

PHYSICAL CULTURE

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...CONTENTS...

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	PAGE
Editorial Supplement.....	246
Exposure of Medical Methods.....	249
Japanese Physical Culture..... <i>By Arthur T. Buswell</i>	251
The Making of Vaccine.....	256
Remarkable Powers of Endurance of Primitive People.....	258
What the "Science" of Medicine is Founded On.... <i>By G. H. Corsan</i>	261
The Power of a Maiden's Gibe..... <i>By The Pioneer</i>	262
How to Resuscitate the Drowned.....	265
Ideal Physical Culture..... <i>By J. R. Stevenson</i>	268
Modern Method of Developing College Athletes.... <i>By N. W. Willard</i>	271
Diana of the Plains..... <i>By J. Redding</i>	273
Modern Hell Makers..... <i>By Timothy Drake</i>	277
The Confessions of a Patent Medicine Testimonial Gatherer.....	279
Question Department.....	281
Editorial Department..... <i>By Bernarr Macfadden</i>	283

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BERNARR MACFADDEN, Editor.

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EDITORIAL SUPPLEMENT

A LITTLE over one year ago, I opened what has been referred to as an "experimental health home," for the reason that it was opened for experimental purposes. I had made many emphatic statements in *PHYSICAL CULTURE* as to the value of natural means of building health and strength, and I desired to prove beyond all possible doubt to every reader the truth of these statements. The interested readers, no doubt, noted at that time my enthusiasm in describing the institution and the work it was intended to accomplish.

Why the Health Home was Closed.

We started with "lying colors." I fully realized the need of such an institution. With weakness and disease claiming their victims everywhere, I felt that the value of such a home could hardly be overestimated, and I wished this first health home to be a standard from which all others might copy. It was my desire to make it co-operative in character, but after a little experience I found that the price we asked for accommodations would not cover the cost. Therefore, to make it co-operative would increase the price; furthermore, we could not state any definite rates, and the co-operative plan was abandoned for the time. I had very high hopes for the future of this and other health homes which we wished to establish, and very deeply regret that my experience in this first institution has not been of a nature to encourage me to assist in organizing others. Many of my readers may have noted that I have had but little to say about health homes for some time. The influence of my experience has lessened my enthusiasm several degrees.

My business experience secured previous to that in conducting this institution was not such as to give me an exalted opinion of human characteristics, but I can truly say that my health home experience gave me a shock. It taught me that nearly every sufferer of chronic disease is sick mentally as well as physically. I must admit that I expected but scant appreciation, but I certainly was amazed at the action of numerous individuals who visited this home. Many came there with the idea of remaining from one to three months. A little experience taught me that I must insist upon the payment of a month in advance to insure the patient remaining there for that period. Nothing can be accomplished in a few days, as our methods would not be given an opportunity to demonstrate their value.

Many persons suffering from serious diseases, after having been at the home

PHYSICAL CULTURE

from two to three weeks with great benefit, and learning the simplicity and realizing the value of our methods, would conclude to return home and finish the cure there, and would insist upon part of their money being refunded. To illustrate: I remember one particular business man apparently well to do. He had been suffering for several years when he visited our institution. He had paid \$50 for one month with the understanding that no money was to be returned. He remained three weeks, and on leaving the home, came to the New York office and demanded the return of part of his money. I inquired if he had been benefited.

"I am a new man; feel like I had been made over," he replied.

"Do you not think you have secured the value of your money?" I inquired of him.

He admitted that no doubt his recovery to health was worth \$50, but he had not remained there the full month and he should have part of his money back!

I returned him the amount requested, as I did many others, but it was with a deep disgust at human characteristics which could be capable of such actions. Many persons who asked for the return of their money had spent thousands of dollars in drugs and other experiments endeavoring to secure health. We had not only given them health, but had shown them the means whereby it could be permanently enjoyed, and still many of them were not willing to pay an amount that would cover the usual expense frequently paid for board alone.

Health is of the greatest possible value when one does not possess it; after it has been secured it is worth nothing. That was the general attitude of many patients who visited this institution.

Although we sent many patients away from the home practically cured, and far more were sent home greatly improved, there was not one who ever offered us one penny more than was charged for their accommodations. Such experience is certainly disheartening when nearly all were aware that the home was being conducted at a loss.

An enthusiastic hygienist, who had advocated and who claimed to have saved several hundred lives by his advice as to the natural means of building health and strength, informed me that during ten years' experience in carrying out this character of missionary work, he had never been offered but one dollar for his services.

I do not by any means condemn all my visitors. Many who visited the home appreciated everything that was done for them and the health and strength which they acquired at the institution, but the lack of general appreciation, the tendency to find fault, and to caustically condemn service and any lack of attention or errors that might be made by employees, was particularly noticeable.

I fully realize that many visitors had the best of reasons on many occasions for complaining of the employees. There was where my principal difficulty lay. It

PHYSICAL CULTURE

seemed almost impossible to find competent, conscientious and reliable help. I changed the management six or eight times while the home was being conducted. It was simply impossible for me to manage it myself and still conduct my publishing business in New York.

We were compelled to secure a large number of new employees in a very short period of time, and it was to be expected that the management of the enterprise would not be properly conducted in all details. A few who visited the home were dissatisfied with the conditions and remained only a short time, but I can truly say that nearly all those who remained there and followed accurately the instructions given them, were greatly benefited. I can recall only one or two cases not greatly improved who remained there a sufficient time to accomplish results. Many were entirely cured, and those not cured acquired information which would enable them to entirely effect a cure at their own homes.

There was much lack of appreciation among the patients, but a number of the employees not only seemed to lack appreciation, but such a lot of egotistical mental incompetents I never have seen before, and hope I will never see again. Although they were drawing a salary for doing work as prescribed by me, the temptation to publish their own idea of their importance could not be resisted, and very frequently I would hear of new theories advanced among my patients by the wonderful intellects of their gifted minds. Apparently, each one was of the opinion that the patients had come there for the particular purpose of hearing and following his theories. Here were opportunities that one would think even a fool could realize were extraordinary. Had a manager been found capable of properly conducting the institution, a salary ranging from \$2,000 to \$10,000 per year would have been gladly paid. But no one was able to rise to the emergency, and every one, with two or three exceptions, who tried and failed, is making much capital over the fact that he was the manager of this health home for a short period, though it would be far more to the advantage of each if nothing were said.

There were occasions when I felt like trying some of the farmers living around the home. They would unquestionably have done better than many who were given a trial at management.

Bernarr Macfadden

Exposure of Medical Methods

The Confessions of a Chief Clerk in a Medical Supply Company

By BURT WILSON



KNOW my statements may not be pleasing to the medical profession. I never claimed to be gifted with a particularly large amount of delicacy when it comes to truth or untruth. A man who grows up in the business world of to-day and is compelled to make his living the best way he

can, becomes hardened after a time; but no matter how conscienceless a man may become, there is a place where he draws the line.

I meet doctors every day. They come in here and buy medicines, instruments, and all sorts of supplies needed in their daily practice. I did not know much about them when I first came here, and I can tell you the experiences I had for the first few months were rather shocking. I had always looked upon the medical fraternity as a very respectable one. In fact I had the greatest amount of faith in them. I remember on one occasion being so sick that I thought I was going to die, and the very presence of a physician made me feel better. If I should feel as though I was going to die now, with my present knowledge, and a doctor came near, I would feel far more sure of it.

I meet them every day, and I know them. They occasionally get very confidential, and tell me about their private cases.

On two or three occasions I was invited to assist them in their operations.

"But won't they think it funny, my being present on such an occasion?" I remarked when this invitation was first extended to me.

"Why, no! How could they? I will simply introduce you as Dr. So-and-So, and you will pass without question."

I had never thought of that, but the plan "worked" beautifully. I merely looked wise and pretended to know everything about everything, and there was no question as to my scientific knowledge.

Not long ago two young surgeons called. They were both healthy, vigorous, lively chaps, joking each other about different subjects. They were looking over a quantity of very fine instruments, and I could not help wondering what operation they were going to perform. I realized it must be a very difficult one, or else they would not be spending so much money. They were as full of the "devil" as a boy just out of college.

My curiosity being aroused, I finally inquired what sort of operation they were going to perform.

"Oh," said one, in a jesting tone, "we're going to cut white meat."

"White meat?" I said, being puzzled at the term, and the jesting manner in which it was uttered. "What do you mean by that?"

"Say, John, Wilson" (pointing to me) "don't know what 'white meat' means." Then they broke into an uproarious laugh, while I was standing there wondering what they could mean, and trying to find excuses for my ignorance.

"So you do not know what white meat is?" said one.

"No: I must confess I do not."

"Well, we will tell you. There is a patient of ours, a very wealthy lady, who has a cancer on the breast, and we are going to amputate the breast. That is what we call white meat."

As those chaps went out I could not help but wish I knew the name of that patient, for I really believe if she had heard them joke about the serious operation they were to perform, she would not have allowed them to perform it under any circumstances. The cold-blooded, unfeeling manner in which they referred

PHYSICAL CULTURE

to the operation made me feel uncanny for some time after they departed.

There was one doctor who had been calling at our place for a long while, and he and I had become quite chummy. One day he said to me:

"Wilson, do you want to attend and see a very difficult operation? You see I want several physicians to be present, to make the operation appear much more serious in character, and I can pass you off for a doctor."

"Sure, I would like to attend."

The operation was the sewing up of a supposed laceration of the mouth of the womb.

We all met at the operating room where the operation was to be performed, two other physicians, my friend and myself. A fine-looking woman came in, healthy and red-cheeked, and I was quite amazed when she was introduced to me as the patient.

She was placed on the operating table in the proper position, and after the preliminary work had been performed, steel hooks were inserted into the mouth of the organ so it could be pulled down into view. I was, of course, a very interested spectator, and though slightly familiar with anatomy, I could see no laceration. The physicians, however, examined it very carefully, and finally the physician in charge took up a pair of shears and clipped off a small part of the edges sufficient to make it bleed. He then took a small silver wire and sewed up the por-

tions he had thus clipped off. This practically completed the operation.

I did not say anything at the time, but I was wondering if it was a laceration they pretended to sew up.

I met my friend the doctor a few days after that, and said to him:

"Well, how is the patient we operated on the other day?"

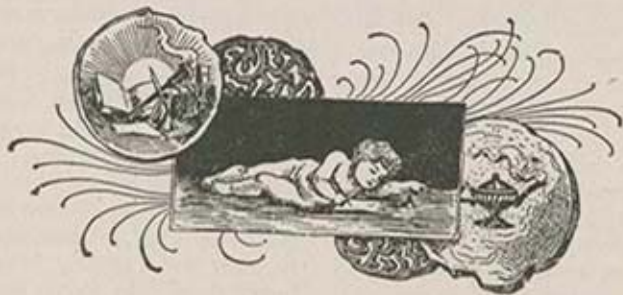
"Oh, she's getting along fine," he replied.

"Say, Doc, now in confidence between you and me, was there anything at all the matter with that lady. Of course I must admit that I am not as familiar with anatomy as I should be, but I could not see any laceration."

"Oh no," he replied, "not very much. I diagnosed it as laceration, and it had to be that. The principal matter of importance was the \$350 I charged for the operation."

I am not a soft-hearted chap, but my friendship for that doctor was not so strong after that. A man who could be so hard hearted as to compel a woman to submit to such an operation in order to secure a fee must unquestionably be a cold-blooded snake.

Of course, I am not going to give my right name. If I did I would lose my job. The editor of this magazine has my name, and I can assure you I am not telling fairy stories. I could write enough on a similar line to fill ten magazines, if I chose. However, I think this will do for this issue.



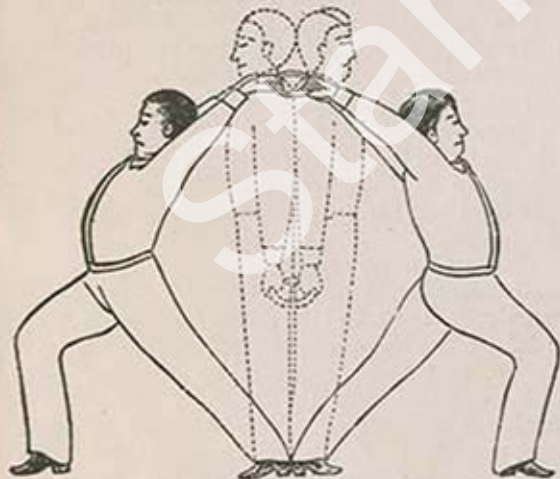
Japanese Physical Culture

By Arthur T. Buswell, M. D.

(The illustrations printed herewith are from the book on Physical Culture by Prof. Tsuboi. The exercises are for two persons, and they combine all the benefits in the way of quick development, and promoting suppleness and health. Heavy japanned iron rings should be used, and they may be employed as dumb-bells, as well as for the purpose illustrated. The exercises illustrated in this article will be found a very effective method of development).



1. Swing from position illustrated by dark lines to position illustrated by dotted lines, stepping back as shown. Make the movements quickly.



