PHYSICAL CULTURE

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

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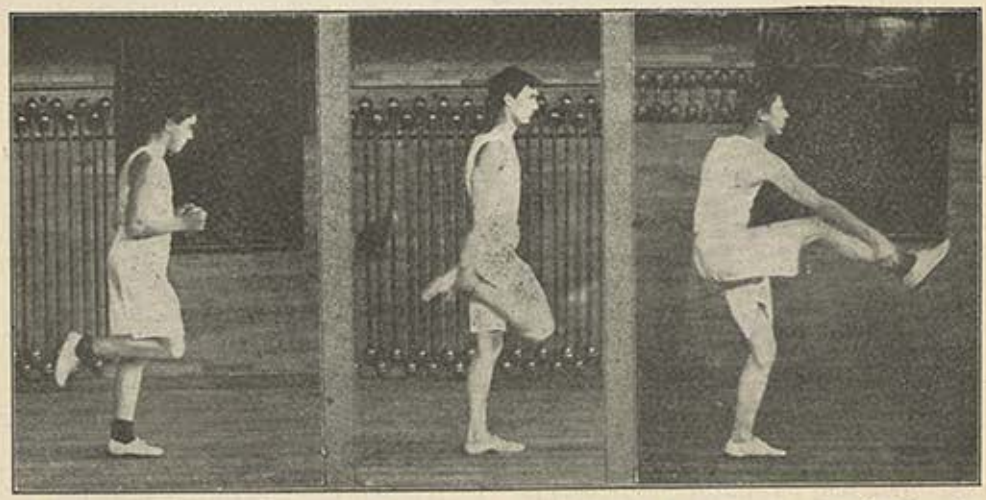
Hopping, Individual and Massed

By DON H. SILSBY

WE all know that physical exercise is necessary to health. The general effects of exercise have been proven to be better health, better physique, grace, self-control and self-reliance, power of endurance, quickness of action, muscular development, will-power and moral character.

Let us see just how physical exercise brings about some of these things. Whenever a muscle contracts, energy is liberated, muscle cells are broken down, waste material is produced, and oxygen and food material are consumed from the surrounding plasma. The constitution of the blood is immediately changed when muscular energy is expended. The blood must go to the lungs where it can rid itself of the waste material and receive oxygen for the rebuilding of muscular tissue. The heart increases its action during exercise to meet the demand for a faster circulation of the blood. The blood flowing through the respiratory center in increased quantity, calls for greater respiratory action. A noted writer on hygiene has said "We eat and drink to make blood, exercise to circulate it,



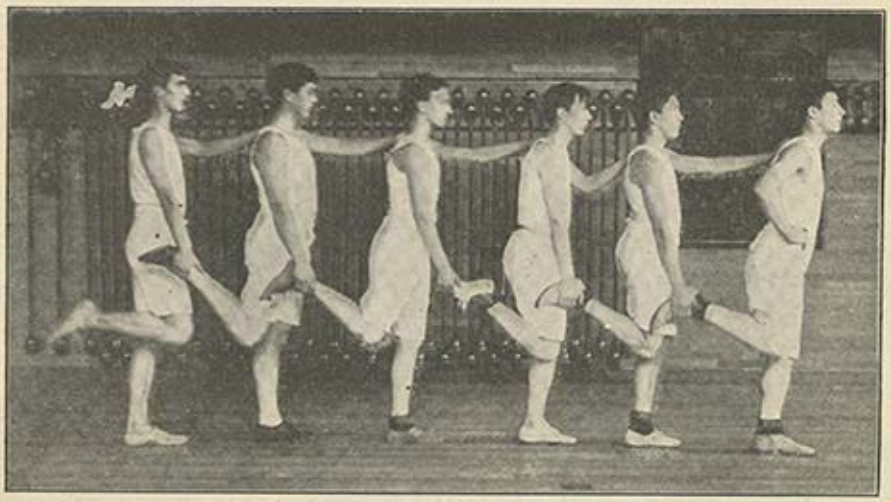
Exercise 1.—Ordinary hopping; first on left foot, then on right. Let the arms and shoulders move freely.

Exercise 2.—Hop holding the ankle as shown in the second figure.

Exercise 3.—Hop holding the ankle as shown in the third figure.

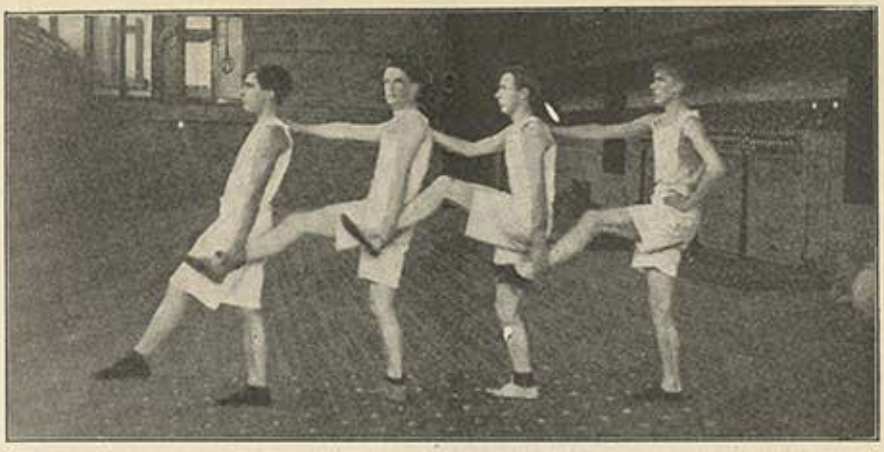
and breathe deeply to purify it." The food materials are absorbed by minute vessels in the walls of the alimentary canal and passed along regular channels to the general circulation, where they become a part of the blood stream and are thereby taken to the cell. The cell has the power of reproducing itself. The proper equilibrium in this process of tearing down and rebuilding tissue, is maintained by the reproducing of cells during rest and sleep to replace those consumed by muscular and mental action during the time of work.

