp near home, so as to lose no time or expense in travel. We purchased a 12x14 tent, cots and other necessary traps at a cost of about \$18.00. We got for the asking, permission from an ice company to put our tent on the shore of a small lake about three miles from home. The place was off the public road, surrounded by trees and thick shrubbery, so we could do and dress as we pleased without considering public comment. Provisions were procured from neighboring farmers at small cost, and the ice company supplied us with ice. We allowed some boys who owned a sailboat and small canoe to use our camp, while we in turn used their boats. The tent was used only for shelter on rainy days, for we slept out of doors at night, as we lived out of doors in day time.

We sailed, rowed, paddled and bathed. We cleared a space of ground close by which we used for running and hurdle racing, jumping and pole vaulting.

Camping out also affords splendid opportunity for the study of botany, which is very interesting to most lovers of out-door life. Light reading is generally selected for vacation time, but I thoroughly enjoyed my histories of Japan and Russia, besides retaining more information than when reading at home, where interruption seems inevitable.

We enjoyed our camp so much, and it was so near home that we left it there the remainder of the summer, often spending half holidays and Sundays there.

We expect to do the same this summer, taking with us our ten months baby, who enjoys being out of doors better than anything else in the world.

L. R. C.

An Adirondack Vacation

A delightful vacation was one spent at an Adirondack lake. It was early in the season, so that the weather was still cool, but the air was splendid and invigorating, and black flies and mosquitoes had not yet appeared.

Here I had my first experience in fishing, namely, trolling for trout. My first catch was a fifteen inch speckled trout. We had it for dinner that night, and I never enjoyed a fish so much. Perhaps circumstances had something to do with this.

We spent our mornings on the lake and I learned to paddle the guide boat, which was a good method of getting warm. While in the boat, we could hear the beautiful singing of the thrushes in the surrounding forest and the frequent hammering of the wood-peckers, both sounding clearly in the silence of this wild place.

The lake was a beautiful one and had many bays and inlets, so if we did not care to fish, we explored some of these sheltered places, or landed for a while on some inviting shore.

Our afternoons were generally spent in following blazed trails through the woods. One learns to notice landmarks in this way, for it is essential in order to find the way back. I shall never forget the "winter roads," along which we laboriously made our way. Many of the logs which formed them had fallen out of place and we had the fun of jumping from one to another, often so nearly used up with laughter that we could hardly keep our balance. And then the swift streams that we crossed, finding a precarious footing along the trunks of fallen trees!

Our last vacation day we spent in making a trip to a tiny lake at a distance of two or three miles over the mountain. The guides carried the boats over the trail between the two lakes, and presented a picturesque sight. After fishing for an hour or two, the guides made a campfire and cooked the dinner. Canada jays, not in the least afraid, kept close around, ready to pick up a chance bacon rind and to eat whatever was left over.

I do not think that I ever felt so much *alive* as during this week of out-door life in the bracing air of the Adirondacks.

BETH.

A Doctor Praises Our Efforts

A Doctor Praises Our Efforts

TO THE EDITOR:

I have been very much pleased with reading your plain, forcible language, used in explaining many improper habits of this generation, especially some habits, students will get into at our schools and colleges, who have not had proper parental instruction, which, I do know to be true, from personal experience in forty years of practice of medicine, as I graduated in

Philadelphia, in 1861, but have not been in active practice now for some years. But I only hope you will continue to publish *PHYSICAL CULTURE* with the same courage as heretofore, notwithstanding the criticism of a few pretenders of such strict moral ideas. I think the majority of the people are with you in your idea of progress, of developing and improving both the body and mind as well as the habits of the people of the whole world.

Chicago, Ill.

DR. J. W. MIGRATH.

A Pious Hypocrite

THE PRETENDED vs. THE REAL CHRISTIAN—THE CLOAK OF RELIGION USED TO SERVE MATERIAL PURPOSES

By S. Wardlow Marsden

SYNOPSIS.—Samuel Jonathan Walker, is a self-satisfied individual, aldermanic in his proportions and firmly imbued with the wisdom of his opinions, who has for years received a comfortable income as the chief official of the Society for Moral Promotion. At the opening of this story he has been much offended by an entertainment at the local Y. M. C. A., at which Charles Warner, a splendidly developed young man, has greatly pleased the audience by an exhibition of his skill as a gymnast, and the grace and symmetry of his form. Mr. Walker's daughter, Emily, attends the entertainment, and when she later meets Charles Warner, at a church festival, the young people become much interested in each other. This causes much dissatisfaction to Horace Horton, a young man to whom Emily has become affianced, at the behest of her parents, but in whom she finds little to admire. The meeting with Charles also comes to the ears of her father, who forbids her to acknowledge the acquaintance of the young man, on the ground that Charles has proven himself low and vulgar by his exhibition at the Y. M. C. A. gymnasium. Emily Walker is persuaded to visit the Warner home with other lady-members of her church. She becomes acquainted with Mrs. Warner, and strikes a warm friendship with little Edna, Charles Warner's crippled sister. A coolness gradually occurs between Emily and Horace Horton; her regard for him becomes even less friendly than formerly, and his attentions grow distasteful to her. She visits the Y. M. C. A. on Ladies Day, and Charles requests the privilege of calling upon her. This she declines, and her failure to explain her action mystifies Charles. At a meeting of the deacons of the church attended by the Walkers, an application for membership in the church is received from Charles. Mr. Walker objects strenuously to his admission, but is overruled by the vote of three fellow-deacons, no one voting in his favor except Mr. Horton, at whose house the meeting was held. His resentment and hatred toward Charles Warner aggravated by his failure to prevent Charles from joining the church, Mr. Walker determines to injure the young man's reputation. Emily Walker overhears her father declare this intention to her mother, and also hears them voice their fears that she will not comply with their desires and become the wife of Horace Horton. A man calling himself Dr. Jordan introduces himself to the Warners as a specialist, and promises to cure little Edna's lameness. Emily Walker is extremely anxious to warn Charles Warner of her father's intention to ruin his reputation, but finds herself unable to accomplish this end. Charles and his mother suddenly discover that Dr. Jordan's pretended treatment of little Edna is merely a pretext to enable him to obtain information concerning the Warner's by Detective Binwell, who had been masquerading in the Warner home as Dr. Jordan. The detective reports to Mr. Walker and Horace Horton that a visit to the former home of the Warners has resulted in an exposure of Charles Warner's alleged breach of faith with the young woman whom he had promised to marry, and whom he had refused to make his wife at the eleventh hour, declining to give any excuse for his action. Mr. Walker determines to use this information as a means of causing Charles to lose his position with the Y. M. C. A. The Secretary, however, declines to consider Mr. Walker's request, and learns that Charles was justified in refusing to wed the young woman to whom he had been engaged, because of her faithlessness. At the behest of Horace Horton, Binwell causes a pugilistic champion named Murphy to join the Y. M. C. A. Gymnasium for the purpose of besting Charles Warner physically.

FIFTH INSTALLMENT.

CHAPTER IX.

EMILY WALKER had spent much time trying to decide upon some method she could use to warn Charles of recent developments, without her action in the matter being discovered. She decided to send an anonymous letter, as she had on a previous occasion, and even prepared such a letter, but she finally determined not to send it. Although she had remained undecided, she felt that she was neglecting a duty. Charles was certainly not to blame for her father's enmity toward him.

It was a difficult problem for her to solve. Possessing to an unusual degree the innate modesty of her sex, she did not like to do anything which would in the slightest way give Charles an opportunity to think that she was seeking his attention, though if the dictates of her own heart had been followed she would have welcomed any opportunity to become better acquainted with him.

Every day she had to listen to the slighting remarks made against Charles by her mother and father, though it seemed that the more they endeavored to prejudice her against Charles, the more she was inclined to sympathize with him. The very means that her mother and father were using to destroy her confidence in Charles had produced an opposite effect. Charles appeared to her as a live, manly specimen of his sex. Nearly all the men with whom she had associated had seemed shallow and insincere. They had no real red blood. When she compared them with Charles, they seemed inanimate and lifeless, they were nothing more than cold, calm, inanimate beings.

There was something fresh and wholesome about Charles—something that was new and pleasing to her. The touch of his hand, the glance of his eyes, the mere privilege of being with him, seemed to have a subtle charm that was really inexplicable to her. She seemed to be "all

in a flutter" whenever she was in his presence. No other man had ever affected her in that manner. But the very fact that she enjoyed his presence so much to a certain extent made her fear him. She could not define the nature of her fear, but she knew that he had a strong influence over her.

Her mental perturbation was greatly increased by the actions of Mr. and Mrs. Walker. They lost no opportunity to cast a slur at Charles. Emily was careful to avoid expressing an opinion, and no doubt her parents referred to the subject much more frequently on account of her attitude, for they instinctively felt that they were not making the desired headway in marring Charles' character in her eyes.

On the evening after Mr. Walker's call upon the secretary of the Y. M. C. A., Emily overheard part of the conversation which had occurred repeated to her mother by Mr. Walker. She felt relieved as a result, for it eased her mind as to her father's power to injure Charles.

"Why, the little fool! I could not get him to do anything," she overheard her father say in loud, angry tones, referring to the Y. M. C. A. secretary.

"Do you mean to tell me he did not remove him on the information that you presented to him?" asked Mrs. Walker.

"That's what I mean to say. Why, I can't understand the extraordinary confidence that the secretary seems to have in the fellow. He has surely taken him in."

"He promised to investigate your charges and consider your suggestion, didn't he?"

"Yes, he gave me that much satisfaction, though I could see that he has been influenced. Why, he said the fellow had been with them over a year and he had never heard anything against him."

"He certainly must be a clever impostor," declared his wife.

"There is no question about his cleverness. He has fooled the whole Association, and the Secretary will rue the day if he does not take my advice and discharge him."

"Ah, well, if he does not let him go now, you can depend on his finding him out sometime in the future."

"Never mind. I'm not waiting. After I see the deacons, I intend to set Binwell on the case again, and find out something about that father of his."

"I suppose you can get the deacons to act without any trouble, unless Williams gets on his high horse again."

"And if he does, I'll show him."

Emily would listen to no more of the conversation. She was disgusted with what she had already heard. Her father's one aim in life at that time seemed to her to be to destroy the reputation of Charles Warner, and his attitude indicated that he would stoop to almost anything to achieve the ends he was seeking.

It is hardly necessary to add that Charles Warner was not worrying while all this scheming and plotting against him was under way. He was hard at work as usual, and there was nothing that he enjoyed more. He was so much interested in his occupation that time sped swiftly onward with him. There was no monotony in his life, he was too active, his life was too thoroughly occupied. Every moment was used for a purpose, and at all times he had a very clear idea of the ends he had in view. It was his great interest in his work that made him so valuable to the Association. Then, too, he was genial, and always wore a pleasing smile. He made his pupils realize that he was working for their improvement, that his principal object was to devise means to add to their pleasure and benefit. All this naturally resulted in his popularity. He was very much inclined to advocate the more strenuous exercises. He had large classes in boxing and wrestling, although these exercises, previous to his becoming the physical director, had not been encouraged by the local Y. M. C. A.

Nearly every young man has an innate desire to understand the art of boxing. Of course, there are but few who will take the trouble to acquire much skill, but the ability to protect one's self in an emergency is always valuable. There are thugs and toughs in nearly all large cities that one may come in contact with at any time, and if one can protect himself from serious injury by men of this character through a blow of his fist, he possesses ability which is well worth

striving for. Charles had especially encouraged boxing since he had been in charge of the physical department of the Association, and his policy had borne splendid results. Not only had the active membership very greatly increased, but it was composed of young men who were greatly benefited by the moral atmosphere of the Association.

Charles believed in the policy of attracting strong, resourceful, ambitious young men. He felt that the Y. M. C. A. was not merely for mollicoddles or young men of weak and wavering character. It was a place, he felt, for the strong, for the young men who do things, for he believed that many of these young men who possessed really superior characteristics were "going to the dogs," as he termed it, merely because they had no place to give wholesome vent to their surplus vitality, and so they went to pool rooms, billiard halls, saloons, dives, etc. He maintained that the Y. M. C. A. was capable of developing manhood of the highest degree, and that a strong, forceful character in a healthy, vigorous body was worth more than all the riches of the universe. Following a policy of this kind it was not surprising that he attracted and greatly influenced many young men who might otherwise have fallen by the wayside.