2. Stand as shown in dotted lines; swing arms out from the sides to high over head; then step out as shown in dark lines.



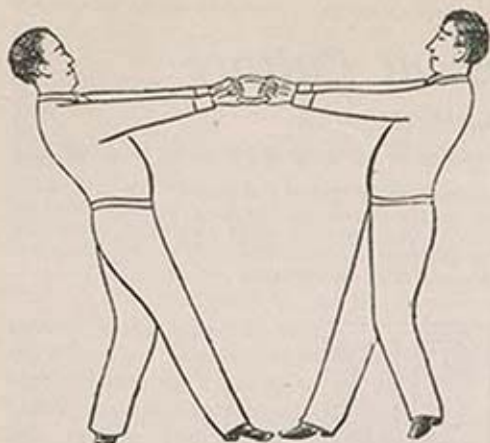
THE Japanese are a receptive people. They have not only accepted whatever came to them for their enlightenment and material welfare, but have sent, at great expense, their messengers to foreign lands for such help as they could glean for the improvement of their social and national welfare. As an illustration of this fact we note their ready adoption of the Chinese written language and its accompanying philosophy. Buddhism, with all its peculiar forms, was so completely absorbed by them that their national religion became almost overshadowed by its teaching.

It is with a peculiar pleasure that we extend a welcome hand to a people eager to avail themselves of whatever they find helpful in our educational and other institutions.

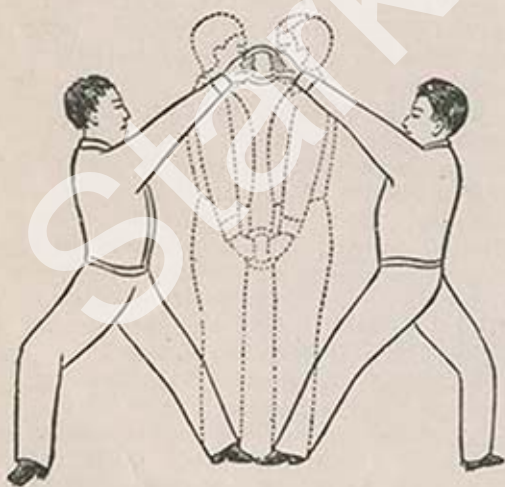
Japan, as in other matters, is wide awake to the importance of physical culture as a foundation not only for the general health of her people, but as a basis for their intellectual and moral strength as well. This fact is evidenced by the appearance in this country of Professor Gendo Tsuboi, professor of the Higher Normal School and the Female Higher Normal School of Tokyo.

Professor Tsuboi, who, like his countrymen, is of comparatively short stature, is, nevertheless, well built, and impresses one with a reserve fund of intellectual and physical strength, and that power of endurance common to the physically trained college man of our own country.

Professor Tsuboi presented me, bowing very politely in accordance with na-



3. Stand as shown in illustration, leaning back as far as possible. Pull toward each other, then swinging body backward, as shown.



4. Stand as shown in dotted lines. Swing hand out to the side, and far over head; then step back as shown. Take same exercise for both hands.

tive training, as he did so, with a copy of the revised edition of an illustrated text book on physical training, written in his native language.

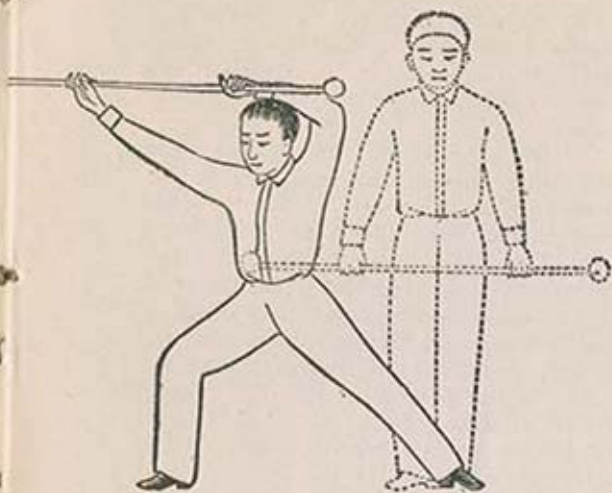
This work, which was first written by a Boston physician who went to Japan, and to whom we shall have occasion to refer later, sets forth the theory and practice of fundamental and free gymnastics, deep breathing exercises, dumb-bell, wand, Indian club, ring and bean-bag exercises, the latter chiefly recommended for the use of women and girls, and a scientific system of measurements, specially arranged for use in the schools of Japan. To the foregoing is added an appendix of anatomical charts, by a native physician, Dr. H. Arai, medical director of the department of education at Tokyo.

Professor Tsuboi left Tokyo in February last, under instructions from the board of education of that city, to make a tour of the world in search of the most improved methods of physical training. He has visited Berlin, Paris, Stockholm, Christiania, Copenhagen, Leipsic, Munich, Zurich, London and Boston. In the last mentioned city he has put in his chief work in this country.

He goes home brimful of new and valuable ideas, and renewed enthusiasm for his great work.

It is of special interest to note the fact that the higher forms of physical training in Japan date their inception from a similar visit to this country of the first vice-minister of education, in the winter of 1876-7. This distinguished personage, having made a journey around the world, reported that of all the systems he had studied in his long research, that of our unpretentious little Amherst College was the best.

This conclusion on the part of the vice-minister resulted in an extended correspondence between the Mombusho, or chief of the educational department at Tokyo, and the authorities of Amherst College, relative to the introduction of Amherst methods into the schools of Japan, and Dr. G. A. Leonard, now of Boston, who was then completing his term at the City Hospital, having previously taken his preparatory course at Amherst, and therefore being perfectly familiar with the system in use there, was selected



5. Stand as shown in dotted lines. Swing wand high over head, and step over to the side at the same time, as shown in dark lines.



6. Stand as shown in dotted lines. Bend over, raising the body of your assistant, as shown in dark line.

to go to Japan and install the Amherst methods in the Mikado's empire.

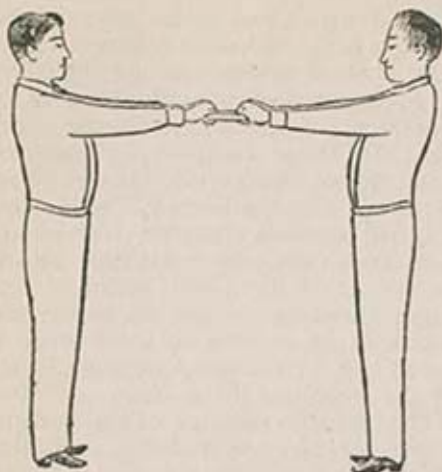
Dr. Leland was a resident of Tokyo for about three years, working under the general supervisor of education, Shuji Isana, Professor Tsuboi being his interpreter during this period. It will be remembered that the late Dr. David Murray, that eminent educator, formerly of New York, was, about this time, also in the service of the Tokyo board of education, directing the general educational system of Japan, and no small credit is due to him for the thorough work he did for the schools of that country.

The distinctive feature of the Amherst system of physical training, and that which was chiefly instrumental in determining the minister of education to adopt these methods in preference to all others then known, was that it consisted of a light form of calisthenics, performed in a single class, every student being compelled to take it. This gave to Amherst at that time a prestige in athletics, as she was the first to adopt systematic physical training for the health of her students.

What caught the eye of the Japanese minister of education, said Dr. Leland, was that every student willingly came and joined in the exercises, which in a most pleasing manner were accompanied with music, and occupied mind and muscle alike.

In the year 1872, continued Dr. Leland, referring to the really superior training then to be had at Amherst, ten college teams assembled on the Connecticut River, at Springfield. Of all these crews, the Amherst boys' muscles showed the best all-around development. They won the race, and it was a pronounced victory for systematic physical culture.

Previous to 1860 Amherst College, like other similar institutions, paid little or no attention to thorough physical development. There were, to be sure, the horizontal bar, the croquet ground, and quoit throwing, each engaged in as an occasion, diversion or pastime, but nothing like an enforcement of scientific physical training had been dreamed of by the educators of the times. It is to the credit of the late venerable Dr. Sterns, who, noticing with his critical eye the gradual decline of certain students



7. Stand as shown in illustration. Bring arms far to the right, then far to the left, keeping elbows straight.



8. Stand as shown in dotted lines. Bend forward as shown in dark lines.

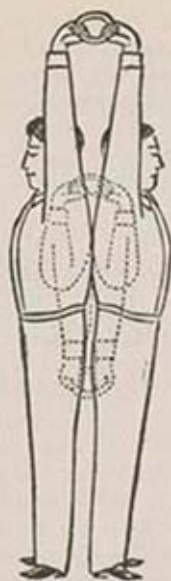
under his care, conceived the idea of laying the foundation for their future health and intellectual vigor in the thorough masonry of scientific physical development.

In the year 1858, one of the most promising students having died, as Dr. Sterns believed, because of the one-sided education of the intellectual, to the utter neglect of the physical powers, this far-seeing educator prevailed upon the trustees to establish the department of physical training as a compulsory part of the college course, which deservedly makes Amherst the pioneer in this line among American institutions. From this modest beginning has grown a demand for athletics, not only in the colleges and universities, but in public and private schools throughout the world.

It is not readily seen how a normal physical development bears upon the moral fiber of youth; but it is, indeed, this "strenuous" quality, as some one has called it, developed in the boy of yesterday, which makes the man of to-day, capable of sustained mental activity, whether it be in the pulpit, at the bar, or in the stock market. This innate power which inspires its possessor to do and to dare—call it "grit," "sand," vigor, courage, determination, or what we may—it is this something which marks the athletically trained man. And in such men, usually, may be found, also, purity and strength, and beauty of character that begets confidence, and earns its way wherever it goes. The boys behind the bat or oar must exercise courage as well as muscle, and thus, in providing for a wise physical training, the educators of our time are building not merely intellect and muscle, but that which is paramount to even these—character itself.

Being an athlete, and in splendid form himself, Professor Tsuboi believes in practice as well as theory, takes off his uwagi (coat) and heartily joins in the various forms of training which he is studying wherever he goes. Hence, when seen by the writer, he was found working like a modern Hercules in a local gymnasium. However, he willingly relinquished the chest weights when invited forward by the director in charge, for a conversation.

Referring to the benefits of enforced



9. Stand as per illustration, with the arms hanging downward, as shown in dotted lines. Bring them up to the shoulder, then high over head.



10. Stand as shown in illustration. Take turns in pulling right and left arm of your assistant back and forward, your assistant resisting movement slightly.

physical training as a part of the school system of his country, Professor Tsuboi said it had already done much for the health and longevity of his people wherever it had been introduced; but, as a rule, the lower classes in Japan are stronger and more healthy than the well-to-do classes, who, soon after leaving the universities, grow indifferent to college training and both eat and sleep too much, though this is somewhat offset by kite flying, tennis, etc. The condition of the wealthier and highly educated classes he found quite different in Germany, England and America. In these countries the more intelligent, as well as the less favored classes, quite generally appreciate the benefits of systematic physical culture as a means of maintaining sound health, and the Americans especially aim to make physical training both pleasant and intensely practical in its adaptation to the various conditions of mankind.

With reference to golf, the professor said it had not yet made its way to his country, and owing to the close cultivation of all available land it was not likely that it would ever be generally introduced.

Professor Tsuboi speaks enthusiastically of the benefits of outdoor sports as a health-giving diversion from work and study, mentioning the art of kite flying in particular. This, of all sports, is the most eagerly sought by both young and old of all classes, and early in February and March, when the winds are strong, the kite-flying fever becomes epidemic throughout Japan. The kites are of great variety, some being 50 to 75 feet square, and will easily lift a man off the ground in a strong breeze. Others are made to resemble children, animals, or birds, while still others are of a rectangular shape, and are gaily painted with pictures of some famous Japanese beauty, old war hero, horses, or even the most startling conceptions of huge monsters. Some are ingeniously constructed with a thin strip of whalebone at the top edge, which acts in the wind like an aeolian harp, and greatly delights the assembled multitude as it ascends heavenward, singing as a bird.

The most curious aerial contests are devised. A common practice with the

boys is to moisten the kite string toward the kite end for several feet with glue, and then roll it in broken bits of glass. When the glue hardens the glass becomes set, thus forming teeth. The game consists in so guiding the kite that the

string will be brought over that of the antagonist's, when a few sharp pulls result in sawing off his string, the kite falls, and becomes the booty of the victor.

(Continued in September Number).

The Making of Vaccine.



SEVERAL millions of people in this country are yearly subjected, either through compulsion, or by the persuasion of friends and physicians, to the operation of having vaccine virus introduced into their circulatory system. It is extremely doubtful if even a small percentage of those so inoculated would submit to the operation were they familiar with the character of the virus so made a part of their body, or appreciated the effects that would follow its introduction into the blood.