Charles was a great believer in exhibitions. It was his desire to show off the strength and agility and superior development of his pupils at every available opportunity. The secretary was at first a little opposed to his ideas, but after trying them out on one or two occasions he was favorably impressed. As a result, exhibitions were given at frequent intervals. At the particular time that the alleged bricklayer applied for sparring lessons, they were preparing for one of these regular exhibitions. As a part of the program, Charles had arranged a boxing bout. The secretary had been very much opposed to any exhibition that savored of a contest so strenuous in nature, but he was soon won over to the idea after giving it one or two trials. The boxing bouts held by the Y. M. C. A. classes were friendly in nature, and simply furnished a display of skill and strength.

The supposed bricklayer, as the reader no doubt has surmised, was none other than Murphy, the champion of the Northwest, the friend of Binwell. He took one or two lessons of Charles and pretended to absorb some instructions. Charles immediately discovered that he had had some experience in boxing. Try as hard as he could, Murphy could not hide some of his skill and strength, and was forced to acknowledge that he had some experience, but that he wanted to gain more points. With that, of course, Charles felt satisfied, and he continued his instructions, though Murphy was possibly more familiar with the various blows that he illustrated than his teacher.

After discovering the ability of his new pupil, he suggested that he give an exhibition with another skillful pupil at the coming exhibition. Murphy, who had given the name of Marshall, agreed to this. In the meantime, however, he managed to secure an opportunity of sparring with the antagonist that Charles had selected for him, and he gave him a severe trouncing. As a result of this, at the last minute on the evening of the exhibition, the man engaged to meet Murphy telephoned Charles that he would not be able to go on that evening, as he had another engagement.

It was difficult for Charles to understand the situation, and as he had depended upon this particular feature, he felt that it was incumbent upon him to take his place. Murphy smiled knowingly when he was informed of the change and realized that he was to have the opportunity that he had been waiting for. Unquestionably he would now be able to earn his money before a much greater audience than they had at first thought would witness Charles' disgrace and discomfiture. These gymnastic and athletic exhibitions had now become very popular in character and were attended by large crowds. On the evening of the exhibition, the gymnasium was filled to its capacity. The exhibition opened with drills of various classes. Then followed individual stunts by especially capable members. After that there was wrestling and other features. The final feature of the exhibition was

the sparring bout. The names of the boxers were announced and statement was made that one of the participants had failed to appear and that the teacher had agreed to take his place. The men were to box three rounds, each of two minutes duration.

Charles had told the supposed Marshall to hit light and make the bout as fast as possible, as the audience would then be more appreciative. In the first round, Marshall followed instructions. They gave a splendid exhibition of countering and cross-countering. Charles was a little surprised at the ability of his supposed student, and smiled his appreciation at the end of the round.

The second round was, in the beginning, a repetition of the first. Toward the last part of this round, however, Charles noted that his opponent had greatly increased the strength of his blows, and at the same time he was put on the alert by an exhibition of skill that his so-called pupil had never previously manifested. The audience applauded the efforts of the men vociferously, and this was exceedingly pleasing to Charles.

While resting between the second and final rounds, a man unknown to Charles stepped near the stage from the front part of the audience and said a few words in a low voice to his antagonist. Charles watched him curiously. He saw Marshall's expression change. The smile left his countenance, and in its place appeared a grim determination which somehow verified the suspicion that had momentarily flashed over his mind during the last part of the preceding round. He could not hear the words spoken, but he saw Marshall nod his head as though acquiescing to the demands of his acquaintance.

At the call of time for the third round Charles sprang to the center of the stage warily. Not a moment was lost. The so-called Marshall went after him savagely. Any doubts that Charles may have had previously were now dissipated. He realized, as two or three powerful blows were aimed at him that it was his opponent's intention to severely injure him. He braced himself to meet the emergency. He saw that all the skill he possessed would have to be brought into

play. Here was a man who was apparently a master of the art. There was no deception practiced now. With a skillful move he drew out a blow from Charles and he returned it with a powerful right hand blow full on the jaw. For a brief part of a second Charles was dazed. The blow made him realize his peril. He began to box as he had never boxed before. Blow after blow was rained upon each other by the boxers. The contest was about even.

The audience somehow felt the change that had come over the contestants. They sat there with bated breath watching these two men striving for the mastery, both strong, both determined. Back and forth they moved on the stage, their powerful bodies struggling with might and main in a contest which, if life had been at stake, could not have been more fierce in character. Above the tumult that had by this time arisen, could be heard the voice of the secretary by the contestants on the stage, "Call time! Stop it!" But the referee held up his hand indicating that it should go on. He realized the situation. He felt that Charles was giving a good account of himself. He did not want it stopped. Meanwhile Marshall was making frantic efforts to land a blow on a vulnerable spot. Charles protected himself well, and his opponent was receiving as good as he gave. The end of the round was fast approaching. It could be plainly seen that Marshall was straining every nerve to accomplish his object. He became reckless in his determination. He stepped in closely to land more effectively. Charles saw his opportunity. With lightning-like quickness he met his opponent on the point of the chin with all the strength of his right arm. Marshall staggered back as the referee shouted time.

The applause was deafening. Charles stood there gazing at his staggering, defeated antagonist. Momentarily he had that animal-like feeling that gloats over a splendid victory well won. When he came to himself he bowed his appreciation of the plaudits of his admirers. The applause continued for some time. As it began to quiet down, a man arose in the audience and held up his hand request-

ing a hearing. During the tumult the so-called Marshall had slipped from the stage and disappeared.

"I would like to ask you why you have introduced this man as Marshall," said the stranger, to the announcer.

"That's the only name we know him by. He is one of our students here."

"Student! He's not a student. He's a prize-fighter. He's Murphy, the champion of the Northwest."

It took the audience a moment to fully comprehend this amazing announcement. Then they broke into prolonged cheering mixed with which were cries of "Warner, Warner, Warner! Hurrah for Warner!" The meeting broke up in a tumult. Several of Charles' friends rushed to the stage and raising him high in the air, they carried him back and forth two or three times amid wild applause, and then away to the dressing-room.

It was indeed an auspicious occasion in the life of Charles. A blow that had been aimed at him by his enemy had been turned into a boomerang. Nothing that he could have planned would have so added to his popularity as the events of that particular evening. When the excitement abated sufficiently to make a search for the so-called Marshall, he and his friends had completely disappeared. Mr. Wilder, the Secretary, was perturbed over the incident. He greatly feared that it would harm the Association, and at first he was a little bit incensed at Charles for continuing the contest, in the last round, and yet after careful deliberation he realized that it would have been exceedingly difficult for him to have withdrawn without disgrace and humiliation to himself. Charles apologized to the secretary at the first opportunity for his behavior, for he felt that he might feel he was lacking in the Christian spirit.

"But after all, Mr. Wilder, isn't it the duty of a Christian to be a good fighter? If we are not prepared to fight for the principles that we advocate, in other words, if we don't go into the battle prepared, aren't we likely to fail?"

"I don't know, Charles. Maybe you're right, but I must admit I'm afraid of the results of this disgraceful contest. You must remember that I'm responsible for

the management of this Association, and I've deviated quite considerably from what might be considered a right course by many secretaries, in order to meet your views and to build up the physical department, but I await with fear and trembling the result of to-night's work."

"Don't you mind, Mr. Wilder. It will be a feather in our cap. If the Y. M. C. A. teacher can give a champion fighter a good trouncing, it shows the value of our methods of training, and after awhile you will have to build an addition to your gymnasium to hold all of your members."

"I hope you're right, Charles," said Mr. Wilder as he turned away.

CHAPTER X.

The prediction of Charles as to the results of the last exhibition proved to be true. To be sure there were some complaints from a few of the more conservative members, but they were greatly outnumbered by those who commended the policy of the Secretary in every detail. Mr. Walker, for instance, was one who entered a very vigorous protest. He took the trouble to call up Mr. Wilder, the Secretary, on the telephone, to inform him that he was "just beginning to feel the sting of the mistake that he was making in retaining such a man as Charles Warner in the service of the Association."

Mr. Wilder's fears were soon quieted. In fact, the attention attracted had apparently given the Y. M. C. A. a great deal of valuable advertising, and a large number of new members were enrolled. Support sprang up in many quarters heretofore unknown, and though a certain amount of controversy was aroused, it redounded ultimately to the benefit of the Association.

Walking was one of Charles' favorite exercises. Though he was compelled to do a great deal of active work in the gymnasium he was never "just right" unless at frequent intervals he went for a very long walk. His suburban home was nearly fifteen miles from the Association Building, and he made a practice of walking home at least two or three times each week. He had learned while taking these walks that he could go right by Emily's home without going out of his way, and

he usually selected that particular route. The Walker mansion faced a large park, and Charles could pass very near the house without being seen by any of its occupants.

One evening nearly a week after the exhibition, Charles had started to wend his way homeward. In his walking he moved along speedily. There was evidence of vigor in his every stride. As he reached the park near the Walker home, there was a strong temptation to lessen his speed. The shadows of twilight were slowly approaching. The odor of green shrubbery encouraged him to breathe deeply. He felt the influence of the joy that comes with life and health. He felt exhilarated, almost intoxicated, as he moved slowly along drinking in the air so richly laden with life-giving oxygen, fresh from the laboratories of Nature. While thus engrossed, he wandered away from the beaten paths. He saw the moon slowly gaining brilliancy as the light was fading away. The park was almost deserted. Here and there was a pedestrian apparently homeward bound.

As he came out into an open space he saw two men standing about a hundred yards ahead. They were earnestly engaged in conversation. He had advanced but a few steps when they suddenly looked his way. He saw them exchange a few words, then separate until they were a few rods apart, and then advance slowly in his direction, maintaining the same distance apart. Like a flash the thought came to him that he was about to be attacked by robbers. He suddenly recalled reading of experiences with highwaymen within the last few days in that very park. He materially reduced his speed. The two approaching men did the same. Charles was not afraid, but he realized that the two men were probably well armed. He never carried a weapon, and he knew that if they intended to attack him he might be injured, but he moved slowly onward. The two men still approached, and still maintained the same distance apart. The men continued their approach until they were on a line with him, then they stopped. Charles also stopped.

The idea flashed into his mind, "Pre-tend that you're armed." He reached

back as though to pull a revolver out of his hip pocket. He turned in the direction of one of the attacking party, looking him carefully over, then turned in the direction of the other. He then slowly continued his way, turning toward one and then toward the other. They stood still and watched him as he disappeared.

His ruse was successful. He had deceived the men who had prepared to attack him and he had evaded what might have developed into a dangerous situation. He went on his way, intending to speak to the first policeman that he met, not neglecting to pass by the Walker mansion as was his usual habit. The path through the park, partially hidden by shrubbery, led him within twenty-five yards of the home, and as he approached the thought of danger that he had just escaped disappeared entirely from his mind.

Emily had been growing dearer to him every day. The difficulty that beset his path in trying to see her and know her had no doubt really made the attraction much stronger. To a certain extent he was making her an ideal, he was growing to regard her as being possessed of perfection of form, feature, and character that might reasonably be regarded as beyond human possibility. She was present in his thoughts during a large part of his leisure moments, and her attitude, whenever he had had an opportunity of seeing and talking with her, he believed had been encouraging in character. How was he to form some plan that would enable him to see her and know more of her? This was the problem that bothered him continually. On this particular evening, as he passed the Walker home, he saw the front door open, and stood still a moment hoping to see Emily appear. He was not disappointed, though he was not by any means pleased that her escort was Horace Horton.

He stood there for a moment hidden by the shrubbery, and watched the two as they slowly walked a short distance down the street and then turned into a path leading into the park. He sat down on a nearby seat to avoid being observed. He saw them moving slowly over the gravelled walks, in the direction from which he had come.

"What would I give to be in his place?" he muttered to himself, picking up a stick and jabbing it savagely in the dirt beneath him. "She does not like him. She can't like him. He's nothing but a miserable little millionaire. He has nothing but money. Here am I with health, all the strength of mind that comes with strong superb manhood, and I want her. He cannot have her, I will not let him have her." These were some of the reflections that flitted through his brain as he sat there and watched the two figures as they gradually receded in the distance. He arose with a heavy sigh and was about to continue on his way when he suddenly recalled his experience with the two highwaymen.

"They are going in the same direction," he thought. "I'll follow them."

At that moment they made a turn in the path and were hidden from view by the intervening trees. It was fast growing dark, though the bright moon was beginning to shed its brilliant rays here and there.

He increased the speed of his steps. He wanted to be near Emily and, he felt that perhaps, their being attacked was more than a mere possibility. He turned in the direction that he had seen Emily and Horace take, but he could see no one. He continued in the same direction, glancing carefully here and there, hoping to discover them. He finally came to a turn, where there were three paths leading in three different directions. He could see no one on any one of these paths. While standing there undecided he heard a piercing scream that made the blood stand still in his veins. He felt somehow that it was Emily's cry. Again and again it resounded in the air. He started with all possible speed in the direction from which it came. Always a speedy runner, he ran now as he never had before in his life. The screams stopped, but he soon heard voices, and at a turn in the path he saw four figures with the rays of the moon shining directly upon them. He saw that one had a revolver, but he sped on toward them.

"Now you get; hurry!" he heard the man with the revolver command, giving the man next him a dig and a shove.

He saw the command obeyed. The

man got away as fast as his legs could carry him. Charles did not lessen his speed. He saw the man with the revolver turn in his direction.

"Halt, or I'll shoot," was the command as he drew near. He stopped for nothing. He dodged as he neared the man with the revolver. A shot rang out on the still night air.

With all his strength he struck the man holding the weapon and snatched it from his hand as he was falling to the earth. The other highwayman was unarmed. He saw his partner fall. That was enough. He took to his heels and disappeared among the shrubbery.

Charles turned to Emily, for he had guessed aright and it was she. She was speechless with fright. Her face was deathlike in its pallor. She recognized Charles and heaved a great sigh of relief. She would have sunk to the walk if Charles had not caught her in his arms. She recovered in a moment.

"Why, it's you, Mr. Warner, isn't it?" she murmured faintly as she regained consciousness.

"Yes, it is I, and you're glad to see me, aren't you?"

"Glad to see you! You are my savior. What would have happened to me in the hands of these two robbers, no one could foretell." She said as she gently disengaged herself from his supporting arms.

"Yes, this opportunity has been a great privilege," he replied, steadying her as she endeavored to regain her balance.

He looked down at the fallen robber who had regained consciousness and had begun to rise.

"Say, boss, who are you anyway?" looking up at Charles with blinking eyes.

"Never you mind. You get up and come with me. I'll turn you over to the first policeman I meet."

"Oh, don't do that, boss. We didn't mean the girl any harm."

"Yes, I know, but you robbed her escort. Give me his valuables."

"Can't do it, my pard has 'em."

"Yes, he is right, Mr. Warner. The other man took the valuables. He held the revolver."

"Well, get up and walk on ahead of

us," Charles commanded. He arose slowly and obeyed.

"I'll take you home, Miss Walker, and will look out for him at the same time."

"When will I ever be able to repay you? I owe you an everlasting debt," said Emily, gazing admiringly at Charles as they moved away behind the robber.

"You owe me nothing. I'm indebted to you for the privilege."

"Oh, Mr. Warner, you're hurt," as she noted in the moonlight a dark spot beneath his temple and extending down the side of his neck.

"Why, no, I'm not."

"Just look there," touching his cheek.

"Oh, it's blood!" she cried as she examined her moist fingers.

"You're wounded. Ah, how awful!"

"I'm not hurt," he answered, as he reached upward to ascertain. "Yes it's blood," he finally acknowledged.

Now that the excitement was over he felt a tingling sensation at the side of his scalp, near the temple. He reached upward and hurriedly examined the wound. The bullet had merely scratched the skin, but the blood was flowing freely.

"Let me help you!" said Emily, wiping the blood from his face and neck with her own dainty handkerchief. "This is a small return for what you've done for me."

"There is no return needed," Charles insisted as he smiled down at her.

"If I only had a little water."

"Here's some just ahead," indicating a fountain they were approaching.

Emily borrowed his handkerchief and used it with her own as she washed the wound and endeavored to stop the flow of the blood. Charles held his head over the fountain in accordance with instructions, and she went about her task deftly.

"It isn't much, but you had a narrow escape," said Emily as she placed a dry handkerchief over the wound in such a manner that it could be held in place by his hat.

During this wound-dressing process Charles could not see his prisoner, and he had slowly but noiselessly increased the distance between them. As he arose the robber dashed away at full speed down the path.

"Stop or I'll shoot!" shouted Charles

leveling the revolver at the fleeing robber.

"Don't shoot Mr. Warner," begged Emily.

Charles pointed the revolver high in the air and fired, but the robber only increased his speed.

"Shall I run after him," Charles asked turning to Emily.

"No! No! Stay with me. I'm afraid to be left alone," she pleaded in affrighted tones.

"All right," grasping the hand that was nearest to him. "Let the robber go hang. I don't care about him. I only care about you," gazing at her with a light in his eyes that even in the moonlight affected her with a strange, but pleasant thrill.

"Ah, Mr. Warner, you're so strong, so masterful," looking up at him with admiring eyes.

"Do you think so? It is gratifying to be strong, to feel the fire of magnificent health surging in every atom of your being," pressing the hand that he still held.

Unconsciously they both turned up the path that led to the Walker home.

"Ever since I first saw you I've longed to be with you—alone," said Charles in soft tones.

"You have!" smiling up at him and disengaging her hand. "We are almost alone now," gazing far ahead at a single pedestrian who had just come into view.

"You made a promise on one occasion. You said you would tell me why you could not invite me to call on you. Will you tell me now."

"Yes, I'll tell you, though you have perhaps already guessed. My father is terribly incensed at you—' smiling and hesitating.

"Yes, go on."

"Well, he thinks you have interfered with his plans."

"What plans? tell me everything, won't you?" he asked.

"You shall know everything. Father is angry at you because he thinks you—"

"Why do you hesitate?"

"Oh, Mr. Warner I don't like to talk about it."

"Well then don't talk about it."

"But I want you to know, and you ought to know."

"I believe I know, I've surmised that you are engaged," gazing at her questioningly.

"Yes," smiling.

"And to—" hesitating.

"Yes you know, don't you?"

"To the man who ran away from you to-night?"

"Yes, to that miserable, weakly, coward."

"And the engagement has been broken."

"Yes, to-night—forever."

"And now I can come to see you can I not?"

"Oh, Mr. Warner, don't ask that. I know you can not come. At least at home."

"Then somewhere else?"

"Yes; I believe I'm warranted in granting your request under the circumstances. Father or mother would never allow you in the house. They seem to hate you."

"That's too bad. I've done nothing to warrant their displeasure."

"No; but they imagine that you're interfering with my regard for Horace, which by the way isn't true. I went out with him to-night because I would rather be out than in the house. He bores me, and the hopes of the entire family are set on this marriage, but it can never be."

"I don't blame you, at least they might have picked out some semblance of a man for you."

"What did they care about the man; they were searching for a fortune, for family and pedigree. It would be very

fine if a miserable little dried up semblance of a man did not go with them," she said scornfully.

"Don't bother, you're of age," replied Charles, smiling at her earnestness, "and you can do as you please."

"And I shall, you can rest assured," an expression of strong determination coming over her features.

They were nearing Emily's home. Another turn would bring them in sight of the house.

"Ah, look," said Charles as they reached the turn in the path.

Emily saw several men entering her house.

"What can it be about," she inquired.

"I know. Horace has gone back and reported the incident. Your father has sent for a squad of policemen and they are there for instructions."

"Surely, you are right."

"And I'll have to leave you now. I can't bear to think of it," pressing her hand.

"I'll see you again soon."

"How soon?"

"To-morrow."

"Ah, you're so good to me."

"I want to be good to you," giving him a warm smile. "To-morrow I'll take a walk one hour earlier and I'll be alone."

"I understand. I'll be there," pressing the soft white hand that she held out to him.

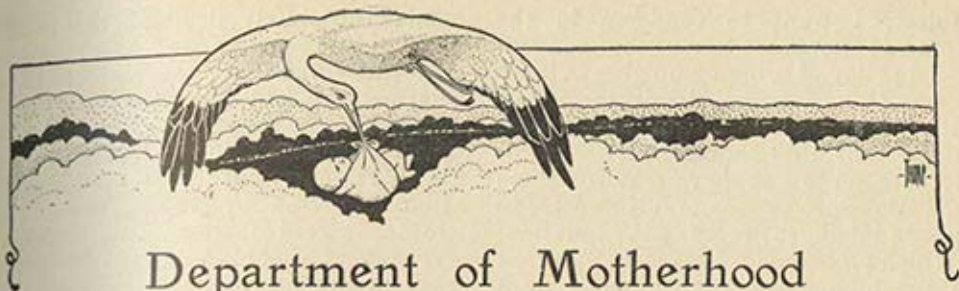
He stood there watching her as she hurried towards the house. Were his wishes, after all to be fulfilled? He felt that at last life meant something to him—that love had come to bless him.

(To be continued.)

Fruit Salads

Choose a combination of seasonable fruits. Any fruits, such as apples or pears, which will discolor, may be prevented from so doing by squeezing over them the juice of grape fruit, lemon or orange immediately after they are cut up for the salad. Pare fruits of this nature, and cut into small dice about a quarter

of an inch. A dressing is made by cutting fresh tasty pineapple in cubes, adding sugar as in above recipe, taking a few fresh strawberries, rubbing them through a sieve, and adding to the pineapple and sugar. Any combination of seasonable fruit may be served with this dressing.



Department of Motherhood

WHAT A MOTHER SHOULD KNOW OF HERSELF

By Marion Malcolm

WE are slowly but surely passing away from that particular phase of so-called civilization that places innocence of the existence of evil, and the ignorance necessarily associated with it on a pedestal. Intelligent people no longer worship at the shrine of innocence. They are beginning to understand its full meaning. Although a man may be ever so fond of the particular characteristic called innocence in a girl who may have attracted him, if his feelings toward her are at all serious he is bound at times to look forward to a period where this innocence becomes a pitiful and at times even a fearful handicap.

Although innocence in a young girl, may be attractive to some shallow brains what does it involve when associated with motherhood? To be prepared for motherhood demands knowledge on an important—even a divine—subject. Intelligent motherhood presupposes knowledge; and although one can be a good mother without knowledge, one can be far more capable, and can fulfill the office far more to the credit of herself and her children if one has wisely acquired the knowledge that is essential under circumstances of this nature.

It is true that the most capable mothers of the past have been innocent and naturally were woefully ignorant, but one must remember that they did not have to meet the evils that are found everywhere at the present time. They were not compelled to come in contact with the various so-called sciences which up to the present time have not been able to select the wheat and throw aside the chaff.

I do not say that nothing useful has resulted from the vast amount of investigation that has been carried on by numerous conscientious students. There is much of great value to be found in the science of healing and even in what is termed the science of medicine, though the word medicine as used by the medical profession, includes practically everything pertaining

to the healing art. There are many things, however, in what is termed the science of medicine, that are commendable, and if the time will ever come when we can intelligently use that which is good, and wisely eliminate that which is bad, then even the so-called science of medicine, will have a beneficial influence.

In this, the first article of the series that I am to furnish on this important



The Madonna of the Chair, by Raphael.

subject, I want to condemn in the strongest possible terms the conventional policy of bringing up girls in innocence of physiological details connected with motherhood. I am firmly convinced that girls should be trained for motherhood just as they are now trained for various professions, and if we were to seek an intelligent reply to the question: "Which profession is the most important to the human race, which adds most thoroughly, to human happiness and health and strength?"—would not the answer in every case be that motherhood is the most important of all professions?"