Long years of custom—a process entirely conducive to that state of mind referred to in the proverb, "Familiarity breeds contempt," is responsible for the apathy with which the general public contemplates a practice of such terrible import. Blood poisoning is a phrase that a great many people have been made familiar with of late years, and its effects are looked upon with horror. You have to but hint at blood poisoning to the majority of persons to excite the most active apprehension. "Vaccination" is a word that has been persistently employed by medical men and writers on public health so long that our people have become accustomed to the soft-sounding, apparently harmless word; and to the majority of them it means nothing more than a slightly uncomfortable means of securing immunity from a loathsome disease.

The idea contained in both phrases—

"blood poisoning" and "vaccination"—is the same, but perverted use has established in the public mind the wildest antithesis between the expressions. The horror excited by the one should no less be aroused by the other, were it not for the confusion that has been produced by the juggling with the definition, persisted in by the physicians.

In this connection it is not without interest and profit to understand just what this vaccine used in the operation of vaccination is, and the method of its production.

The vaccine employed by the profession for the past ten or fifteen years has been almost exclusively what is known as calf lymph, and has been described by writers as an attenuated culture of small-pox virus passed through the blood and tissues of a young calf.

This lymph is produced in large quantities by institutions, directly and indirectly under the protection of various national, municipal, and state governments; and, like most industries protected by politics, they are nowhere celebrated for honesty of management or the purity of the product turned out.

The calves used for producing vaccine are from one to four months old. They are bought by the vaccine farmers in large lots from cattle dealers. The average price paid is considerably under that paid by butchers for animals of like age. It follows, of course, that those calves which are weak and diseased, and unfit for food, and are rejected by the butcher, fall into the hands of the vaccine makers; and upon such unpromising material they work in their glorious(?)

endeavor to provide the millions of citizens in this and other countries with a pure, disease-restricting virus, which our medical profession would enforce us to receive into our circulation from time to time, whether we desire it or not.

It has been firmly established by repeated experiment that the introduction of any lymph product from a diseased body into a healthy one engenders disorder, weakness, and generally a diseased condition in the body so inoculated; and it is indubitably logical that the virus produced from the rejected, poorly nurtured, diseased calves sold to the vaccine men by the butchers and cattle dealers will produce the gravest evil.

The rejected and dishonored calf being obtained, the vaccine manufacturer proceeds as follows:

The calf is tied down to an operating table, the belly is shaved for twelve to fifteen inches square, the surface is washed, and about one hundred slight incisions are made. Into these incisions one drop of glycerinated lymph—a culture of pure smallpox passed through a solution of glycerine—is allowed to drop, and is thoroughly rubbed in. The weakened animal is then turned loose. Its appetite is gone, and in its poorly nurtured condition it presents a most pitiful aspect. Fever sets in, and the animal becomes exceedingly sick.

In a few days the vesicles appear, the scabs form, and the elimination of impurities of various kinds from the blood

of the animal begins, in the form of pus, which is thrown out of the blood into the vesicles. At the end of six days the process of elimination has proceeded so far that the vesicles contain a quantity of pus, putrid cells, etc., and a scab has formed over the reservoir of disease. The calf is once more bound and laid upon the operating table. The inoculated area is washed with warm water, and each vesicle is clasped with clamps, separately. The crust is carefully removed with a lancet, and the underlying vesicles are thoroughly scraped with the edge of a steel instrument, and the dead skin cells matter that is exuded from the small blood vessels, etc., is transferred to a small crucible. To this horrible mass of putrid animal matter is added an equal measure of glycerine. The mass is then thoroughly stirred and mixed by a small electrical motor. As soon as it has been rendered homogeneous it is placed in another crucible and passed through a very fine sieve in order to remove the coarser pieces of rotten flesh, hair, etc. The mixture is again beaten up and thoroughly mixed, and is then transferred to tubes, and distributed throughout the country as pure vaccine virus.

It is this wonderfully compounded matter that our health boards, school boards, family physicians, and legislations, insist upon having introduced directly into the circulation of millions of school children every year.



Remarkable Powers of Endurance of Primitive People

By F. P. Tape



THE traveler in the equatorial region of Eastern Africa, either in pursuit of game, or for scientific research, cannot fail to notice the deeply indented footpaths which traverse the country from end to end, over mountains, through morasses, fording rivers, and passing through gloomy forest regions and dense scrub. They are the ancient caravan routes, over which have been carried, on the backs of humans solely, the treasure-trove of the Dark Continent; the ivory, the gold, the precious stones, the rubber and spices, and whatever has incited the greed of man, more powerful and cunning than his black brother, the child of Ham, to enslave him for this purpose. How many millions of patient, weary feet have trodden those narrow pathways, roads of Calvary one might be tempted to call them, no man can tell at this present day.

Frequently, however, in the good old slave days, when Tippoo Tib wielded the "sjambok," or hippo-hide whip, over all the Lake region, many caravans must have numbered a thousand head or more. The average weight per load for each man to carry is about 60 pounds, and the distance from Uganda and Unyoro to the sea at Bagamayo or Mombasa is 500 miles. Consider these figures for a moment, bearing in mind that the average speed maintained day after day never falls short of ten miles, and the performance must appear to us stupendous, and hardly credible. Just imagine an average citizen of our own, an individual injured even to hard labor, shouldering a bag or package weighing over 60 pounds at the Battery and carrying it up to the shores of the Harlem River. Add a broiling hot day in mid-summer, very little food, and no water to speak of, and how many of us do you think could do this task, which our humble, patient, primitive black brother performs uncomplainingly for 50 days or more on end, for a distance that would reach as far as from New York to Buffalo? One naturally inquires why and how he can do this; why his frame, no better originally than ours, can perform this seemingly marvelous feat. It is the old, old story of plain, healthful living! A lesson that the sages from time immemorial have tried to



GATHERING COCOANUTS.



EAST COAST NATIVES.

teach mankind, sad to say, with so little success, as the ages roll by, and one would think that people would grow wiser. Yet how simple is the story after all. That little nigger pickaninny born out there to shoulder some day that caravan pack, has a good start from the beginning. The parents are healthy children of nature, the wee one knows no other nourishment but the mother's breast milk till it is old enough to relish the principally vegetable

food of the elders. The child is not hampered with irksome clothing, but the limbs are free to grow and develop. Running, climbing and swimming are the main pastimes of his youth, and by the time it arrives at maturity the body is fully able to take up the burden and stress of this life. It is never to be supposed that the African races were ever comely of feature or high in intellect; mayhap the oppression of centuries had much to do with this



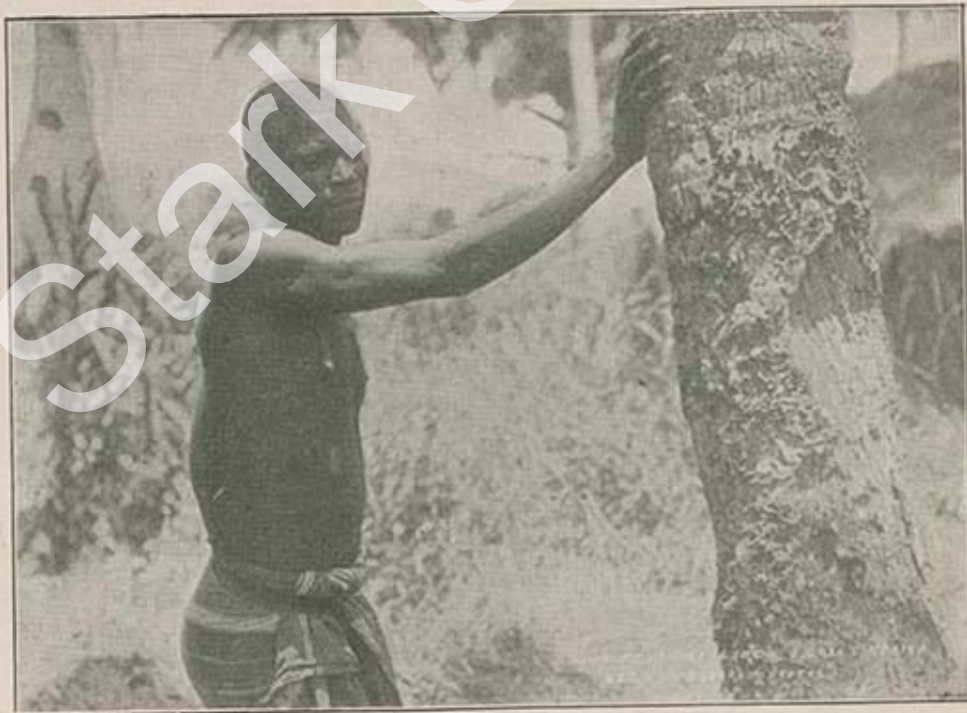
KAFFIR BATHING.

failing; but it cannot be denied that among them occur the finest and most perfect specimens of mankind. Some branches of the great Bantu tribe of East Africa, notably the Zulus and Basutos in the south, and the Masai on the slopes of Kilima Njaro to the north, are almost matchless physically.

Know you the story of the battle of Isandhlwana, where near 2,000 British soldiers fell under the assegaits of the hosts of Cetewayo? Twenty-four hours before that fateful day the British scouts knew the Zulu army to be 47 miles away. Yet in that one day and night 25,000 black warriors, in impi's of 1,000 each, marched, or rather ran, that whole distance without stopping, and were there in time to surprise and overwhelm the white forces, camped in blissful ignorance of their coming.

Now, the staple, and almost only food of these people is maize and milk, with meat only on festive occasions. The climate is not as mild as one would suppose, and in winter often very inclement on the high plateaux where they live. But man is, before all, a creature of habit, and so these people have succeeded in

inuring their skins to the weather. Cold and heat and wet run off their shiny black skins like water off a duck's back. Away up in the Drakensburg Mountains, 8,000 feet and more above the sea, the people bathe habitually, winter and summer, in the ice-cold brawling mountain torrents, without any apparent damage to their health. Europeans who sojourn there are mighty glad of a roaring fire and plenty of wraps and blankets. Among the Basutos a fine and popular style of sport is the matching of a man against a horse in a turn of speed. Strange to say, the horse is almost invariably worn down in the end, and as far as endurance goes the man beats him hollow. What simple, sober living can do for mankind has been shown us by the Boers, who, in four or five generations, have developed into a healthy, sturdy race almost without equal. It is the exception and not the rule with them to measure less than 6 feet in height, and in very many instances even their women folk exceed that. Grand old President Kruger was in his prime so strong that on one occasion he slew a prowling lion with a pick handle.



EAST COAST CLIMBER.

What The "Science" of Medicine is Founded On

By
G. H. Corsan



AND she had suffered many things of many physicians, and she had spent all that she had, and was not in the least benefited, but rather grew worse."
—Mark v., 26.

Saint Mark's plain, unvarnished description of the result of doctors' treat-

ment was composed of antimony, salt-peter and mercury. And that man was part of the earth's ingredients, and when he was sick he lacked one of the above trinity. This he tried to remedy by experimenting, and the result was, in every case, a hasty trip to the grave.

Later on, during Shakespeare's time, we find the witches teaching materia



ARTHUR E. PROY, BAR HARBOR, ME.

ment at the time of Jesus is a very faithful depiction of medical men of all ages. During the Middle Ages 3,000,000 persons died as a result of a single visitation of the bubonic plague. It was in the Middle Ages that Paracelsus, one of the fathers of medicine, sprang up and announced to the world that the whole

medica to the physicians, as the rhyme goes in "Macbeth":

"Eye of newt, and toe of frog,
Wool of bat, and toe of dog,
Adder's fork, and blind worm's sting,
Lizard's leg, and owlet's wing."

When we come to the eighteenth century we find things still worse, for in Dr.

Quincy's "The Complete English Dispensatory," we find: "old man's urine, a sure cure for measles"—taken internally at that! And then follows syrup of snails and earth worms, wood lice, goat's blood, viper's fat, bear's grease, stag's heart, dog's fat, lizards, powdered dried foxes, snakes, etc.; cochineal, ammonia, rhinoceros' horn, elk's hoof, spirit of human skull, poison ivy, goose fat, and many other animal and vegetable abominations.

We have just passed out of the nineteenth century, and the abominable list of prescribed medicines has changed somewhat, but improved not at all. For the ocean was dredged for its filth, and it yielded cod liver oil. The bowels of the earth gave us Epsom salts, Glauber's salts and hundreds of mineral waters to destroy the stomach of mankind; the swamps were searched and miry marshes were stripped of their bitter elements, and that king abomination, quinine, was discovered, and man thanked God for what the Devil had given. The desert was denuded of its rattlesnakes and their poison glands were extracted for our benefit (?). But, reader, medical science is progressive; it does not stay in the rut, but advances. All the above relates to the past, for we are now in the great twentieth century; we do not discard a single substance, but examine each one under the powerful microscope for its active principle, which we separate and make a special culture of in gelatin.

Thus we extract the boils of cattle, the red marrow from mouse's bones, the semen of billy goats, the spittle of mad dogs, the germs of glanders, anthrax and tetanus. These we plant in our little gardens, which consist of rabbits, guinea pigs, etc. In the old days they drank blood and then visited the barbers, and were bled, but to-day they inject the rotten blood (pus) into the veins of the sick and well! We saw in the old days 3,000,000 people die of the black death, but to-day 6,000,000 die of the white plague in a year.