To be sure you might say that it should not be called a profession, it is too sacred to be considered a business or an occupation. Then if we will acknowledge that it is sacred, that the proper performance of the duties of a mother is perhaps of more importance than anything else in a woman's life, then is it not plain that motherhood should be thoroughly and efficiently prepared for?

I want especially to impress upon every young woman who looks forward to the possibility of having a home of her own, that there is no duty that is more imperative than that she properly prepare herself for this sacred office. Proper preparation will mean that she will become a capable mother, she will understand herself and will not be fearful of all the minor symptoms that may possibly appear under circumstances of this nature.

If you are one of those women who look forward to the building of a home, and have definitely made up your mind that the responsibilities of motherhood shall not be a part of your life, then may God have pity on you for your poor, ignorant, dried-up soul. Of course, I realize that many young women express sentiments of this kind when, if they were to search down deep into their heart they would find an imperative call in favor of following the natural instincts of a woman. Thus many young women who definitely determine before marriage to avoid the divine responsibility of motherhood, find it necessary to change their mind. This change is brought about because their womanly instincts are stronger than their so-called superior intelligence. The instincts of a true

woman absolutely demand the fulfillment of this function, and as a rule it is only those whose normal instincts have been perverted by an erroneous mental training in conjunction with defective development and a weakly body, who are able to carry out the desire that is so often expressed by young women to avoid the sacred functions of motherhood.

The great need of to-day is knowledge, more knowledge, and still more knowledge. It is not the innermost details of the various abstruse sciences that are most important; it is knowledge of the simple things of life that we are suffering for most seriously at the present time. There seems to be a peculiar attraction in the complicated aspects of life, in the various deep, unsolvable mysteries of existence, while the plain easily obtained sources of knowledge are very often entirely ignored.

The science of sexuality should be as plain as an open book to every mother. The instincts of the average woman who expects to be a mother should be retained in all their delicate acuteness. They should not be perverted or diverted from their normal inclination. It is also well to remember that the more strength a mother possesses, the more capable she will become for the performance of this natural function. The delicacy and weakness that in days gone by has often been considered attractive—largely because of the mystery associated with it—no longer holds sway. There is an admiration nowadays for strong womanhood, and for the firm muscles and well-shaped body that is supposed to accompany a superb physique. We have all sorts of educational institutions at the present time, and lately there has been a correspondence school started with a view of supplying the information that is so important to mothers by mail, and a course of this kind should be in every public school. It should be an important part of every college or university. It is about time that the mask of prudery was thrown aside. It is about time that the mental rottenness which has handicapped the race, and which has led to weakness, sickness, misery, and ruin in thousands upon thousands of homes, was properly branded. Prudery stands in the way of

intelligent motherhood. In this particular situation it might be termed a demon in disguise, for his Satanic majesty could hardly have selected a more appropriate scheme for bringing misery and decrepitude upon the human race than by the present process of looking upon the most sacred of all human functions as vile and vulgar.

Motherhood should be the most important of all themes. Details in connection with it should be discussed reverently and sacredly. They should be understood by men and women, and even by boys and girls. It is the inability of the average individual of today to grasp the sacred character of this wonderful theme, which has enabled the public in general to cast slurs at the sacred emotions and the divine functions connected with motherhood. The vile-ness and vulgarity with which prudery has surrounded this theme should be torn aside, and the field of knowledge that it has obscured should be carefully searched for the details that will help to make motherhood more profitable—that will help to add to the strength and health and happiness of the mother herself and to the beauty and vigor of her children.

At the present time many mothers unnecessarily suffer the tortures of the damned. They endure miseries that are greater, it seems to me, than those who are supposed to be confined to the infernal regions, simply because of want of this important knowledge. They have become victims of their own pitiful ignorance which no doubt at one time they considered so attractive under the name of ignorance.

We are living in an age of enlightenment; education on all subjects of so-called importance can be freely obtained. The only exception is that important knowledge that appertains to motherhood. Valuable books on this subject can be found in every library, but as a rule you have to be a medical student or have to use special influence in order to secure an opportunity to read them. May the readers of this publication use their mighty influence to dispel the curse of prudery, which is to blame for all this, through its obstruction of the efforts of those who might become efficient and happy mothers were it not for the difficulties which prevent them from gaining proper knowledge of this important subject.

Even Drug Vendors Turning to Physical Culture

THE best evidence of the growth of the physical culture movement is to be found in the fact that the medical profession and vendors of proprietary remedies generally are turning to natural methods of healing, though usually with the hypocritical assumption that these methods must be combined with their own old-fashioned treatments for good results. Recently the following advertisement has been made conspicuously displayed in Subway and Elevated trains in New York City, and elsewhere:

TUBERCULOSIS.

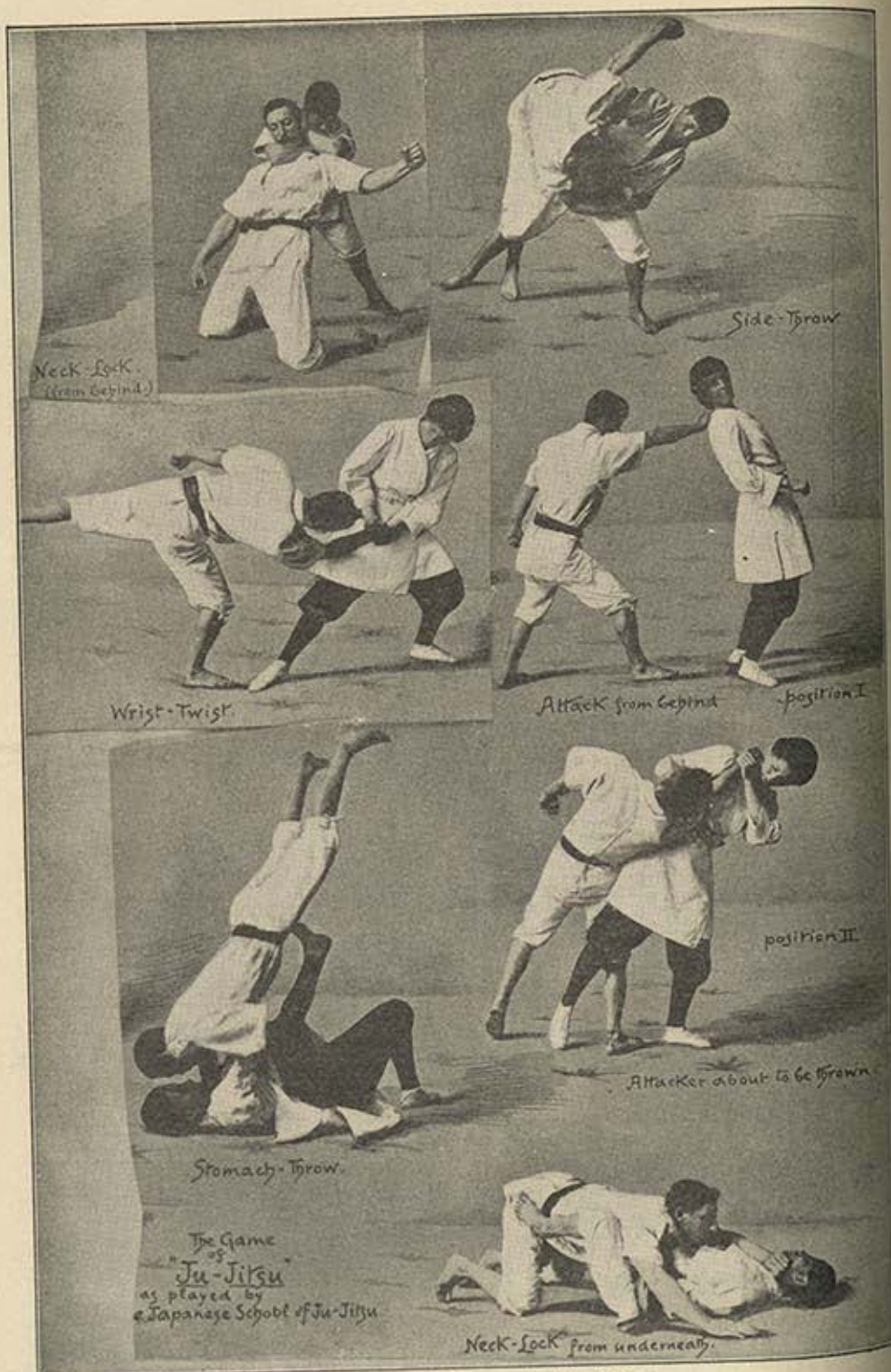
Can be cured at home. The universal treatment is good food, exercise, sleeping in the open and

SCOTT'S EMULSION.

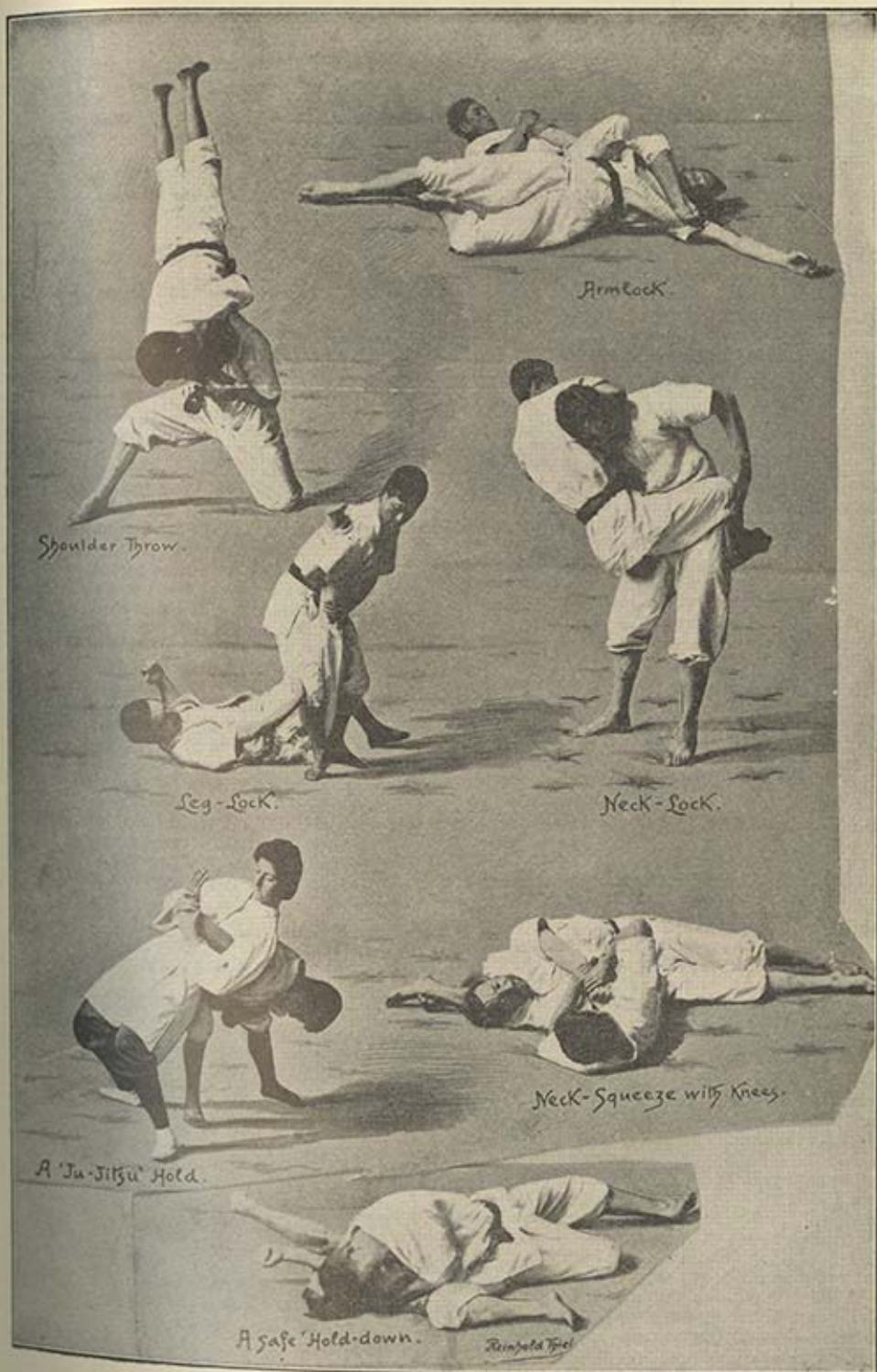
So the preparation which at one time was advertised as a complete remedy in

itself, especially for diseases which seemed partly or wholly due to malnutrition, is now publicly recognized by its manufacturers as inadequate. They acknowledge the necessity for natural treatment, even though they add the name of their own preparation.

The day of the patent remedy as of drug treatment generally, will soon have passed, for by the time that the public at large have come to realize the advantages of exercise, open air and pure food to the extent suggested in this advertisement, they will have the sense to understand that these simple natural measures will be sufficient for all purposes, without the addition of any "dopes." Past issues of this magazine have already called attention to attempts made by quacks, to saddle the practice of physical culture with their respective remedies. This is evidently their only hope for their continued prosperity.



An Illustrated Lesson in Jiu Jitsu.



Another Lesson in the Art of Jiu Jitsu.



THE VIRTUES OF OUR METHODS PROVEN

Brothers Saved from Consumptive's Grave TO THE EDITOR:

We have read the serial story, for which you were prosecuted from its beginning until it was discontinued and *know we were greatly benefited by the same*. We think it ought to be well considered in every way and are certain it would benefit many. We have been readers of your magazine for two years or more and were saved from consumption, for which we had been taking dope for three or four years.

As soon as we started to read your magazine we began to see the benefit of thorough ventilation and our cough disappeared shortly thereafter. We have both gained in strength and morals and one of us has gained twenty-eight pounds in weight inside of thirty days on two meals a day.

OSCAR and KARL WESTERHEIDE.
New Douglas, Ill.

Physical Culture a "Life Saver"

TO THE EDITOR:

I feel as though I ought to write to you, thanking you for the man I am to-day and I owe it all to your valuable theories advocated by you in your *PHYSICAL CULTURE* magazine.

I am twenty-six years of age, and have followed your teachings for the past nine years, which time I have been a "silent worker," for the *PHYSICAL CULTURE* magazine. When I was going to school and until I was seventeen years old, I hardly knew what the word "health" meant. I well remember the time I took up bicycle riding, getting ambition to be a racer, I took up training in preparation for the Pullman Bicycle Road Race—an annual event taking place on July 4th, from Chicago to Pullman, a distance of fifteen miles. That was in 1900. About that time I was taken sick and was advised by a doctor not to ride, as I had heart trouble. Not long afterwards I came across the "life-saver," in your magazine.

The first thing I did was to cut out the meat. The following year, I again entered the race, winning same with my arms folded, covering the fifteen miles in forty minutes, the fastest time ever made by a winner, besides being the hottest day we had that year. As the paper said the following morning, "It looked like he had heart trouble, the way he won." Have newspapers and photos to back me up. Can furnish same if desired.

EARL M. MCINTOSH.
9056 Ontario avenue, Chicago, Ill.

Priceless Treasures Secured from this Magazine

TO THE EDITOR:

I think that a letter is due from me on account of the priceless treasures that I have secured from your publication. If I could sell these treasures (and when I say this I mean exactly what I say), all of John D. Rockefeller's millions would and could not buy them. Curiosity would naturally lead the curious to want to know the treasures that I have that John D.'s millions could not buy. I will only enumerate the principal one, it is how to take care of that much-abused organ, the stomach. So far I have not been able to live a physical culture life, but I put into practice as many of your principles as I possibly can. For instance, when I feel a little indisposed, I do not immediately hurry to a drug store as of old, instead I simply begin a little fast, the way I feel determines the duration of the fast. I hope, and in fact, I feel confident, that I will be able to begin to live a strict physical culture life beginning with next June and I tell you I intend to develop my body to what it should be. At present I am sorry to say that I cannot live the life that I would like to. Last year at this time I weighed 130 pounds. I weigh now 140 pounds, so you see that your magazine has done me some good. Keep up the good work.

R. L. A.

Mother of Eight, Age 45—Young as a School Girl

TO THE EDITOR:

I have been a careful reader of your magazine for about ten years. The doctrine of right living taught therein has been of untold value to me and my family. I am the proud father of six sturdy sons and two beautiful daughters. Their mother at forty-five has the appearance of a school girl. We are greatly indebted to you for the elevating and helpful influence of your magazines in our healthy happy home.

As a minister of the Gospel I have recommended your magazine freely, and this year I am sending at my own cost nine subscriptions besides my own. Truth will prevail.

The treatment you have received at the hands of the law is a sad commentary on the times.

HOWARD H. KEIM, V.D.M.
Wild Rose Farm, Ladoga, Ind.

A Magnificent Baby.

TO THE EDITOR:

I enclose you two photographs of our baby boy, Glen Ogilvie, age 3 months, 3 weeks, length, 24½ inches; weight, 15 pounds, 7 ounces; weight at birth, 7½ pounds.

It was somewhat difficult to get exact measurements but I believe the following are correct: Neck, 8 inches; chest, 17 inches; waist, 15½ inches; hips, 16½ inches; thigh, 9½ inches; knee, 7 inches; calf, 6½ inches; ankle, 5 inches; arm, 6 inches; elbow, 5½ inches; forearm, 5½ inches; wrist, 3½ inches.

Mrs. Ogilvie for about three years and myself for seven years past, have excluded flesh foods of every kind from our diet entirely, and believe we are much better off for having done so. We have also adopted the two meal per day plan and use raw foods a great deal. My wife is very fond of her air and sunbaths, and kept up her daily exercises until her confinement, with the exception during the last month of some of the more strenuous ones. She took a good walk daily, and the day before her confinement walked nearly two miles without fatigue.

Baby gets his air bath and exercise regularly morning and night and enjoys them thoroughly. He also gets a sun bath once a day when weather is fine. He is strong and well and has not a blemish of any kind, and will catch hold of your fingers and pull himself up to a sitting position, where he can sit for sometime, quite straight and without support.

We most heartily endorse physical culture methods and believe that the present excellent condition of both mother and child are entirely due to our having followed the advice and instructions given in your publications, which we have read for several years.

ELMER OGILVIE.

215 Wellesley Street, Toronto.

Saved from Wreckage—Now Happily Married

TO THE EDITOR:

Eight years ago, at the age of twenty-seven, I was nervous and dyspeptic and suffering ex-

cessive losses, which were very enervating. At this time I met a young lady of nineteen, who filled my ideal exactly and in a short time we became engaged to be married. I had always led a clean life, having in my earlier years decided that when I married I would bring to the marriage altar a life as pure as demanded in my wife.

I began to have doubts as to the rightfulness of offering myself in my physical weakness to the strong, healthy girl that I loved. I consulted a specialist (quack), who for a fee of \$10 per month and sundry drug bills agreed to make me all right. Began treatment, but secured no benefit. Then I deliberately quarreled with my fiancée in order to break up the engagement. I thought that for me in my weakness it would be utterly out of the question to marry.

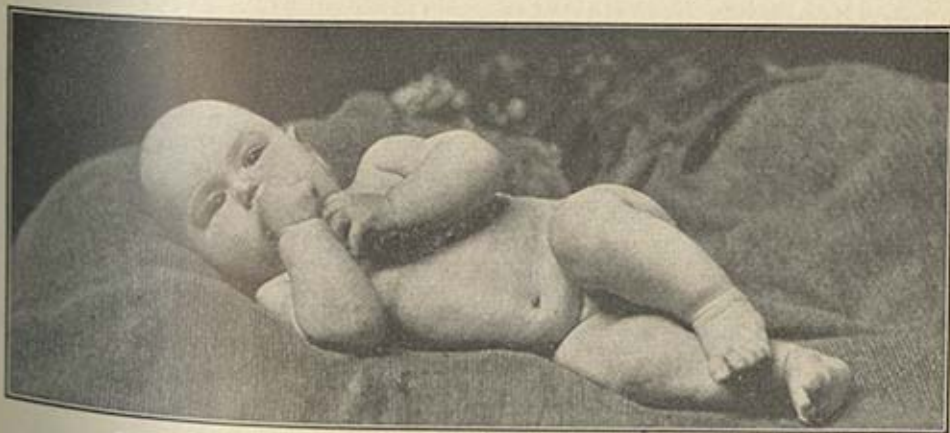
At this time in my despair and despondency, when all my hopes of a happy marriage were almost dispelled, I ran across a copy of PHYSICAL CULTURE. I read it and bought another. Then sent for all the back numbers, and have read every number since, besides several other publications by yourself. I became an ardent physical culturist and in a few months was in excellent condition, with all my ailments gone. I then sought out my former sweetheart and in a few months we were married. That event took place over six years ago and we have lived a honeymoon ever since. Our union has been blessed by two strong vigorous children.

I recovered from an attack of inflammatory rheumatism in a few days, and my wife from a violent attack of pneumonia, by physical culture methods.

We live clean lives and do all we can to spread your principles. I can hardly see what life would be worth to me had I not seen your publications. Could fill pages with details, but think perhaps this will serve the purpose. If not can write you further.

J. M. SALTER.

Everett, Washington.



Master Glen Ogilvie, of Toronto, age three months and three weeks.



A. W. Wefel, of Portland, Ore., who gained nineteen pounds in solid muscle and cured a complication of serious ailments.

Physical Culture as a Family Doctor

TO THE EDITOR:

We all know that ignorance of the law excuses no man. This is a true statement, but I venture to say that ignorance of physical culture ideas is the direct cause of bringing thousands of people to early graves. My advice, "to whom it may concern," would be instead of having a family doctor and his dope about the house, it would be far better to have this magazine delivered once a month, it would bring better results and be less expense.

Personally I know that drugs will not cure, for I have had enough to cure or kill twenty men.

My troubles consisted of stomach, liver, heart, lung, kidney and bowel trouble. Ever since I read the first item in this magazine there has been a remarkable change, both physically and morally. It is needless to say that health is always my first consideration, by all means, for I would sooner be a poor healthy beggar than a sick rich man.

My daily exercises consist of a rub-down, with the bare hands, rope jumping, three-pound Indian clubs, seven and fifteen-pound dumb-bells. I consider deep breathing very helpful.

I believe if people were not so afraid of the night air and would open their windows, so they may partake of it while they sleep, they would soon notice the increase in vitality and soon notice that the doctor wasn't visiting so often, fresh air is nature's best remedy, a valuable gift of God, but is little used in the proper manner.

I am a vegetarian and I eat but two meals a day, at one time breakfast was my main meal and now I do without it entirely, I never eat between meals, the raw food diet appeals to me through it is difficult to get down to it. I never drink coffee nor tea, nor liquors, and I dispise tobacco.

I fail to find words to express my good feeling towards the good work your magazine has rendered in my case. Hoping it may have a much larger circulation in the near future so it may reach thousands, who are in need of it.

A. W. WEFEL.

Lieut. Eng. Co., No. 13, Portland, Ore.

Taught a Mother how to Train Her Son

TO THE EDITOR:

I will write a few lines to tell you of the benefit your literature has been in our home. We have read your magazine over five years and have several of your books.

The high moral principles advocated in your publication have assisted me in training my little son in the way he should go, and in so continuing. I believe he will be kept unspotted from the world. Your work I consider next to Christianity, if not part of it. And as a teacher and player, my experience is that success depends on good health, if a piece of music is performed as a task the music loses its charms.

Pecos, Tex.

MRS. D. R. McLAIN,

Instructor of music.

A Young Man Saved from a "Hellish" Habit

TO THE EDITOR:

I am radically opposed to "Comstockery," and in justice to the benefits derived from the purity teachings of your magazine, I want to state that prior to having a copy of the magazine providentially placed before me I had been since early youth addicted to a hellish habit, taught to me by a playmate, and that all my will power, prayer and good resolutions were powerless to emancipate myself from it.