Edison, Marconi, and hundreds of other great men are working to-day to advance mankind in the electric world. If I pay a carpenter or any other kind of laborer to work for me he will do it well and faithfully. If I pay a lawyer to lie for me he will do it to the best of his ability. And so on, through the whole list of professions and trades, with the exception of the doctors. We pay the bartender to poison us, and he poisons us. We pay the doctor to advise us with regard to sanitation and hygiene; and he humbugs us every time; dosing us with morbid matter, giving us absurd advice as regards clothing, night air, draughts, food, etc., etc. And, not satisfied with charging us the highest possible fees, we find the modern physicians getting into Congress and Parliament, and making laws to compel us to patronize them, and them only.

The Power of a Maiden's Gibe

By The Pioneer



LOOKING back over what might be called a strenuous life, which I have lived as well as any one could, perhaps, for, notwithstanding its strenuousness, its hardships, which would have laid many a man low, I am hale and hearty at seventy-five, with unimpaired digestion, a comfortable home, and with lots of interest

in life still, I have been led to ask what made me superior to others who started it with me. I am not one of the pantalooned fellows who are ready to quit because of accumulating weaknesses. I am physically pretty nearly as strong as I ever was, and life has not lost its charm for me, by any means. I have lived to see a majority of those who started on the career with me overcome, laid low, vanished from the ken of men. And, as I've said, lately I have been peering into the past, to discover if I could, just what

made me different from my fellows, and enabled me to outlast them. I think I have discovered it, and it stands out distinct in my memory across the tide of sixty-four years, as if it were yesterday.

It was the tantalizing gibe of a little, red-petticoated mite of a girl, with flowing, curly hair, blue eyes, and a round, peachy face that was usually all smiles.

She just made a pointed remark about me one day in those far-off years, that stung me to the quick, stirred up my pride, set my ambition going, and spurred on all my physical powers till I had developed them to something like what they should have been.

You see, in those old days, schools were not what they are now, especially in the country districts. The old red school house was a reality in those days, and girls and boys went the same way, studied in the same classes, and grew up just as chummy, and a great deal more contented than boys and girls do now with their separate schools, and the tremendous efforts that are made to keep them away from each other. As if two young animals, which if left alone would think of nothing but play, could possibly think of hurting each other. The old fools that give them such vulgar notions about being seen in each other's company are responsible, I believe, for a lot of the devilishness we read about in the papers nowadays.

But, as I was saying, in them days we all went together, and, my, what times we had! We didn't have none of your modern parlor games—snipping rings into pockets with your finger, or knocking a ball across a table. We played out of doors, winter and summer, where the air just got down to the bottom of one's lungs whether he wanted it to or not; where the sunshine painted a glow on the skin, the wind helped to keep the blood pure, and the doctors didn't have a thing to do.

I was just turning twelve when I received the impetus that started me on the track that I have kept ever since.

I was an ordinary boy of that age, rather below the usual size; in fact, what the uncharitable called a "runt." I was not chosen by the larger boys for any of their rough out-of-door games, and I was

fast dropping to a condition of a moping in-doors boy. I was well placed in my classes, and stood high, but I was not satisfied with myself, although I didn't know it then.

Well, after the Christmas holidays that year I'm telling you about, a new girl came to school. Her father had just bought a place out near where mine lived, and our roads lay the same way. I liked her rosy cheeks, her saucy smile and independent behavior, and I started out to carry her books the first day she came to school. She looked me over, and I fancied she lifted her nose a trifle at my insignificant size, but she didn't say anything, and down the road we went together. We didn't get very friendly. There was always more or less constraint between us, for somehow I sensed that I was tolerated rather than cordially liked.

Well, St. Valentine's day came around, a period when all the children make believe they select a Valentine, and I was divided between hope and fear that my little curly-headed divinity would not select me. And she didn't. She sent her regards to a tow-headed stupid, a head taller than I, who was loud-voiced and one of the leaders in the games. I despised him for a lazy blockhead, but I could not deny that he was better grown and more manly looking than I.

I took my defeat quietly, sneaked off home with a lump in my throat without saying anything or letting on to any one that I had sent a Valentine. But I had. The little curly-head had it, and a woman's vanity prompted her to make public boast of it. And she sent it back to me by my hated rival, with the outspoken comment, that she didn't want for her Valentine no "mamma's baby boy."

Right there and then I made the wicked resolve to punch the head of my tow-headed successor in her affections. It was an ambitious resolve, but I was desperate. The very next day I went boldly out among the big boys. I ran their errands, let them make me the butt of their practical jokes, stood a lot of cuffing and kicking, but all the time I was getting points. When spring came, I ventured one day to the swimming hole, a place I had never dared to follow them to, for fear of their pranks. With a shout, they

seized me, and relieving me of my clothing, tossed me, heels over head, into the water, with the injunction to "strike out for shore." I did, and I reached it.

I took all the knocks that were coming my way; I was determined upon the strenuous life, and I was living it, and I grew hard and muscular. Still, I didn't increase very much in stature. I simply broadened, got harder muscles and more wind.

I was still doubtful about trying conclusions with my tow-headed rival, but one afternoon in June, when we were loitering home from school, somehow my lost beauty's attention was directed toward my person, and she said to her constant escort, "Ain't Willie Daniels a little runt? He couldn't fight a girl, could he?" And the great hulker boastfully answered, "Naw!"

"I can fight you!" I blurted out, all the anger in my soul swelling and firing me to desperation.

"Oh, Tommy, don't fight him; he's too little!" said Miss Trouble-Maker, and with that my books went "bang" on the ground, and my hat followed them, and with flaming cheeks, I faced Tommy.

"I'll show you whether I can fight or not," I muttered, and without waiting for provocation or thinking of science in attack, I struck out boldly, and started a thin stream from Tommy's nose, whereupon we clinched, and punching, pulling hair, scratching and struggling, we rolled here and there. I saved my wind, and kept hammering away at him wherever I could see an opening. The bloody nose was a good mark, and I soon had him

blubbering, and when I found his hold slipping, I proudly turned him over on his back and demanded:

"Nuff?"

"Uh-hu," he blubbered.

"Am I your master?" I asked, with an ear held firmly in each hand.

"Ye-e-e-s," was his thoughtful and circumspect answer, and then I let him up.

It was a crude, brutal, uncivilized feeling that had ruled me up to this point. It was a little savage's desire for revenge, for satisfaction for wounded pride; but I discovered that I was not the no-account thing physically I had been rated before. I kept up my record in my classes, and became the equal of my playmates physically, and in some respects their superior.

The little girl was just an episode. I never tried to make her my Valentine again, and I don't know whose Valentine she finally became. It doesn't matter now; but she gave me a boost that was worth more to me than any possible inheritance or fortune that could have descended upon me; and whenever I have triumphed again, in these later years, when I have had my powers tried, and they have brought me through, I feel very thankful towards the girl who found fault with my person in those far-off years and spurred me on to make something of myself. Just as she gave me the impetus for that first battle and victory, I believe her selfish, childish, cruel prattle made me the man to be able to do, bear and overcome the things I have overcome, and prepare myself to be what I am to-day, a man instead of a dottering infant of the second childhood estate.



How to Rescue the Drowning and Resuscitate the Apparently Drowned

By F. W. S.



ANY swimmers, even those expert, have no idea of how to rescue drowning persons. This is the more remarkable inasmuch as it is very easy to effect such a rescue.

Not only swimming, but the art of rescuing the drowning, may be taught on land, supplemented by instruction in a swimming tank. To keep one's head is the main requisite when attempting a rescue.

It is a fallacy to suppose that a drowning person rises several times to the surface of the water. There is no law to determine how often a person rises to the top of the water, so waste not a moment in looking for the third rise, but take off your shoes and heavy clothing, jump into the water and swim for the bubbles, as they indicate the air from the lungs of the one under water.

If the drowning person struggles, approach from the rear, otherwise he may catch you in such a way that both will

be helpless. Try to turn the drowning one on the back. Take a firm hold of the arms, just above the elbow, and draw them upward at right angles to the person's body. He will then be under your control, and can neither turn, clutch, nor struggle to any effect. Then by employing the "back stroke," you can easily bring him to land.

If the person's struggles are violent, so you cannot follow above directions, slip your hands under the armpits and place them upon the chest; then raise the arms at right angles to the body (*keeping the head out of water*), turn on your back and swim with the back stroke. This means swimming on the back, using the legs for propulsion, the arms being used to support the drowning person, the rescuer's body being undermost. (See Figure A.)

Sometimes a drowning person grabs wildly for the would-be rescuer's neck. In this case the best way to release one's self is by forcing the other's head back until he lets go his grip. If both of the arms are free, put the left arm around the drowning one's waist, and with the



Fig. A. HOW TO SUPPORT A DROWNING PERSON.

other hand under the chin, force his head back until he releases you. A man can not breathe if his head be forced far back, and he will soon relax his muscles if you shut off his breath. Care must, however, be taken not to dislocate the neck, which might easily be done in the excitement of the moment. With only one arm free place the hand on the opposite shoulder, and with the forearm throw his head back as before until you are released.

RESTORING CONSCIOUSNESS—ARTIFICIAL RESPIRATION.

After reaching shore safely, the next problem is to restore consciousness. Drowning is suffocation, the lungs are filled with water, and there is no room for air. First loosen the clothing; then turn the body on the face, letting the water run from the mouth and nose.

Both mouth and nasal passages must be cleansed by wiping well. Especial attention must be given to the patient's tongue, which is liable to fall back into the throat and prevent breathing. A cork may be placed between his teeth while one feels in his mouth to see whether the tongue is in the proper position. If not, it must be grasped firmly and pulled forward. Loosen the patient's clothing about the neck and chest, but be careful not to unduly expose the rest of the body.

As soon as a blanket can be procured, strip the patient, and dry well under cover.

Be careful that a crowd of curious spectators does not shut off the air. Roll the body gently on one side, and then forward on the face again, keeping the

shoulders lifted by a rolled coat. Alternate the movement by turning on the opposite side.

If this does not result in restoring the patient's breathing, try the next method.

The patient is here turned on the back. Kneeling behind the subject's head, grasp him firmly by the wrists and, bringing the arms down on the chest, make firm pressure, as indicated in the figure B below.

Then draw the arms up and back to their fullest extent. This puts the muscles of the chest through the same relaxations and contractions as occur during breathing. See figure C. These two movements may be repeated rhythmically every four seconds.

Stimulants, like whisky and brandy, may be given also to increase the heart action, after patient begins to breathe.

TO THE DROWNING.

Try to keep your presence of mind. Remember, one reason why good swimmers are sometimes drowned is because they are overcome by fear, and therefore have no control of themselves. The loss of presence of mind leads to paralysis of the body, or to such wild exertions as accelerate drowning. The ability to behave wisely in cases of sudden accident can only be acquired, however, by experience. Hence, in some of the European swimming schools pupils are taken out boat riding and suddenly upset. They are also pushed overboard and subjected to all manner of pre-arranged accidents. In this manner they learn how to behave in cases of real accidents. They are taught also to have faith in the sustaining power of water itself, which will hold them if they render it the least help. A finger laid on an oar, or almost any floating substance, will sustain the body in calm water. Should you find yourself

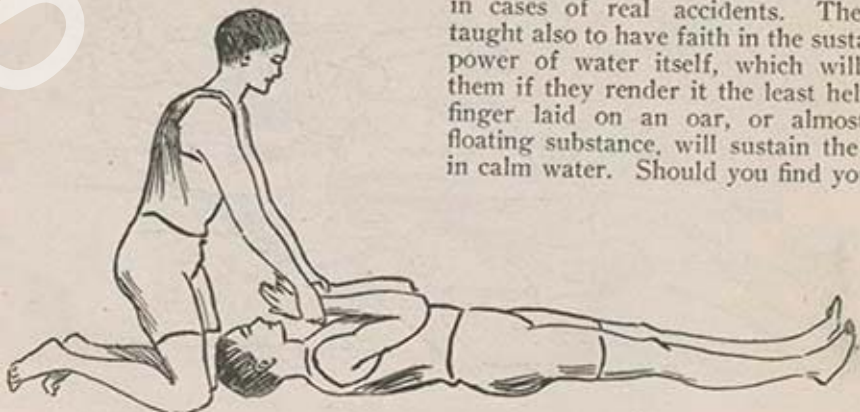


Fig. B. INDUCING ARTIFICIAL RESPIRATION. MOVEMENTS AS IN EXHALATION.

upset in the water, do not attempt to climb upon the overturned boat, but quietly take hold of it. It will support you. A boat half filled with water, or completely overturned, will support as many people as can get their hands upon the

gunwale, if they only remain quiet. Try to keep your head above water and your lungs full of air.

Vanity drowns many people, who become too confident, and over-exert themselves. Then there are people who cannot get enough of the water, and stay in too long. Their muscles become cramped, and when they get into deep water they are helpless, unless they have at least learned to float. One who can float may easily save himself, even if he cannot swim.