PHYSICAL CULTURE magazine gave me ennobling ideas and thoughts regarding the body and from following its teachings I became a wonder among my fellows.

Total abstinence from meats, fleshy food, spirituous drinks and a return to natural foods produced in me a prompt return to chastity. I thank God I am clean and that I have been enabled to remain clean for so long a time that a return to the old life seems impossible because of its repugnance.

I am doing all I can to spread the gospel of making one's body a fit dwelling place for the Holy Ghost.

JOHN RIVERS.

30 Seventh street, San Francisco, Calif.

General Question Department

By Bernarr Macfadden

Our friends will please note that only those questions which we consider of general interest can be answered in this department. As we can only devote a small portion of the magazine to matters of this kind, it is impossible for us to answer all the queries received. Where the letters, however, do not require lengthy replies, the editor usually finds time to answer by mail. Where an answer of this kind is required, please enclose a self-addressed, stamped envelope.

Remedying Anemia

Q. How can anemia be overcome? What sort of food do you recommend?

A. A detailed reply to this question would require a very extended article—in fact, it would cover the whole science of vitality building. What you need first of all to remedy a trouble of this nature is more vitality; that is you need greater digestive and assimilative powers, an improved quality of blood, stronger muscles—not only increased strength of the external voluntary muscles, but of the muscles that carry on the digestive processes—and stronger nerves. If the general rules laid down in this magazine for increasing the strength of the entire muscular and vital organism are followed in detail, this complaint will disappear in practically every instance. The best dietetic régime to follow while treating a trouble of this nature is found in uncooked food. An exclusive milk diet would be of very great value, though in most cases a fast should precede it. Long walks can also be especially recommended.

Going to Bed Immediately after Eating

Q. Does one's food properly digest when one retires to bed immediately after eating a hearty meal? I find that under such circumstances I feel bad on arising.

A. It is usually decidedly injurious to retire immediately after eating a hearty meal. A certain amount of movement of the body seems to aid digestion, and when one assumes a reclining position and the voluntary powers of the body are inactive, digestion is carried on very slowly and unsatisfactorily. If your digestive organs are strong enough, there is no especial need for the stimulus that they secure during the waking hours, but when they are defective, in other words, where the digestive organs are weak, a hearty meal just before retiring will be the cause of trouble in practically every instance. In discussions of this question, the statement is often made that one feels sleepy after a hearty meal, and this is really a mandate of Nature, which indicates that one should obey the inclination, but as previously stated, where the digestive organs are very vigorous, there will be no unsatis-

factory result, but where they are weak it is a dangerous practice.

Cure for Pleurisy

Q. Will you please tell me a cure for pleurisy? For two months I have had it in the left side under the heart.

A. If you were to adopt a one meal a day diet for awhile, chew your food very thoroughly, drink freely of water, and at night before retiring wear a girdle pack, I think you would secure favorable results. The quickest results are achieved if one fasts two or three days or longer before beginning a regular régime. The girdle pack can be taken by wringing out an ordinary face towel that has been wet in cold water. Apply this around the body directly over the region in which the symptoms have appeared. Place a dry towel over it to avoid wetting the bed-clothing. These hints will bring results in every case, though if a long walk and various exercises for the chest, together with breathing exercises, are also taken, much more speedy results can be expected.

Removing Scars

Q. What treatment will remove scars that result from boils or other causes?

A. There are no natural methods for removing scars. Dermatologists, I believe, have a method that they employ, but unless the scar is especially unsightly, I would suggest that it be allowed to remain.

Diaphragmatic Breathing; the Spirometer

Q. Why is diaphragmatic breathing recommended so much if, when a cold is contracted, it always settles in the chest or upper part of the lungs? Besides, I understand consumption always starts in the uppermost part of the lungs. Do you think a spirometer or any other instrument necessary in developing the lungs?

A. Diaphragmatic breathing is especially recommended because it uses every part of the lungs. In other words every air-cell throughout these important organs is inflated and se-

cures all the oxygen it can absorb and the consequent benefit of excreting the poisons eliminated by this process. The benefit accrued from expanding the lungs results from the increased surface of the lungs that is exposed to the oxygen of the air. The greater amount of surface exposed, the greater is the amount of oxygen absorbed, and the more thoroughly are the poisons eliminated. This is the chief reason for recommending diaphragmatic breathing. If a person has good lungs it is a sign of good health. The fact that a cold when contracted in the chest usually settles in the upper part, simply indicates an effort of the body to take the most convenient method for ridding the system of the poisons that are eliminated in the form of mucus when a cold is contracted. We are more prone to colds in the nasal passages. The parts next liable to affection are the throat and larynx. When the conditions are more severe, the bronchial tubes are also affected though the inclination of a "cold" usually is to cause an inflammation where the mucus or phlegm that comes from this condition can be conveniently eliminated. A spirometer is not at all necessary for developing the lungs, although it provides a useful instrument for encouraging lung exercise. One possessed of large lungs is usually healthy and possesses more than average strength, though this is not true in all cases.

Nasty Taste in Mouth

Q. I am a man who is never sick. I have good health, but every morning when I get up I have a nasty taste in my mouth and my tongue is very yellow. Will you give me the cause and remedy?

A. You are certainly not in good health while the symptoms that you describe are in evidence. Although you may apparently be able to go about your ordinary duties while in this condition, the time will come, when you will find yourself suffering from some serious chronic disease, if these symptoms continue. Remember that the same "nasty taste" that you have in your mouth is also in the stomach, and in many instances exists throughout the entire alimentary canal. It is quite evident that you are eating too heartily, or in other words eating more than you are digesting. It would be a splendid plan for you, for at least a short period to eat nothing at your evening meal but acid fruits. A two or three days' fast would be a splendid remedy to start a new régime of this kind with.

Strengthening a Weak Heart

Q. I am bothered to a certain extent with a weak heart and poor circulation. Kindly tell me in your magazine, the exercise, food and general care of the body necessary to remedy this trouble.

A. Physical culture methods are capable of bringing about very remarkable results in the treatment of heart trouble of various kinds. We have demonstrated this in a great number

of cases. Many medical men are of the opinion that exercise is very dangerous when suffering from heart trouble. Exactly the reverse is the truth. This ailment requires a certain amount of exercise in order to increase the vigor of the heart, though all sorts of exercise cannot be taken and violent exercises are dangerous. Any effort to continue exercise beyond moderate fatigue is inadvisable, but movements that bring into play the muscles around the chest walls, that cause one to breathe deeply and fully, can be most emphatically recommended. However, nearly all cases of heart trouble are accompanied by serious disorders of the stomach, and the first effort must really be made to treat the stomach, rather than the heart. When the stomach is strengthened, and through appropriate diet, has been enabled to perform its functions properly, radical amelioration of the heart trouble is noticed immediately in nearly all cases. Of course, hydropathic methods, and in fact, various means of adding to the general physical vigor, are especially important in treating a trouble of this nature.

Muscular Strength and Business Ability

Q. Would the development of great strength, enabling one to lift say one hundred pounds over head with one hand, be any hindrance to a business man? Would it interfere with the arm of an artist or with one's handwriting?

A. The development of great strength will be of special value to a business man. It will give him more energy to work with, give him more vitality to furnish the superior quality of blood necessary in order to acquire and maintain the highest degree of mental and physical power. The idea that muscular strength interferes with mental vigor is erroneous. In fact, the effects of muscular vigor are always opposite in character, provided one develops the brain. Because athletes in many cases neglect their brain, they are frequently dull, but these same men, if they were to develop mental capacity, would outstrip the ordinary business man with the weak body. The development of a strong arm should not interfere with the work of an artist, or with one's handwriting.

Rough Skin

Q. What would you advise me to do for rough skin? The symptoms appear on my arms and make the cuticle appear like goose flesh.

A. In nearly all cases this particular defect could be remedied with dry friction. This can be taken with a rough towel or with bristle brushes. Bristle brushes are perhaps a little better. Brush the parts very thoroughly, up and down, and back and forth, and from side to side, until the skin is pink from the accelerated circulation induced by the friction. It is sometimes, also, a good plan to apply olive oil or cold cream to the parts. This can be done once a day after the evening friction bath.

An Experiment with a Nut and Fruit Diet

WE have always maintained that a nut and fruit diet furnishes the most ideal nourishment.

This diet seems to contain less impurities than any other, and although as a rule it requires some time to accustom the digestive and assimilative organs to this character of food, when it is followed for a sufficient length of time satisfactory results are achieved in practically every case. Where one makes the change to a diet of this character, as a rule, a loss of weight occurs, though this is in time recovered and the quality of the tissue is vastly improved.

Mr. Harry McCord, of Los Angeles, California, has written to us describing his experiment on nuts and fruits, and the splendid results that he has secured from this abstemious diet should encourage others who are desirous of securing a diet that will build superior tissue. Mr. McCord's letter follows:

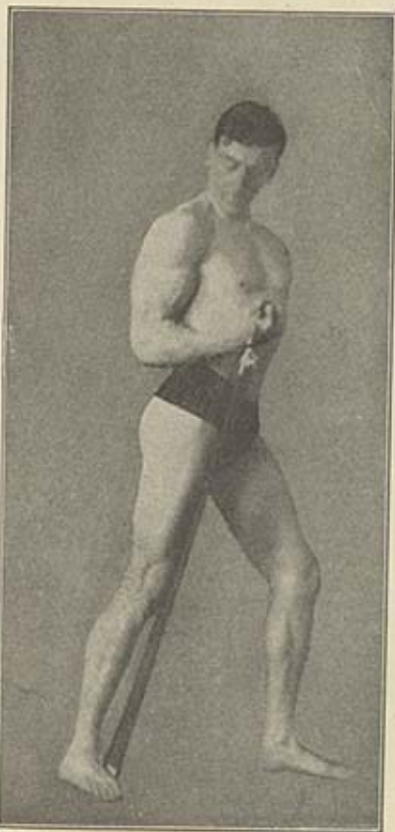
"I live on a very low proteid diet. I have lived on this diet for the past fourteen months and have kept accurate notes of the foods I have eaten. I average between four and six ounces of nuts each day. I eat no breakfast. My first meal is between eleven and twelve o'clock. It consists of either almonds or Brazil nuts. I have found the eating of one food at a time will give you perfect health. There is less chance for fermentation. I always eat nuts at noon, never at night. The latter course, I believe, is one of the most serious mistakes made by those trying to follow this diet, that

is, eating nuts at night. About 5:30 or 6 o'clock, if I am hungry, I eat some figs or bananas, apples or oranges. Of course, what I consume at this time depends entirely upon my appetite, but I make an entire meal on only one of these fruits, whichever seems to be the most appetizing at the time. If I eat dried fruit, I usually eat about a half a pound; if I eat fresh fruit, I use about two pounds.

"The result of this experiment has certainly proved wonderful. Before I adopted this diet I used to feel 'all in' after my exercise, but afterwards I was able to double the amount of exercise, and when I get my bath I have to fight against myself to keep from taking more exercise. Sometimes I eat no nuts for several days, merely eating fruit, but

when I am in the need of proteid I strongly crave nuts. Most people eat too much proteid food, and when one is doing hard muscular work he does not require half the amount he eats. With all my hard training, my face is round and full, which, by the way, is an unusual experience for me, as my face was always thin.

"Another valuable feature in connection with this diet is that if you cease exercising for a considerable time you do not accumulate excessive flesh. You remain at about the same weight. If you live on fresh fruits, the acids will keep you in perfect condition. You cannot take on fat, and yet you secure all the carbohydrates (fattening foods), that you need from fresh fruit already for assimilation. At one time I



Harry McCord after more than one year of the fruit and nut diet.

was very nervous, but now this symptom has entirely disappeared. I have not known what it is to have an ache or a pain in over a year. I usually continue exercising until I am in a profuse perspiration, and I can stand in draughts at this time without fear of catching a cold. My experience has taught me that the over-eating of proteids, or the mixing of one or more starchy foods, is the cause of all colds,

and I believe I can prove this at any time. In the last few years I have carried on various experiments and have proven my theories to be accurate.