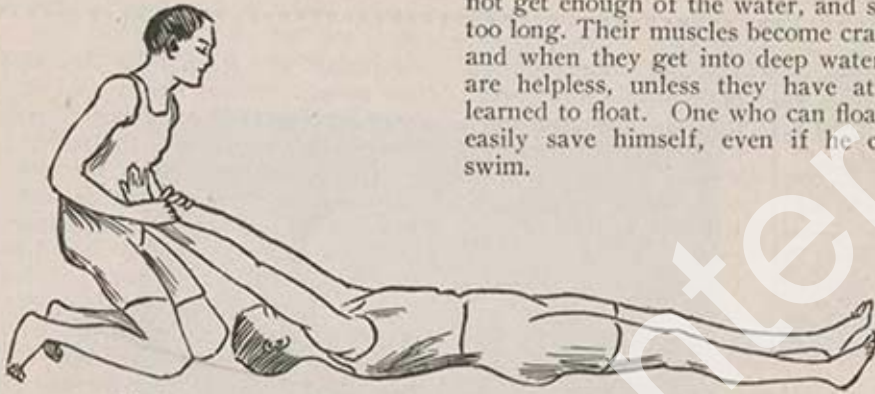


Fig. C. INDUCING ARTIFICIAL RESPIRATION. MOVEMENTS AS IN INSALATION.



C. A. PULASKI, SO. BOSTON, MASS.

Ideal Physical Culture

By J. R. Stevenson



PHYSICAL culture, as understood and practiced by the people of to-day, is exceedingly simple, compared with what will be understood and practiced by those who come after us. Rapidly shortening life, an appalling frequency of weakness, and the impotency of healers of old schools to treat successfully, weakened and diseased conditions are responsible for the turning of thinking people from the theories and falseness of existing customs to the older, primitive and effective processes of Nature. On every hand one hears of the wonders accomplished by a little devotion to cultivation of the physical part of our natures. It is not an unusual thing for persons who have been chronic and hopeless invalids to discover that a little daily use of their muscles brought speedy relief, and they spread the knowledge on to others, and the simple secret of health and strength is being made known to the multitudes.

But I contend that this is merely the forerunner of physical culture of a truly scientific and satisfying character. Scientific men have been so busy running after rainbows, in the shape of theories of panaceas, of elixirs of youth, etc., that they have not taken the trouble to observe and tabulate the results of very simple experiments in the matter of physical culture.

Ask any doctor and he will tell you that man grows or develops till he is a certain age, and then the process ceases. His science has been concerned for centuries with trying to discover some all potential extract that will make permanent the development secured at this point of maturity, and endow the individual with all the lustiness, health

and beauty of youth. For disease they have sought potions that would stay its progress, and miraculously restore strength and appetite to the sufferer. Now, as a matter of fact, no man can tell you when development ceases. We can trace it pretty near to its origin. We know in a dim way about cellular life and cellular growth. Experience has demonstrated to us that the man animal reaches the period of his growth in height by a certain age, but experience no less emphatically teaches us that the process of decay and repair goes on as long as life itself.

If we go a step further we deduce from observation that the physical powers are capable of being cultivated during the period of most active development, and the experience of every convalescent demonstrates beyond peradventure that growth, or development, may take place in the body at any period of the existence.

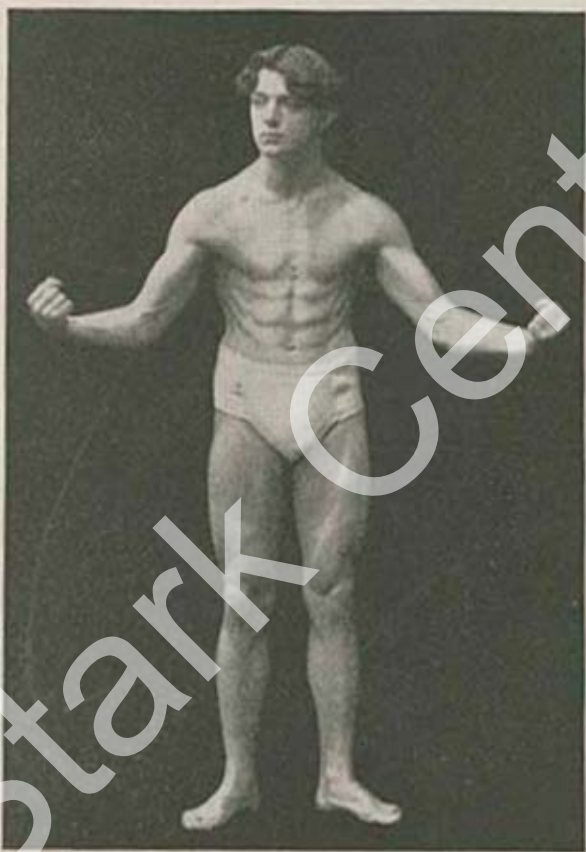
It follows then that the secret of healthy, vigorous life, of recovery from weakness and disease, lies wholly in a scientific knowledge of physical culture—an understanding of what invigorates cell life; what stimulates it, what supports it. Its application would be what I would call scientific physical culture.

Anatomists tell us that we have, in our long process of evolution, lost the power to use at will certain muscles, simply because there was no call to use them. Men and women without this knowledge of the importance of physical culture, neglected every set of muscles except those employed in getting a livelihood. And a little later they came to rely upon the potency of drugs to free them from effects, which judicious cultivation of their physical selves would have quickly overcome. Custom, followed blindly, has thus robbed us of the power to employ many parts of the body at will.

A little experiment will prove this to

any one. How many persons can hold the fingers of either hand extended, and bend the little finger at the middle joint, without the other fingers crooking too? How many persons can put the left hand to the same uses as the right with equal facility? In fact, how many persons are there who can do anything freely, make any demand that the hands, arms, or body is capable of performing, and have a re-

A great many persons who have rushed into physical culture have taken up a few stereotyped movements, which bring into play muscles long unused, and they experience stimulation and invigorating influences throughout the entire body. When the true value and scope of physical culture is understood it will be a more elaborate method of self culture than it is now. Its adherents will dis-



WALTER McADAM.

Age 19; 5 ft. 7 ins. high; after one year of systematic exercise.

sponse in other than the one habit-bound way?

Manifestly this is wrong. In a dim way the people of old realized that there was some sort of a physical superiority in the ambidextrous man, but they did not appreciate the cause. It was considered as a gift, and none realized that it had been acquired by practice, unconsciously taken up though it might have been.

cover that working with dumb-bells, exercisers, etc., does not comprise all its practice, and that if they would acquire the ideal development they will have to go into many minor details which are now entirely overlooked, even by the physical culturists who assume the most scientific courses.

I have seen a young man ardently exercising day after day, confining his work

to flexing his arm and working with dumb-bells, with the sole object of acquiring a large arm and a hard biceps. When he secures this he will be astonished to find some fellow with a smaller arm, and one far more pliable than his, capable of performing feats he cannot touch.

Right there lies the lesson. One can assuredly cultivate this, that or the other muscles by assiduous practice, but often it produces no lasting benefit, because other parts of the body have been entirely neglected.

One can easily increase the chest measurement, the size of the arms and legs, strengthen the muscles of the abdomen and back, but even when this is done there may be poor, weak, starved muscles, which prove a constant worry, because they have been neglected.

The ideal physical culture then is that which embraces every part of the body. One should be able to use right or left hand indiscriminately; to perform movements with the toes which approximate the functions they were originally created for. A little experience will convince any

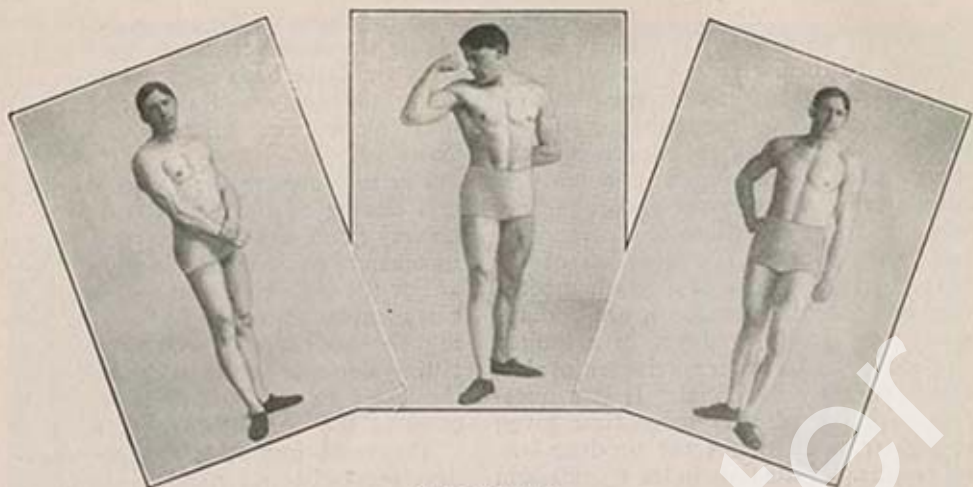
man, however well developed and strong he may consider himself, that there are many poor, weak, starved muscles in his anatomy; muscles which he cannot control because they have been so long unused. And if he is a wise man, if he has observed any of the benefits of physical development, he will set out to discover and develop these weak parts. To live long, live well, live happily, all-round development is necessary. Your strong men—weight lifters, pugilists, long-distance runners—men who have sacrificed everything to the development of particular sets of muscles, do not furnish the examples of long-lived men. Their errors find them out in the end, and they suffer for them.

The individual undertaking self culture should not confine himself to one series of movements. He should study his body intelligently, learn its weaknesses, and set out to remedy them. In doing this he will secure the degree of strength one of his build and weight should normally possess, without a gymnasium course, or the daily grind at some exhausting exercise.



FRED. T. PERRY.

"I became interested in your magazine a year ago. I was 23 years old, weighed 123, and was weak physically. I commenced working to develop myself. To-day I weigh 149, am as hard as steel, and I owe it all to 'PHYSICAL CULTURE.'"



N. W. WILLARD,

Who made the highest percentage in strength tests at Columbia College this year.

The Modern Method of Developing a College Athlete

By N. W. WILLARD



THE natural conditions of human life, at least as far as concerns the readers of *PHYSICAL CULTURE*, have so changed from those of a more primitive age, that life is, for most of us, highly artificial. Most of this artificiality is, of course, beneficial, and many live to

work and enjoy themselves who could not have survived under more vigorous conditions. Many, on the other hand, because freed from the constraint of necessity, have suffered themselves to be satisfied with but a partial development of their physical powers. What has really been brought about is the possibility of development not only for those naturally vigorous, but also for the weaker members of society. It is no longer a matter of necessity, but of one's will. The desire to be able to take part in athletic sports, and the endeavor to fulfill that

desire, have given me whatever strength I may have.

In describing the course of training, if it may be called a course, which I have followed, it is in no wise as an instructor to others that I do it. The whole question seems to rest for the most part entirely with the individual. A determination to make the most possible out of one's self will find its own means to accomplish this, and that without great difficulty. In so doing, one of the first considerations will be personal pleasure, coupled, of course, with common sense. This has been the ruling motive in my work, and has, I am sure, been largely responsible for the routine of exercises adopted. Why certain particular exercises have been taken rather than others can be only partially explained, for the pleasure afforded by this or that particular exercise, rather than some others, does not seem to rest on a logical basis. For example, although enjoying a few exercises with heavy weights, there seems to be no pleasure in putting them

up with one or both hands, and yet others do this regularly, and with great enjoyment to themselves.

Owing to the fact that my time for exercise was somewhat limited, I was led to two things—first, to supplement my work in the gymnasium with some very simple calisthenics in my room; second, when in the gymnasium to do more or less heavy work. The question of the value of heavy work is a much mooted one, and the criticisms on it are perhaps made very justly, and yet in a limited amount I find such exercise enjoyable, and apparently beneficial. It is a question with me whether more time given to lighter work might not produce better results. If the time in the gymnasium were twenty minutes, or half an hour, I gave up from five to ten minutes to a very few exercises with the weights, and the rest was divided between chest weights, one-pound dumb-bells and the medicine ball, the usual order being chest weights, heavy weights, light dumb-bells, medicine ball.

In my room I found that I accomplished the most by having a very limited number of exercises, and eventually reduced the number to six, which I will give very briefly.

The first is the full bend forward. Standing erect, the hands are held straight above the head, at arm's length, palms forward and thumbs interlocked. With a full sweep forward, bending at the waist, but keeping the knees straight, the hands are touched to the floor. The arms and body are then swung upward and back as far as possible. This exercise is done slowly, but energetically, from ten to twenty times.

With the body upright, place the hands on the small of the back, letting the fingers just touch. Bending forward at the waist, swing slowly around, keeping the body as nearly horizontal as possible. The circling should be alternately to the right and to the left.

Another exercise which seemed valuable for the waist muscles consisted in lying flat on the back on the floor, with the hands clasped under the head, then coming slowly to a sitting posture, and again as slowly reclining.