"It is certainly great to feel so good. Just think of being able to get up in the morning, bound out of bed and feel like tearing the house down. You may think me extreme, but I expect to live forever, I feel so fine. No matter how much exercise I may take, I never seem to tire."

What Physical Culture Can Do in the Building of Boys and Girls



TO THE EDITOR:

The above photograph shows the remarkable results that can be achieved by following the suggestions that are given from time to time in this publication, for developing strong, healthy children. The parents of the little ones recently wrote us as follows: "Their ages are, respectively, Ada, eight and a half; Anna, six and a quarter; Willie, four and a half; Hilda, two and a half years old, and ever since the eldest was born, we have taken your magazine, and have brought them all up in accordance with your theories. I shall never regret taking your magazine, which is worth its weight in gold. The children

have never tasted tea or coffee or fresh meat since they were born. The boy was brought up strictly on your lines. He used to have his cold bath from a month up to nine months old, and we had an inspector from the National Society for the Prevention of Cruelty to Children visit us on account of his going undressed so much. He was, however, delighted when he saw him, because he also took your magazine, and he advised me to send his photograph to you. At six months of age he weighed nineteen and three-quarter pounds.

Yours for health,
Stockport, England. MR. and MRS. BROOKS.

Comment, Counsel and Criticism by Our Readers

If, at any time, there are any statements in **PHYSICAL CULTURE** that you believe to be erroneous or misleading, or any subject discussed regarding which you take issue or upon which you can throw additional light, write to us, addressing letters to this department. We intend to make this a parliament for free discussion. Problems that you would like to see debated, interesting personal experiences, criticisms, reminiscences, odd happenings, etc., are invited. We shall not be able to publish all letters, but will use those of greater interest to the majority of readers. For every letter published we will present the writer, as a mark of our appreciation, with a subscription to **PHYSICAL CULTURE**, to be sent to the writer or to any friend the writer may designate. For the convenience of our office, kindly write us after the publication of your communication, giving name and full address of the person to whom you wish subscription to be sent.—Bernarr Macfadden.

Can We Grow a New Set of Teeth

TO THE EDITOR:

Can a new set of natural teeth be grown in the mouth after the other set have worn or fallen out?

Is there anything that can be done to the jaws, the gums, and the mouth that would promote the growth of a new set of natural teeth when needed and desired either by old, or young persons?

Is there anything that can be done to prepare the jaws, the gums, and the mouth to cause a new set of natural teeth to grow when the others are gone?

It seems reasonably possible that there can.

We know that when the finger nails are cut short and trimmed close, they will again grow out long. When entire finger nail is gone, a new one will grow out full length in three months; and there are things that can be done to promote this growth.

We know that when the hair is cut short close to the head it will again grow out long; and there are aids and helps to further and promote that new growth.

When a piece of skin is bruised off, or cut off from the hand or any other portion of the body, new skin will again grow in that place—sometimes without leaving a scar. And there are aids and helps to further and promote that growth in the best manner.

I consider that it is also possible to grow a set of new natural teeth in the mouth when the proper conditions and materials are brought into existence and promoted and maintained a sufficient length of time.

I would suggest and recommend that any reader of **PHYSICAL CULTURE**, or any other person, that has any facts or useful suggestions relating to that subject, should write a description of them and send it in for publication in **PHYSICAL CULTURE**; and when a reasonable number of descriptions have been printed, then have the Editor make a summary of what has been written and described; and thereto add his statements and recommendations and instructions.

There have been instances where a new set of natural teeth has grown in the mouth of

aged persons. I thought possibly something definite might be done to produce such a growth.

A few years ago, I read of a woman over a hundred years of age, and there had grown in her mouth four different sets of teeth—two sets in her youth, and two sets in advanced life. The last set (or rather the fourth set), grew when she was ninety-four years old.

Was that inherent—born with her—that condition of things that caused the teeth to grow four times? Or was there some way of living and manner of doing throughout her life that furthered and promoted such growth? Possibly both.

In one of the States, a few years ago, there was a woman then one hundred and two years old. She then had a full set of natural teeth. The account did not mention how many sets of teeth she had during her life thus far; but that instance exhibits that good teeth will continue to exist until advanced age.

Some time since a man lived to be one hundred years of age—and more. At that time he had a full set of natural teeth.

A few years ago, some persons were talking. One of them said: "Old Mr.—, has lately grown a new large solid double tooth in his mouth." That old gentlemen was then in his eighties.

In my mind I then thought that if it were definitely known what it was—or is—that furthers and helps new natural teeth to grow, when the impulse and the process were in his mouth, to some extent, he could then make use of those conditions, and the materials, and obtain a complete new set.

Conversely, lately I saw a young lady, who had a beautiful mouth full of beautiful teeth. My! what beauties! Every tooth was large, and solid, and sound. They were fine, evenly balanced and proportioned, and tightly set along side of each other. They were so firmly and closely set beside each other, that they were self protective and self preserving. It made the mouth and the face attractive. It was beautiful to look at and contemplate. I know of many such instances with girls and women.

Would it not be good and useful to have a

number of articles from different sources upon such useful and important subjects — as the teeth, the hair, the eyes, etc.

Steven's Point, Wis. GEO. H. WYATT.

Producing a Vaccination Scar

TO THE EDITOR:

In a recent number of *PHYSICAL CULTURE* I noticed a request for a way to produce an imitation vaccination scar. As I am opposed to vaccination on physical culture principles, I will send you a good one.

With a toothpick apply a drop of strong nitric acid to the arm, let it stand a few minutes until the skin begins to turn red, then take up the acid with the corner of a piece of blotting paper. The spot should be wiped dry carefully and covered with a piece of oiled silk. Keep covered for a day or so. After a week the spot will begin to turn dark and after another week or so it will likely slough out, leaving a granulated sore underneath. This sore will gradually heal, producing a scar so nearly resembling vaccination that the average physician cannot tell the difference.

Trusting this will be of service to you, I am yours for good health.

Buffalo, N. Y.

OTTO MOEHLAU,
Pharmacist.

About Christian Fighters

TO THE EDITOR:

The article in a recent issue, regarding Christian fighters, attracted my attention, as the question is of very grave importance. I have been interested in this question for a number of years, and have tried to think of some way in which young men, and young women too, for that matter, could be interested in this problem sufficiently to take it up in earnest and fight it out.

I am aware of the fact that the Young Men's Christian Association is doing something along this line, but they are not doing what they might do. They have a great opportunity along that line if they would only see it and take advantage of it. The main object of the physical department of the Y. M. C. A. at present is to reach as many young men as possible in a beneficial way. They do not train a certain few for competitive work. I think the Y. M. C. A. should be big enough and broad-minded enough to take in both phases of the work. Just a suggestion. Why can't some organization take the initiative and secure the services of some noted athlete who is a Christian and have him train young men for competitive work, and fit them against the champion athletes, who now hold the titles, but who are men of immoral character. I do not say that all champion athletes are men of immoral character, but a very large majority of them are. Advertise these contests just as they are. State clearly that the one contestant does not use liquor, tobacco, etc., and state just which ones the other does use. This would in a very short time create public sentiment against such vices, and they would soon be stamped out. Public sentiment counts for much nowadays. If the public could only be thoroughly

aroused I feel that it would be only a short time until we could rival in some degree the excellency of our Greek brothers of the past.

I know these thoughts may seem strange and even shocking to some, but please give the question serious thought before condemning it. The time is fast approaching when the long-faced and narrow-minded Christian must take a back seat. What we need now is more clean, broad-minded, thinking Christians, who can meet the present-day evils squarely in the face and overcome them.

GEO. S. WEST, Physical Instructor,
Pratt Institute, Brooklyn, N. Y.

Purity in the Nude

TO THE EDITOR:

You invite opinions from your readers and subscribers. Like so many others who have testified before me, I have gleaned "sweet words of life and beauty," in your splendid magazine—words which have borne fruit in a new manhood. Would that we could hear more of them from the fond lips of father and mother, older brother and sister, or friend and companion in the critical period of our temptations; for here is a gospel which has meant, is meaning, and will mean more, I believe, to thousands of young men like myself and their brothers, yes, and their sisters too, than any amount of doctor's advice afterwards.

Like so many others, I was in the unsuspected throes of the terrible habit when your magazine came to my attention about six years ago. I still feel the effects of my woeful ignorance and, I may say, indifference, for I do not wish to cast all the blame upon my innocent parents nor escape censure myself; but whatever salvation from the cursed vice—and I think it a miraculous escape—I have had, was due almost wholly to your magazine as a starting point. My experiences have been similar to those of some of your correspondents, but there has been one point in my case which I think has scarcely ever been referred to directly and of which your readers may like to hear.

Much has been said about ignorance and the mystery surrounding the sex question being the direct cause of the social unrighteousness prevalent throughout our land, and some little (not as much as I think should be), has been said of the beauty of the unclothed human form as contrasted with the criminally prudish ideas of others. Some little has also been written and heard of the advantages and benefits of nudity for a period of time each day for the purpose of enjoying a sun or an air bath—I refer especially to an article appearing in a recent number of *PHYSICAL CULTURE*, entitled, "Birthday Clothes," and which I take occasion strongly to recommend—but little, if any attention has been called to the logical deduction from these two or three premises; namely, that the practice of nudity, absolute nudity, not only by one's self but, under proper conditions in the sight of one's family, is a detergent as well as a detergent of impurity, prudery, ignorance and all the vices attendant upon these.

This conclusion has been substantiated and verified in the lives of two or three whom I personally know. I can not describe the exhilarated joy and consciousness of the true power of manhood which came to me when I first realized the real, natural, truth contained in nudity. To the readers of PHYSICAL CULTURE, and especially to those still hampered by temptations and evil and prurient imaginations I venture to suggest a simple test of this value and virtue of nudity. Some time during the day, preferably in the day time, when it is not one's custom to do so, discard all clothing and garments of every description, kneel down and offer an earnest prayer to the Divine Creator of your beautiful, pure, manly (or womanly), form for purity and strength and guidance in the face of temptations and for the power to see the beautiful in Life. After arising practice physical culture exercises for ten or fifteen minutes in your room. Then take a cold shower bath or plunge and rub down with a towel until the skin fairly vibrates with exhilaration, and see if you don't feel like remaining naked for the rest of the day. One feels like a new man physically, morally, and spiritually.

I could not close this letter, however, without warning the reader, especially, he who has not yet conquered a perverted or impure imaginative tendency, to constantly engage the thought and attention upon something positively pure, for the practice of nudity, when one is not accustomed to it will tend to unduly concentrate the mind upon parts of the body ordinarily covered. For this reason, and as a precautionary measure against this tendency I have recommended prayer and exercise.

When one becomes accustomed to the "feeling of nudity, his prudish ideas will begin to vanish and he will gradually acquire a taste for the beauty that inheres in the human form." This taste should be cultivated as much as possible by actively willing to see more and more of this beauty and glory. One can after awhile acquire a *natural modesty* regarding, and in the presence of the naked body. It is a virtue which everyone should strive to attain. The ability to see and study nude statuary, that is not suggestive of impurity, without harboring prudish thoughts and imaginations is highly to be recommended, but much more virtuous is the ability to be in the presence of one or more human forms in "birthday clothes," with a pure and transparent imagination.

I do not venture to predict what would be the natural result of a more extended practice of nudity among all classes of people, but I believe it is and would be, under proper educative influences a practical solution of the many wrong ideas and the evils which you, Mr. Editor, are combating so courageously. My own experiences, and the testimonial of others, has satisfied me of the physical culture possibilities in the practice of nudity.

I should very much like to hear comments, criticisms, and experiences of others upon this subject.

New Haven, Conn.

L. H. GATES.

Need for Christian Fighters

TO THE EDITOR:

I have read with much interest the article on "The Need of Christian Fighters," by Mr. Hardwick, in a recent issue of PHYSICAL CULTURE. Is there any line of work which does not need Christianity in it? Of all things should not the persons, men or women, standing before the public in any capacity, be so far above the average, that they are really EXAMPLES?