For the arms I use what is commonly known as the dip. Lying face downward,

with the palms of the hands on the floor, beside the shoulders, heels together, and body rigid, the body is raised by straightening the arms and then lowered, the chest alone being allowed to touch the floor.

For the forearm the vigorous opening and closing of the hands was found to be very good, as much energy being used in opening the hand as in closing it.

For the leg exercise the same position was assumed as for the body circle. Keeping the body erect, bend at the knees, sitting down as far as possible, allowing the heels to rise from the floor; then come to the upright position again.

The most important step in physical development, to my mind, is the acquirement of the habit of deep, slow breathing. This has been a part of my work which I have pursued with what might seem a mal-persistence, taking it with me everywhere. The day's work will drive the thought of careful breathing from the mind, but it will come back from time to time, and whenever it does, an effort should be made to breathe more slowly and fully. The result will be, in the course of time, the formation of a habit of breathing in this way. It seems to me that the importance of this can hardly be over-estimated, for all of the functions of life depend so largely and directly on the lungs that the better they do their work the better will be the work of all other parts of the body.

While there is a certain amount of importance to be attached to particular exercises, the manner of execution is of far greater importance. In this it is not ease or grace of execution that I have in mind so much as the spirit that goes into each effort. The whole heart should be put into this work, and when this ceases to be the case, it is certainly time to stop. If anyone has the idea that progress is proportionate to the amount of time given to the work, he is certainly laboring under a great delusion. It is not at all an uncommon thing to find at gymnasiums men who spend hours each day in their athletic suits, loafing all the time without progress. A half an hour daily of whole-hearted work is more than the average man will desire, and for mere physical condition might well be made the outside limit.

Diana of the Plains

By J. Redding



ANOTHER girl!" Holbert Cummings echoed the sententious remark that was thrown at him by an elderly woman who was bustling about the room, as if she were ex-

remely busy, without leaving any visible signs of her

efforts in tidied furniture, or straightening out of the tangled articles that were thrown upon chairs, bed, and tables.

Cummings took off his hat, with a sigh, and asked: "How's Mary?"

"Oh! she's all right. Mary is not one of your weak, shaky women that can't stand a breath of cold air. She's laughing in there, with the neighbors, but she feels dreadfully over your disappointment."

"Well, it is a little bit disappointing, that I won't deny," drawled Cummings; "but, then, Nature knows best, and perhaps we won't be any worse off with a sixth girl than we were with five. Though I would have been mighty pleased if this one had been a boy. Boys are more to a man than girls, you know."

Cummings slowly strode off to the inner room, where the little pink, newly arrived lay by its mother, its wrinkled visage puckered up into a frightful scowl at the annoyance of the

light, its eyes nearly closed, thinking hard in its baby way, perhaps, of all the new, strange sensations it was undergoing.

"Oh, Holby," cried his wife; "it's another girl."

"Well, that's all right, Mary. We've got room for her, haven't we, in our hearts and in our home? Boys make a terrible sight of trouble sometimes for their little mothers, and girls never need so much watching over. I guess the Master knows what is best for us."

And he bent his great, shaggy head and kissed the pale-faced woman whose eyes were brimming with tears, and lips were beginning to tremble.

"Don't you feel like this," he commanded, tenderly. "She's a cute little woman, and will turn out a wonder, see if she don't."

It was a widely known fact that Holbert Cummings and his wife desired a son and heir. They had prospered greatly in that broad, strenuous, wide Southwest, where the earth gives her increase with no grudging hand, and lands and cattle and bonds and money had come to them. But a son had not. The five little girls who had preceded the latest arrival were bright, healthy and lovable children, but there was a great vacant place in both parents' hearts, waiting for a son—and he came not.



The youngest, which was hoped so ardently would prove a male, proved a sturdy mite, and she was soon kicking and cooing, a perfect type of healthy animality, as her sisters had kicked and crowed before her. But, somehow, she did not draw the strings of love upon the mother heart as she should. What maternal wealth of affection she had left had been reserved for a son; this little girl was a disappointment, and she could not reconcile herself to it.

Cummings, somehow, sensed this attitude of his wife, and he sought to make up for it. The youngest girl received every manifestation of his love. He more than made up for what his wife failed to give.

Mary, and Alice, and Bessie, and Jennie, and Kate were the older sisters, and when it came to selecting a name for the sixth, the father, being the most interested, called her Ruth.

When she could run about the house she became her father's main companion. She realized and responded to his deep affection. The other girls were more of the mother type; fair, rather slender, and small of feature. Ruth was dark, with the father's big forehead, deep set gray eyes, and of larger build than her sisters.

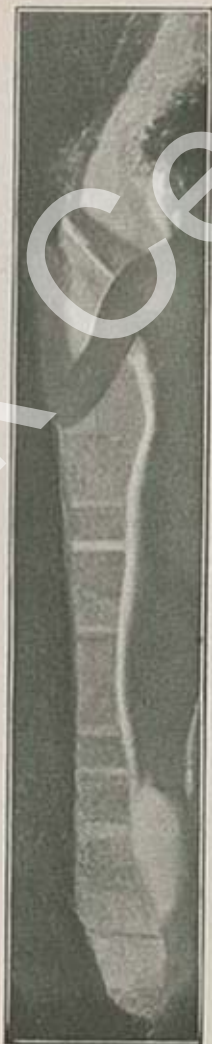
When she was started to the district school it became manifest that she was different in other ways from the other sisters. Before she had left the primary class, it was known, and commented upon, that she liked boys' games better than those indulged in by the girls, and when she commenced her second year, her chubby arms and sturdy legs did their part in all the sports that could be devised by school-boy mind. She played ball, climbed trees, ran races, and she and her sisters, lacking a male champion, she fought their battles with the boys, bravely, doggedly, and with a spirit

that commanded their attention. She knew how to bear the shock of a bloody nose, a scratch on the face, and fight back, still with the ferocity of a lioness.

Mrs. Cummings was greatly shocked at the unladylike habits this youngest daughter had developed, and many motherly lectures she received. Her father, however, looked upon her in the light of the boy that was hoped for. She was just such an independent, fearless, bold-hearted creature he would have wished his son to be, and, while outwardly coinciding with the remonstrances of his wife, and the older girls, he showed by a hundred covert endearments and pettings that he was excessively proud of his little vixen, as he came to call her.

Ruth, despite her name, as has been indicated, proved a very decided, very original young person in short skirts, and when she changed that estate into a young woman in long skirts she retained all her originality, her vigor and peculiarity. True, she no longer ran races, or fought with boys; but she did not sit at home, strumming on a piano, or bending over a piece of fancy work, like one of the other girls.

She was afoot with the earliest risers at the ranch. When Cummings was ready to ride forth, her horse was by his, and they cantered out into the morning sunshine, a pair of perfectly happy beings. She carried an identical equipment with his; from lariat to heavy revolver in the saddle holster—and what is more, she could use both, too. For, from the days of her tothood, when she rode in front of "daddy," to the last holiday she had spent at home from the Eastern school, a horse had been her greatest delight; and the sports of the plains, riding at a wild gallop, and shooting small game with a revolver, her principal diversions.



One Fall, when Ruth was eighteen, a party of hunters, embracing a railroad official or two, a well-known corporation lawyer, and two or three millionaire stock operators, came down to the neighborhood to hunt, one of the party being owner of a large ranch adjoining the Cummings demesne.

The party encountered the girl and her father on the second day of its stay in the country. With superbly poised body, a wealth of dark wavy hair, rosy cheeks, and perfectly moulded features, she was a type to excite interest anywhere. Gerald Marston, the youngest man in the hunting party, turned in his saddle to watch her after the duo had passed the hunters. "There is Diana, if she has modernized herself," he cried. "With a spear, and in the Grecian costume, she would be the fair huntress to a line."

The ranch owner laughed. "That's old Cummings' daughter, Ruth. She is the patron saint of all masculinity round here, not because she has ever smiled upon any of the sex, but by virtue of her beauty, her coldness, and her accomplishments. Why, she used to fight the boys in the school, tooth and nail, and win quite as many battles as she lost. She has been away to some big Eastern educational institution, and now she's back, a wild rider, a dead shot, and just the sort of baggage that would inspire the most sublime emotions in the hearts of our chivalrous rough-living Texans."

Marston sighed, and looked back again. His reputation was known to his companions. He was a lady killer. The old rancher noticed his movements, and continued:

"You had better keep your eye and your mind on the sport, and not moon after the Cummings girl. She won't do to trifle with, I can tell you. No holiday flirtation there, my boy, and I would advise you not to try it."

Marston did not answer, but he evidently had his own notions about what was best for himself, and the following day he made it convenient to get lost from the other hunters and to pull up at the Cummings ranch. Mrs. Cummings and the older girls who were at home looked upon him as a *rara avis*, and made up to him at once. Old Cummings and Ruth were in the saddle, but when they re-

turned the old man extended the usual hospitalities to the stranger, and Ruth left him to the entertainment of the others.

He did not get back to the ranch of his host that night, and thereafter, as long as the hunting party held together he was over at Cummings' oftener than with the others on the chase. He made it apparent from the start that Ruth was the magnet of attraction. He followed her about like her shadow. He was a good rider, had a splendid figure, and intellectually was far above the average of the young men who had been callers at the Cummings ranch. The girl's heart began to wake up; slumbering love to stir, and she rebelled against it; rode farther and faster; struggled like a hooked fish, to find herself—listening for his voice, looking for his coming, hungering for his speech.

Marston knew all the signs. He saw, before the fortnight was up, that he had made an impression; he already thrilled with pleasure at the triumph of this conquest. And, like the selfish man that he was, he revelled in the anticipation of his physical joy, and forgot the cost to the creature whom he had marked, or counted it but little. "She was a daughter of the people," he ruminated; "perhaps a trifle polished, but crude, and animal still. Did her habits and condition not argue that?"

So he took no reck of her, exerted himself to deceive her still more, as to his intention; practised all the arts he could master to stimulate her love, telling himself all the while that it was a love like his own—a coarse, sensual, evanescent thing, that would die as quickly as it had sprung into existence.

Then, on the eve of his departure, he played his last card. He declared his passion; and had counted upon an instant surrender. She listened to him till he had finished, and he, deeming silence to mean consent, had attempted to take her in his arms. He received his first shock when the lithe body slipped from his grasp, and he sensed a physical antagonism that shocked him.

"Mr. Marston," she said, quietly, "do men in your life mean marriage when they make such avowals as I have listened to from you?"

He flushed slightly, attempted to temperize.

"Tell me frankly, do you care enough for me to marry me?"

"Well, marriage is not to be considered just now; a good many things would have to be settled before that."

"By whom?" she continued; "by you or by me?"

"Why, by me."

"And I?"

"You!" he murmured, slowly; "why, I love you."

"There are loves and loves, Mr. Marston. We have been taught that women usually love and give up all to it. Love is virtually the same with regard to both sexes. In your case, for instance, if I listened to you, what would you have to give up? Honor? Your friends? Your wealth? Your happiness? Hardly any of these. Perhaps, you fancy you would be less free; love don't desire freedom. And I—what would you have me give up?"

He had burned out the first burst of passion. "I made a mistake," he commenced; "I apologize."

"Don't be so fast. An apology may not be needed, and, again, it may not suffice." He had noted her forehead growing lined, and the veins showing, and her eyes, half-closed, were blazing. Something told him he had gone too far; that he had made an egregious ass of himself; but beyond this annoyance with himself, he did not sense anything unpleasant; he even fancied that she might be making all this comment, by way of excuse, to the yielding that would follow. He made the mistake to whistle softly to himself.

Suddenly she turned her horse across in front of his. Her eyes were wide open now, and her cheeks flaming. Her riding whip was clasped in her hand, and with a

hissed "You cur! You coyote!" she brought it across his face again and again, and where the rawhide struck it cut the skin and left a livid, bleeding welt.

Somehow, his horse, either because of devilishness, or through some sudden fright, turned, and ran down the trail, and the little fury, with flaming cheeks, and mounted on her superb bay, followed at his side, raining blow after blow upon his head and shoulders. His hat was knocked off; his face was streaming with blood; he was crying for mercy, when they came thundering to a turn in the road, and face to face with the hunting party of which he had been a member.

"By Jove!" cried O'Reilly, the ranchman; "the vixen's giving it to him. Hurrah!" and to their credit, be it said, every man in the party echoed the cheer.

Marston's horse flashed past the throng; Ruth reined in her mount, and turned without a word and galloped back over the trail towards the Cummings homestead, the same great, man-like anger welling in her breast that had been there when she defended herself from boy tormentors in those far-off days at the old country school house.

Marston did not return to civilization with his jolly comrades. Somehow, there was not the *entente* between them after this encounter that had existed before; and he took a train by himself. Back in town, though nothing had been said, people began to avoid him, and he soon found it advisable to move from his Western home into more congenial territory. He carries the scars of the Diana of the Plains on his face still, and her image in his shriveled heart, but you couldn't bribe him, with all the gold of the Klondike, to go anywhere near her presence.



Modern Hell-makers and Their Work ∴

By
Timothy Drake



FEW months ago a Brooklyn doctor forced himself into notoriety by offering his living body to the authorities of a local hospital for vivisection. The offer was not taken seriously by the doctor's fellow professionals, and if it had been, the laws of our land would prob-

ably have prevented a consummation of the project. His professional brethren declared nothing was to be gained by such a proceeding.

The doctor's expressed motive in making this offer was to strike a blow at the opponents of vivisection. For years there has been a growing sentiment of disgust in the hearts of humanitarians, the world over, at the horrible practices of those experimentators, whose work is prosecuted along lines of animal vivisection. It has been pointed out time and time again that the results achieved by such bloody, heartless and shockingly cruel practices are not at all commensurate with the cost.

Years of unwarranted, ill-advised experimentation have left the vivisectors just as blindly ignorant of the laws of life and health as when they commenced. Their work is not worthy of being denominated scientific, for it is not. It is merely haphazard, horrid torturing of beings as sensitive to pain, as much entitled to pleasure, as themselves. No specious reasoning can ever make their work appear otherwise than as a brutal, selfish, horrible form of worse than barbaric torture. A man or woman with a shred of feeling, with a vestige of the fine sentiments attributed to mankind, could not endure a second visit to one of the experimental clinics of the vivisectionists. The coarse, the selfish and the ignorant might find excuse for the in-

ventors of drugs and "cures" that are worthless, for making such horrible experiments, on the ground that it is safer to try it on "the dog" first; but such a viewpoint is too brutal for the intellectual to assume for a moment.

Just take with me a brief view of some of the horrible, disgusting details of savage torture and unfeeling cruelty of this most uncivilized practice.

The following picture was drawn by an eye witness from the experimental department of the Pasteur Institute in Paris, where all the misery, suffering and torture that unfeeling cruelty, assisted by all the aids of patented devices, lately discovered drugs, and disease-breeding apparatus, are employed to make the last days of the unfortunate animals experimented upon, a hell of torturing and horrid savagery that pales the lurid purgatory of Bunyan's imagination, or St. John's dream on Patmos. He says:

"Next I saw the rabbit room. In this great, dark, gloomy chamber were scores of large baskets and cages, full of rabbits of all colors and sizes. Most of them were lying on their sides, evidently suffering in one way or another, paralyzed in the hind legs, sloughing at the eyes, hideous and distressing degradations of the bunnies of my school-boy days. In odd corners here and there were horses, donkeys, goats and other animals, two or three of each, and all for one or another sort of cruel experiment. Be sure that none was spared the last extremity of pain or wasting misery of poisoned blood and weakened frame.

"They kept the worst sight from me till the last, and here I had to exercise great restraint to keep myself from unprofessional, unparliamentary and imprecatory language. The rats and mice I blindly pitied; the rabbits I inwardly grieved for, but the dogs, oh! the awful cage, like the wolves' den at the Zoo, with a dozen mad dogs, all raging, bark-

ing, wildly tearing at the iron bars, frantic to be free, furious to escape, and bite and tear even me, whose heart bled for them—all made mad experimentally. Beautiful, high-bred creatures, whose mouths foamed with bloody matter as they flung themselves at the strong iron bars, and appealed to each newcomer to set them free. One's first impulse is to shrink back from the dangerous proximity of such wholesale rabies. Next one looks at the bars and mentally gauges their strength; then pity comes; then one's heart burns with indignation against a system which demands, and must secure, a continual succession of such tortures to keep going the vast machinery of a great Pasteur institute."—*Dr. Edward Berdoe, in Medical Liberty News.*

This is just one glimpse of the man-created animal hell. The profession has gone into the vivisection experimentation all over the land. Mice, rats, rabbits and dogs are tortured and sacrificed to senseless theories, in hundreds of medical colleges, and in thousands of private laboratories.

And all for what? To note how much poison a beast's system can stand before death comes; to watch the twitching of pain-racked nerves, to note the effect of pain on heart action? It is all a Pain-Hell experiment.

Health and joy and life are not considered, cannot come within the range of these experiments. The processes of the torture are sickening enough to shock even an Indian. Imagine a dog, one that has been accustomed to lick the hand of some master, to manifest a degree of devotion to man that perhaps no other living creature approaches, bound down,

helpless before one from whose soul sympathy has fled, whose heart harbors no feeling of pity; then, with keen scalpel, see the operator dissect the skin from the quivering flesh, with painstaking care lay bare acutely sensitive nerves, wrench bones asunder, penetrate to the very organs of life, and, absorbed in his horrible passion, extend the torture of operation to the utmost, making dying the supremest agony that cunning and ingenuity can devise, and then declare that it is scientific research, if you can.

What hunts he, in heaven's name? Is it the fabled essence of life? That is beyond him. Is it the phenomena of pain? He knows enough of that without watching the pangs of tortured brutes. Are they studying the phenomena of health?—what promulgates, and what sustains it? Assuredly not; the maimed, wounded, blinded, rotting, shrieking, suffering victims of this devilish black art can reveal no normal hygienic phenomena, either while kept upon the rack or in their dying.

Stop, ye searchers after knowledge! Primary truths suffice to prove that your search in this direction is a vagary. You might as well hark back to the human sacrifices of the old alchemists. In studying pain and disease, the tortured man would be more valuable as an object of observation than the tortured beast.

You have no right to tear down when you cannot build up. There are vast realms of physical science to explore, abysses of ignorance to bridge. Go at the work like men, if we may not do it like gods, and stop this devil's work of destruction and torture.



Confession of a Patent Medicine Testimonial Gatherer

(From the Topeka
Daily Capital)



WORKED once for a big proprietary medicine concern in an Eastern State. They paid me a fat salary, gave me a room that looked as though it had been fitted up for the president of a trust company, and sent a good looking stenographer to do my bidding. I was the boss testimonial gatherer. A boss testimonial gatherer is a man who induces governors, congressmen, judges and bishops and others of the elect to put their names to testimonials

to the virtue of a patent medicine. Testimonials from the smaller fry are usually sent in gratuitously, or are picked up by the regular traveling men of the firm. In cases where diplomacy, suavity, geniality and perseverance are required to land a man, the expert is sent out and told to take his time. He is not expected to account strictly for the money intrusted to his keeping. What the concern wants is a testimonial; it doesn't care for the expense.

There is a mistaken idea about patent medicine testimonials. It is believed by many that they are bought and paid for the same as any other commodity. There's nothing in this theory. They are not purchased outright, nor indirectly, for that matter. It may cost considerable money to secure one, but the man who gives the testimonial receives no direct fee.

Practically, every person takes patent medicine at some period of his existence. A great many persons think they receive either lasting or temporary benefit. Many persons feel so grateful that they give a testimonial gladly. Others have to be handled carefully, but in the end nearly all sign their names to a statement if the right man hands them the pencil. The trick in the testimonial trade is this: the smart testimonial gatherer doesn't allow the victim to write his own testimonial. He interviews him in newspaper style and writes the testimonial himself, after which the victim signs his name to it. There are weak spots in every man's story of how he was saved from the grave. The testimonial gatherer knows how to conceal those weak spots without mangling the truth. He knows how to bring out the strong points without apparent exaggeration. That's all there is to it. During my career in the interest of better health and more of it I landed a United States senator, a governor, several con-



gressmen and judges of greater and lesser degree, a bishop and smaller fry, world without end. I spent a barrel of money doing it. But I never paid a dollar directly for a testimonial. The best they ever got from me in the way of a direct fee was an order on the local photographer for eleven pictures.

Judge Ozias Strong was a personage of great candle power in one of the Illinois River counties. The traveling man in that territory "tipped it off" to the house that the Judge had derived much benefit from Herbine, and I was sent down to get his signature to the usual document. I made friends with the local druggist and assured myself that the traveling man's "hunch" was no "pipe." Then I went to see the Judge. He was a pompous, dignified gentleman, who habitually wore a silk hat with a sack coat. I broached the Herbine business gently and diplomatically, and the Judge shut up like a clam. He denied that he had ever been sick in his life. He assured me that he had never heard of my medicine until I mentioned it myself, and he expressed in vigorous language his opinion of any man who would allow himself to be caricatured in the newspapers in the manner in which I suggested. I was stumped, but not disheartened. I had been up against that game before. So I went back to my pharmacist friend for counsel and advice. I made careful inquiry as to whether the Judge had any vulnerable weakness, and what his foibles were.

"Well," said the pharmacist, "he dearly loves to drink and play poker at another man's expense. He does love a quiet game with trimmings if the other man is losing. He sits in some nights when we have a little game behind the prescription case."

"Well," said I, "pass the word up to him that there will be a quiet little game behind the prescription case to-night. Intimate that it's a combination to get my money, and insist that he come."

About 11 o'clock that night the Judge, the pharmacist, myself and two other good fellows took out a stack and started the game off. I bought copiously of bottled goods of a mighty good grade before the game began. I kept it up right along until we quit. I reckon it was the sweetest "wet" function ever given in the town. I had to stay sober and the cuspidor got the most of mine, but the Judge did certainly revel in liquids. I also lost steadily and the Judge won as steadily. I remember distinctly laying down four queens, with upward of \$20 in

the center of the table. The Judge raked in the pot on a pair of tens. Along about 1 o'clock he began to mellow up. At 3 o'clock I had him talking about Herbine enthusiastically. We stopped the game to drink the health of somebody, and I slipped over to a nearby table and wrote a testimonial. He signed it without a murmur. I needed his photograph, but I knew I'd never get his permission to use it after he had sobered up. In fact,

I wanted to get out of town without seeing him again. The local photographer had a picture or two of the dignitary in his studio. But he wouldn't talk about giving me one without an order from the Judge. I offered to buy, but he was incorruptible. I had the picture in my hand. I fished up a twenty-dollar bill and asked the photographer to go across the street and buy some good cigars. I haven't seen him from that day



to this. I turned in a picture and a testimonial from the Judge and the house O. K.'d an expense bill of \$143.50.

"Send House to Corning to handle big testimonial," wrote in the New York traveling man, one week. "Dave Templin, a wealthy capitalist and one of the most prominent men in this section, has been an invalid for five years. He has tried a dozen specialists and about all the fakes in the country. He has been confined to his home for over a year. About three months ago he began taking Herbine, and yesterday he was downtown attending to business. It's great stuff. Everybody in the country knows him, and everybody knows that he hasn't been able to do a stroke of business for

three or four years. He's a hard man to handle. I couldn't touch him."

The "Old Man" came in with the letter in his hand. "Draw a hundred from the cashier," he said, "and go to Corning on the first train."

I got to Corning in the middle of the afternoon after a long and tiresome ride. As I walked into the hotel I noticed a funeral procession coming up the street. "I see you're having a funeral," I observed to the clerk with the airy facetiousness of a man who is used to hotel clerks.

"Yes," said the clerk, "they're burying David Templin—one of the big men here."

Question Department

Q. I have a very troublesome skin disease. I have done everything that I know to relieve it, and consulted physicians, without avail. What course would you advise me to pursue?

A. Fast for three or four days, until the stomach is completely emptied. Then adopt a two-meal-a-day vegetable diet. Wash the skin all over with pure soap and water at least once a day. On rising, when the skin is dry, brush it briskly with a soft bristle brush until it is pink. Repeat this just before retiring. After this treatment, at night wrap the body in a wet sheet and allow it to remain for 20 to 30 minutes. Do this every other day until the irritation disappears.

Q. I am troubled with frequent attacks of biliousness. Have headaches, vomit, and become very weak. My skin is yellow. What course shall I pursue?

A. Adopt an abstemious vegetable diet. Spend as much time as possible in the open air, taking long walks, and practicing deep breathing. Exercise night and morning, and bathe the skin freely with cold water.

Q. I am troubled with incipient paralysis; cannot lift my feet, but have to drag them along when I walk; and I feel exhausted all the time. Is there any hope of my recovering my health, and if so, what course shall I adopt?

A. Your only hope lies in persistent effort. Would advise you to adopt a vegetarian diet. Join immediately some gymnasium, if convenient, and spend considerable time there every day. Do not over-tax yourself, but work constantly to the limit of your strength on the various body-developing devices. It will require two or three months of hard work to produce any noticeable results, but this course will surely bring you relief if persisted in.

Q. Is exercising daily with apparatus such as chest weights, dumb-bells, etc., preferable to exercising without apparatus? Which will develop muscles the quickest?

A. By the use of apparatus muscular development can be secured very much quicker than by any of the systems of resisting exercises. The reason for this

is that the movements are natural. You are actually using your muscles to a purpose, as in working. The flexing exercise will very frequently result, if carried to excess, in producing a muscle-bound condition; although when one merely desires to exercise for health, flexing exercises, in moderation, may be advantageously employed.

Q. I am round shouldered, and have very little chest expansion. What exercise would you recommend to remedy these defects?

A. To accomplish the quickest results would advise you to use either chest weights or similar device. This, employed in connection with deep breathing, will quickly effect the development you wish.

Q. I had pneumonia last spring, and my lungs are still sore. How can I overcome this?

A. Morning and night take a cold sponge bath, and at frequent intervals during the day practice deep breathing. Use Indian clubs or dumb-bells for chest expanding exercises immediately after rising, and just before retiring.