Think of what this world would be if the men most prominent in business were as successful in fighting wrong in their own lives (and therefore helping others to fight), as they are in building up their business, whether it is prize fighting, manufacturing some much used household article, building houses, or selling them for other people.

For instance, a business man walks the street. Watch him—keen, resourceful, magnetic, stern and relentless in whatever he under takes to do. Systematic, up-to-date and dauntless in his business life, what a wonderful influence he might have for good and how much more he might be looked up to, if it were known that he lived an absolutely blameless life and did not think that "a man was a fossil," unless he yielded to his lower nature and was decidedly of the earth earthy. How much more might he accomplish if he could be pointed out as a man who lived up to the highest and best in his nature, thereby making it still higher, for it is only too true that what we cultivate in our natures is developed as well as in our talents.

O for clean, pure, upright business men and women. Men who cannot be tempted, swerved or lowered one particle from their straightforward course of right living and purity. For women who cannot be bribed or smirched or soiled.

All honor to those who have been through their Garden of Olives, or in other words, have suffered the temptations of their earthly natures and have risen high above them, even though they must keep on fighting. All honor to the brave men and women who fear nothing but themselves, and thus fearing are made pitiful and sympathetic with the failings of weaker ones. But what cities and citizens we might have if our business men would take the stand of right living, purity and honor! What an influence they would have among their employees, from the lowest office boy to the chief clerk and head stenographer, if it were known that the head of the business was living far above the low intrigues, the unclean recreations now common among many business men of to-day?

How much purer would be the flow from the fountainhead of civic life, where now it is a vile mass of corruption? How much higher the ideals of the young man or woman starting to earn a livelihood, if business men could always be trusted to protect and shield their women employees, instead of too often tempting them? Then purity would be the food of the children of this generation, for the business man, keen and far-sighted, is often the

unknown ideal of the boy or girl who knows him to be able to make money—and ride in his auto. What could this man not do if he cared to make his influence tell on the side of higher manhood!

Rochester, N. Y. MARION BRADLEY.

A Recipe for Bread—Also an Uncooked Food TO THE EDITOR:

Just a few comments. Anyone who is accustomed to taking the shower bath, finishing up with the cold shower will find that if they use the tensing exercises during same, they will be able to keep up the circulation better and enjoy the bath more than when the percussion exercises or vigorous slapping is used. Also use the tensing exercises while drying and rubbing down.

Here is something else that's good. Wash a dozen dates. Stone and cut them up with one banana into a lunch jar, pour over them the juice of one lemon, let stand over night, or better still, let stand twenty-four hours. Anyone who appreciates the value of dates, bananas and lemons will be sure to like this delectable dish or marmalade. If you find the lemons too strong just let it stand twenty-four hours and mix thoroughly. Or it may be diluted with water. I have used this since the Spring of 1908 as fruit in my lunch and must say that I would not carry a lunch away from home without some of it in, particularly in the warm months.

It is very nourishing, inexpensive and the lemon juice will have a splendid effect on the whole system. It helps to purify the blood, keeps the bowels regular and the head clear. In fact it will help you to feel fine and dandy all the time. It is something that grows on you, the more you use it the better you like it.

In your article in the February issue of PHYSICAL CULTURE on page 173, "Remedying Self-Poisoning Constipation," you speak of the value of whole wheat bread. I can vouch for the fact that it is a grand help in remedying constipation. About four years ago I purchased from Mr. Cummings D. Whitcomb, Detroit, a Quaker Mill for grinding wheat by hand. I paid four dollars for it and it has paid me big dividends, not alone from the splendid flour it turns out, but the dandy bit of exercise it gives me mornings. It is surprising the numerous sets of muscles that can be brought into use while using the grinder. The muscles of the abdomen can be brought into service as much or as little as the person operating the machine desires.

The flour is just right for using when it comes through the first time. Everything is there but the straw. Set the sponge over night, don't put any salt in until just before mixing next morning, knead well and place in buttered tins and let rise again. Bake the loaves as thin as desired. If the loaves are baked an inch thick or less, just thick enough to make two slices by splitting the loaf, it will be all crust and you will derive greater benefit from it than when baked in thicker loaves. This bread eaten with one's other foods will go

a long way toward helping one to eat slowly and masticate thoroughly. The oven should be at such a temperature that the bread will continue to raise for fifteen minutes after being placed in it, the next fifteen minutes it should bake through, the last fifteen minutes it should brown well.

Buffalo, N. Y.

J. E. BATTRAM.

The Continent Life for Men

TO THE EDITOR:

Having had a good deal of unpleasantness to put up with at various times owing to the prevalent ideas on morality, I am naturally keenly interested in your campaign to try and set up a better all round standard. Whether living a continent life means any gain to health or not is a question I can give no opinion upon. Never having lived otherwise, I have no means of comparing, but my experience proves that your strong call for a cleaner kind of existence was badly needed by the great majority. I have been in many parts of the world, and the most galling thing to me in this connection has been to meet everywhere the idea that a man cannot live a continent life, and when it is found that he avoids the habits of the average men he is openly taxed with other unwholesome practices. If your teaching only served to dispel this notion it would be a great gain, and make things easier for men like myself, who could then go about without creating a general opinion that they were strange and unnatural.

One strong point has always struck me with regard to the various purity crusades which are started, and that is the fact of their being almost entirely directed at men, while in my opinion the women take a strong hand in keeping up the present state of affairs. Perhaps my experience may have been out of the ordinary, but I have found that most of the women I have met, although of "respectable" character, badly needed some new line of thought with regard to the morals of men. Put briefly, they laugh at a man for a fool who doesn't "have his fling," and I have heard many say that though they believed in women keeping straight, they would take a different course if they were men, though how this theory would work out it is difficult to see. Many also have a pious belief in the old saying that a reformed rake makes the best husband, and so on, and in face of all this I have often wondered what inducement there was for the average young fellow to try and live right. It seems to me that the final goal of the whole business is to carry a clean record to the girl who will be your wife, and if there is not more appreciation and encouragement shown for this idea than I have met with, there will be no great rush to the ranks of continent men.

I hope that you will have every success in convincing your large circle of readers (both masculine and feminine), that a young man's physique and power can be developed to the full without the indulgences tacitly allowed at present.

Ottawa, Ont.

R. H. F.

Arthur Saxon Challenged to a Weight-Lifting Contest

TO THE EDITOR OF PHYSICAL CULTURE:

I was greatly interested in the article regarding the Saxon Brothers, published in your June number, from which it seems that Mr. Arthur Saxon is claimed to be the world's strongest man. I am convinced that he is not entitled to that distinction.

I have now discontinued my public exhibitions, but under the stage name of "Lionel Strongfort," I have for years past appeared in leading theatres of America and all European countries, more extensively in Europe, performing feats of strength, which so far as I know have never been equalled by any other strong man. In connec-

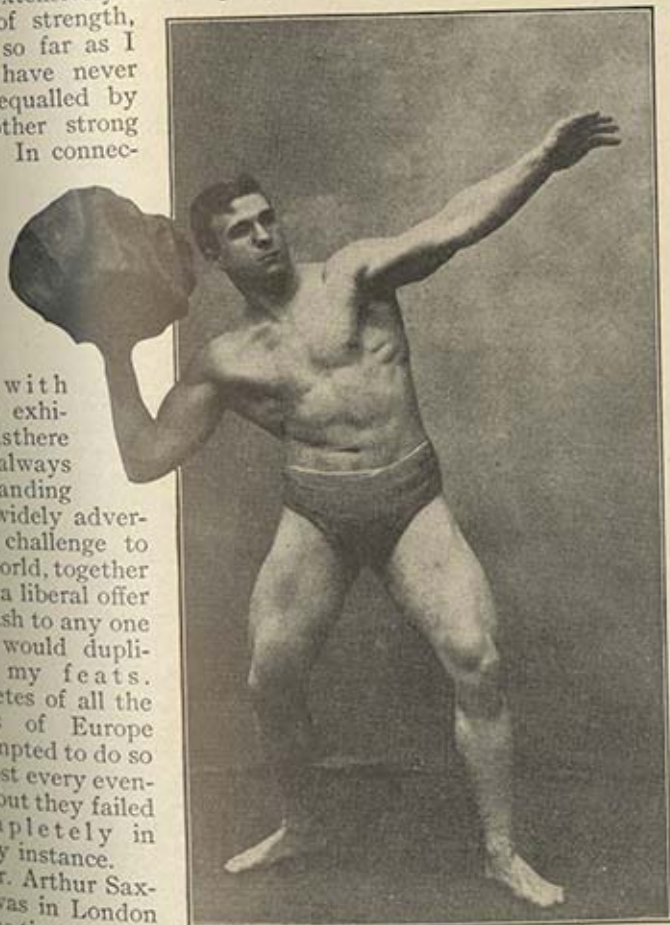
tion with these exhibitions there was always a standing and widely advertised challenge to the world, together with a liberal offer of cash to any one who would duplicate my feats. Athletes of all the cities of Europe attempted to do so almost every evening, but they failed completely in every instance.

Mr. Arthur Saxon was in London at the time of some of my exhibitions

there, and could have secured the twenty-five pounds (\$125.00), which I then offered, by merely coming upon the stage and duplicating a part of my act. But he did not, though he visited the theatre. Later, he was given the opportunity of trying to break my records for lifting weights above the head before the National Sporting Club of London, but in three different attempts he failed utterly.

All Europe and a large part of America know me as the originator of automobile acts, the Saxon Brothers'

performance being in this respect a poor imitation of my own, in which I supported upon my chest, unaided, a bridge upon which was driven an automobile containing six passengers. The *New York Sunday World*, in or about the month of March, 1904 (I think March 6th), published an elaborate article, with photographs, describing my act. The *New York Sunday Herald*, September, 1902, also published an article, with photos, descriptive of this act. In some cities, even an electric auto was used, of sixty horse-power, bridge, passengers and auto combined weighing sometimes as much as eight thousand pounds. In the Saxon act, the au-



Max Unger, who challenges the Saxon Brothers to a weight lifting contest.

tomobile bridge is supported by two of the Saxon Brothers.

I wish to say that I went several times to the Ringling Brothers' Circus at Madison Square Garden, New York, this Spring, to see the act of the Saxon Brothers, and was ready to accept any challenge which they might make to the public, *but no such challenge was ever made by them.* Without such a challenge, or any opportunity for others to compete with them, how can anybody know just how much the Saxon Brothers can lift, or whether or not they are the strongest men in the world? However, since there was no such challenge from them, and Mr. Arthur Saxon did not make any extravagant claims of being the world's strongest man, I saw no reason to molest them. But in view of the statement made in the article referred to, I feel that this question is one that should be settled definitely, and I hereby challenge the Saxon Brothers, and particularly Mr. Arthur Saxon, to engage in a competition to determine who is the world's strongest man, in the interest of all American athletes.

I offer to perform each and every one of the feats of the three Saxon Brothers, and will in addition perform six other feats of strength which not one of them can duplicate, or all three of them together.

I will say further in connection with any proceeds which may arise from a competition of this kind, that I will agree to give my share to any charitable institution agreed upon. I realize that Mr. Saxon is now under engagement with the Ringling Brothers' Circus, but I will be glad to meet him at any time that he is disengaged or can find it convenient.

Further interest in such a competition will arise from the fact that I am a vegetarian, whereas Mr. Arthur Saxon, in a recently published interview in the New York *Sunday World* (May and 1909), states that he eats very heavily of meat, and particularly of beef, three times a day, giving his opinion also that meat is absolutely essential in gaining or maintaining strength.

Faithfully,

MAX UNGER.

149 West 125th St., New York City.

To Our Friends

Those of our readers who are interested in the advance of the physical culture movement can materially assist its progress by helping to increase the circulation of *PHYSICAL CULTURE* magazine.

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Our Circulation Department will be very grateful for any information which readers may offer regarding this subject.

A Correction

The name of the author of the contribution entitled "The Life Story of a Woman," published on page 465 of the June issue of *Physical Culture* was

erroneously printed, Grace Potter. The authorship of this article should properly have been credited to "Grace Pastor."