Q. Is phosphate of soda a good thing to take as a cathartic?

A. No cathartic is a good thing. Most of the cases of habitual constipation, piles and appendicitis, show a previous history of frequent use of cathartics. A proper diet of fruits and vegetables will prove sufficiently laxative in every instance. In cases of long standing constipation thoroughly cleanse the colon by flushing, adopt a vegetarian diet, eschew white bread, use considerable olive oil in your food, exercise regularly, and there will never be any occasion to employ the harsh, demoralizing, injurious cathartics of the drug stores.

Q. I am a commercial traveler. Every spring I grow exceedingly nervous, become dizzy, suffer from insomnia, and have little energy. What would you advise?

A. A thorough fast at once; that is, fast until tongue is clean, breath sweet, and there is a pronounced normal hun-

ger. This is the quickest and most effective way.

Q. As you advise fasting, or abstaining from all solid food as a cure for stomach troubles, would you advise similar treatment for the kidneys, by abstaining from the use of all liquids for a short period in order to give the kidneys time to eliminate accumulated waste matter?

A. "Waste matter" is not conveyed into the system by pure water. It is an absorbent and assists in eliminating waste that has been accumulated from other sources. In kidney troubles I would enforce an abstemious diet, frequent bathing, exercise, and give all the water the patient could drink.

Q. Would you kindly give your advice in this case? The patient is a woman 48 years of age. She is troubled with palpitation of the heart, and bloats considerably at times. She has been having attacks of constipation, followed by dysentery; also dizzy spells. She has severe headaches. With these exceptions she has enjoyed good health, considering she has worked hard all her life.

A. The plain indication in this case is an overworked, disordered stomach. Simply give it a rest, drink water freely, and nature will do the rest. When she is ready for food, and the distressing symptoms have disappeared, give it to her.

Q. What would you advise in the way of diet and exercises for one employed at manual labor?

A. A cold sponge bath on rising; a light breakfast of fruits and cereals; chief meal at noon, of boiled or roasted meats, vegetables, rye or whole wheat bread. The most available vegetables are peas, beans and lentils, either in soups, or boiled, and served whole. Supper, light, should consist of bread and butter, a little cheese, and stewed fruits, or dried figs and dates. A brisk walk just before retiring, during which deep breathing is practiced. Brush the skin briskly all over, and take a cold sponge bath before retiring.

Editorial Department

IT is extremely difficult to furnish matter on timely topics in a monthly magazine where a large circulation exists. Nearly all matter must go to press a month in advance of the publication date.

The editorial appearing in the June issue on the methods adopted in Cleveland for stamping out smallpox was hardly in the hands of our readers before the editorial in the July issue was written and sent to press.

Now note this strange coincidence.

Almost immediately upon the appearance of June issue of *PHYSICAL CULTURE* in Cleveland, smallpox cases began to appear in Cleveland in great numbers. During May only 82 cases were reported; during June 169, although about April 1st it was publicly announced by Dr. Friedrich, of the Health Board, that there had not been a case of Smallpox in Cleveland since

August 23rd, 1901.

The elastic possibilities in the diagnoses of diseases are well known. We are aware that this first editorial, showing wherein smallpox had been stamped out by abolishing vaccination, had aroused the medical profession throughout the entire country. We are also aware that the physicians on the Cleveland Health Board had been severely scored for apparently condemning the vaccination theories which have been upheld by the medical profession so long.

It would be folly for us to claim that all this has had anything to do with producing the large number of smallpox cases reported in June, but if numerous physicians were suddenly especially desirous of increasing the number of cases of this disease, and would report all cases of chickenpox, measles or other eruptive fevers as smallpox, it would probably be an easy matter to increase the smallpox cases in Cleveland as rapidly as reported.

Several cases have come up in various cities where attempts are being made to force the medical profession to prove their claim as to the value of vaccination. Some one of these attempts will no doubt be carried to a higher court, and the truth brought out as to the frequently hideous results of this vaccination superstition.

They have had recently quite a smallpox scare in Pittsburg; the Health Board there has assumed dictatorial powers greater than have ever existed since the time of Nero. They have entered houses, and with the assistance of the police, forced vaccination on one and all, and furthermore, have issued an order that every citizen must be vaccinated or leave the city. It is pleasant to note that there are some few persons who refuse to be inoculated and who also refuse to leave the city, and it is to be hoped that the legal fight resulting from this will also assist in exposing this giant fraud.

We want to say to every free American that no one possesses the right to

force vaccination upon you or your children, and that those who take upon themselves this authority should be made aware of their presumption.

Every person who has been made a physical wreck, or who has been injured by vaccination, has good grounds for a suit of damages against those who make this inoculating process compulsory.

If you find that you are liable to be compelled to be vaccinated, or if vaccination is to be forced upon your children in order to attend school, engage an attorney and fight for your rights. Write to us and we will help you all we can.

Many have written us inquiring as to the best method of eliminating the poison introduced by the vaccination. About the best method is to wash it off as soon as possible thereafter, place a hot wet towel around the arm and dip it in hot water as fast as it cools; continue applications for at least twenty-four hours, or until the inflammation disappears.

"Killed by Vaccination." Clipped from the *Buffalo Enquirer*:

But my heart goes out in sympathy to Conductor Sturtevant of the Lehigh Valley, who caused to be carved the words, or words to that effect, "This child died of vaccination in the public schools," upon a marker which designates the little one's grave. Her name was Lucille, and she was an only child, and the contributing cause of her demise was as stated on the tombstone, and when it was suggested soon after the funeral to the father that he should have a case of damages against the city for carelessness, he said, "No, my wife couldn't stand it," but I perceive that he has seen the light and is looking for revenge. He is entitled to it, full measure and flowing over. Some wounds don't heal; that of the loss of an only child so sacrificed should call for some exemplary and almost retaliatory penalty. Unhappily, the compensation if any by way of damages must be green, and not red; were I in that parent's place I should like mine crimson, warm and fluid.

MARK HUBBELL.

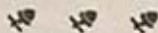


[From the address of Dr. J. W. Hodge, delivered before the Western New York Homœopathic Medical Society, published complete, with other interesting details against vaccination, in our new book, "The Vaccination Superstition," which we will forward on receipt of 10c.]

SO-CALLED "successful" vaccination is nothing less than the implanting into the healthy organism of the virulent products of diseased animal tissue, with the effect of inducing actual disease. The performance of such an operation in the very nature of the case violates every principle of modern aseptic surgery, the legitimate aim of which is to remove from the organism the products of disease and never to introduce them. The chief aim of the modern surgeon is to make and treat wounds aseptically. The careful operator employs every means at his command to clear the field of operation of all bacteria, and he uses every available resource of the marvelously minute and intricate technique of asepsis to prevent the entrance, through wounded tissue, into the organism of any germ of a morbid agent before, during and after an operation. He fears sepsis as he fears death; and yet, under the blighting and blinding influence of an ancient and venerated superstition, he will intentionally inoculate into the circulation of a healthy human being the virulent animal poison, vaccine virus, the infective products of diseased animal tissues, under strictly aseptic conditions.

Think of the unparalleled absurdity of deliberately infecting the organism of a healthy child, in this era of sanitary science and aseptic surgery, with the poisonous matter obtained from a sore on a diseased calf, under the pretense of protecting the

victim of the ingrafted disease against the contagion of another disease! Can inconsistency go farther than this? Inoculating an indeterminate lot of microbes into a healthy organism under aseptic precautions! Ladies and gentlemen, just think of it!



Copy of offer we telegraphed to the Cleveland "Daily World" on July 2d, but up to the time of going to press no reply was received:

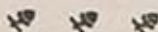
"The Cleveland 'Daily World,'

"Cleveland, Ohio.

"If Dr. Friedrich will allow me to put my physician, a recognized member of the medical profession, in charge of smallpox pest house, I will deposit one thousand dollars with any reputable bank, and agree to present it to Cleveland charity if I don't prove, first, that smallpox is not a dangerous disease; and second, that it leaves no noticeable marks when properly treated without drugs. Wire reply my expense.

"(Signed) BERNARR MACFADDEN."

This same offer is open to any city where similar conditions exist, and will further agree to prove that the disease is not contagious to those in good health.



IN the future I look forward to, and dare prophesy, that one generation from to-day, perhaps ten years from to-day, and maybe five years from to-day, no self-respecting woman will dare to wear a corset.

I make this prophecy, not so much because of the injurious influences of this device, but because I have confidence in the intelligence of women. I believe firmly that they will see it is to their advantage and seeing will ultimately step by step discard this terrible device.

I make this prophecy, also, because I believe that at this future time I mention, all men, and all women, too, will understand the terrible body, soul and character crushing influence of this vicious instrument.

Its use will be a sign of deformity. It will indicate weakness, unwomanliness, ugliness and laziness.

It will indicate weakness first, because it weakens the body; second, because the muscles and frame work of the body, made to hold the body in proper position, will become incapable of performing their office from disuse occasioned by the continued support of the corset.

It will mean unwomanliness because it unsexes many women who are addicted to its use—destroying absolutely by its stifling, paralyzing influence upon the nerves and circulatory system every instinct that is a part of superb womanhood.

The terrible results of the corset evil cannot begin to be accurately determined. It is only when one studies the facts in reference to its use and influence that he fully realizes the universal character of its evil influences.

No woman, not a slave to conventionality, who allows herself to calmly and seriously consider the facts in reference to the baneful influence of the corset can continue to wear the device for any length of time.

I have a few charges to make against the use of this device and I would like every intelligent human being to give them careful consideration, and if considera-

The Corset Evil.

tion is given you may be inclined to agree with me that the use of a corset is at the present time actually endangering the future of the American nation.

- (1) It lessens and sometimes ruins the digestive power.
- (2) It restricts development of the lungs to almost half normal size.
- (3) Destroys absolutely the normal power of breathing.
- (4) Ultimately injures and makes shapeless, flaccid and nerveless the flesh at the waist line.
- (5) Destroys the beauty lines of the body, of the limbs, arms and bust by restricting nourishment, interfering with normal circulation and thus lessening vital power, and by the continuous and unnatural support of the bust in an abnormal position.
- (6) It is absolutely, in most cases, the direct cause of weaknesses peculiar to women, and from which every corset wearer suffers at some time in her life.
- (7) Greatly weakens, sometimes destroys, or makes abnormal, the instinct of sex.
- (8) Produces tumors and the inflamed condition from which women so frequently turn to expensive and dangerous operations.
- (9) Causes serious displacement.
- (10) Prevents the return of the venous blood from parts below the waist line.
- (11) Weakens and sometimes kills unborn babies.
- (12) Is one of the principal causes of marital miseries and divorces.

IN a recent issue I especially emphasized the importance of acquiring the habit of drinking a certain amount of pure water every day. The necessity for this in retaining health and strength of the body can hardly be emphasized too strongly. There are many consumers of alcoholic liquors at the present time who were first induced to take up this habit on the advice of physicians or friends, who hold the theory that a certain amount of stimulation is essential to the enjoyment of the highest degree of health.

Any liquid containing alcohol will create a desire for more water. Usually one attempts to satisfy this thirst by drinking more of the liquid that created it, and if one will not drink water under any other circumstances mild alcoholic liquors may possibly be of slight advantage. The body cannot be maintained in a high degree of health unless a sufficient amount of liquid is used; and if liquid is not furnished in pure water form, the use of some mild alcoholic stimulants may actually be productive of beneficial influence. The body must have water, and if it cannot secure it in a pure state, it may be better to have it supplied in mild alcoholic liquors than to be deprived of it altogether.

*Alcohol—
Water Drinking.*

I do not by any means intend to advise the use of alcoholic liquors of any kind, I simply wish to emphasize the vast importance of pure water—the importance of encouraging a thirst for pure water.

Many persons, who are apparently improved in health by drinking a tonic, so called, in the form of beer or ale, can usually be improved far more by simply acquiring the habit of drinking more pure water. In other words, if water is supplied in a pure state instead of being supplied in an impure state, as in alcohol, it will produce a far more beneficial effect.

I must admit that the thirst created by the so-called mild alcoholic liquors induces the average individual to drink more water, and in many instances accounts for the increasing energy that occasionally results, temporarily, from the alcoholic drinks advised. But if each one of my readers will drop all tonics of an alcoholic nature, feed the body properly, and develop a natural thirst by having water close at hand and drink it at frequent intervals during the day and evening, beneficial results will be produced far more quickly than by exhausting the internal functional system through the effort required in eliminating alcoholic poisons.

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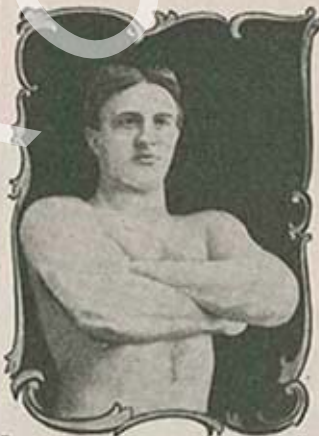
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