The more the work and the larger the muscles used, the greater will be the number of broken down muscle cells, thus, a greater amount of waste material will be produced and there will be a greater call for food material and oxygen. The blood must flow faster and the lungs work more vigorously when the larger muscular groups are exercised than when the smaller ones are used. The amount of work done is greater. We may therefore say that the benefit of exercise, especially on the circulation and respiration, is the greatest when the largest muscular groups are used. The arms may be flexed and extended till the muscles become exhausted, and the effect on the circulation will be slight and the respiration not at all embarassed. But climb a long flight of stairs and the result will be altogether different. The circulation of the blood will greatly increase and the respiration will be so taxed that you will find yourself out of breath and almost exhausted, while the muscles may not seem fatigued at all. In the first instance the muscles used were small, or comparatively so, and little work was done. In the second instance the muscular groups used were of the largest and strongest in the body, those of the thighs, and a great amount of work was done. Other great muscular groups are those of the back, those of the abdomen, and those of the shoulders. Physical exercise using these larger groups of muscles is of a greater value to health, in that it effects the vital organs, than exercise using only the smaller muscles. We do not mean to say that the smaller muscles do not need exercise. There must be a certain amount of all-around physical training to keep the body, as a working machine, in running order. But it is upon the exercise of those larger groups of muscles that we must chiefly depend for effect upon the vital organs.



Exercise 4.—The left leg is flexed, the left arm is down at the side grasping the ankle of the man in front. The man behind grasps your ankle and so on down the line. The right hand of every man grasps the right shoulder of the man in front of him. The front man holds his hands on his hips. Repeat the exercise using the other leg.

Walking is one of the best exercises,



Exercise 5.—The left thigh is flexed, the left hand is at the side grasping the ankle of the man behind. Your ankle is grasped by the man in front. The right arm grasps the shoulder of the man in front. The first man holds his right hand on his hip, the last man his left hand on his hip.

Why? Simply because it is a mild exercise bringing into constant use large groups of muscles, thereby having that beneficial effect on the circulation and respiration. Then again, the exercise is taken in the fresh, blessed air, making it as agreeable and exhilarating as any outdoor exercise could be. Walking, as an exercise, is indulged in more by older persons. The younger generation want their exercise in the form of play. Older persons need more play, for that matter. G. Stanley Hall says "Grosswell says that children are young because they play and not *vice versa;* and he might have added, men grow old because they stop playing, and not conversely." Gutsmuth, one

Exercise 6.—This is done in double file. The inside thigh is abducted in front of the man at the side, who holds the ankle with his outside hand. His thigh is abducted and held in like manner. The exercise should be repeated with the men who were in the left line forming the right line, so that both legs will receive an equal amount of work.

Exercise 7.—This is also done in double file. The inside thigh is abducted back of the man at the side, who holds the ankle with his outside hand. His thigh is abducted and held in like manner. The inside hand grasps the inside shoulder of the man in front. The exercise should be repeated with the men who formed the right line forming the left line, so that each leg will receive its exercise.

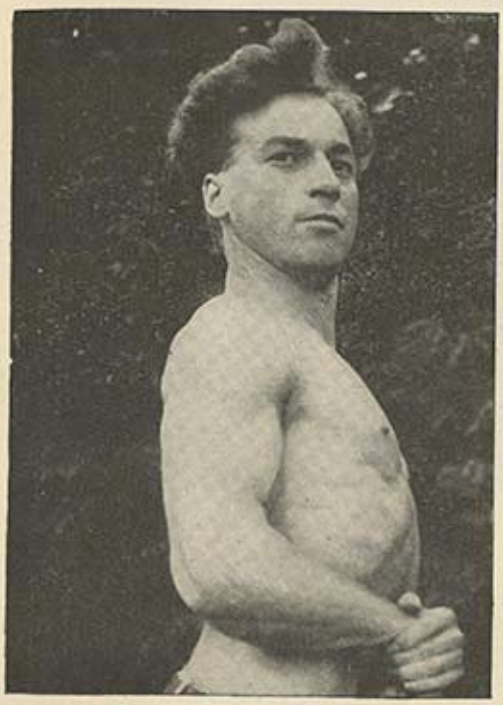
of the pioneers of physical training, describes play as "work in the garb of youthful pleasure." In play a spirit of joy and gladness rules. That these exercises in hopping will assume the form of play and arouse the greatest of interest and enthusiasm, there is little doubt. They may be performed indoors or out.

Let us look for a while into the value of hopping as a physical exercise. It certainly calls for the full use of the legs and thighs. The shoulders must be used to start and maintain the motion of the body. The entire muscular system must be active to maintain the equilibrium of the body as it moves along. The agitation from the up and down jolting stimulates the action of the abdominal organs, aiding digestion. That hopping is a vigorous exercise, having immediate action on the circulation and respiration, may easily be determined by hopping a dozen steps around the room. The effects are similar to those experienced after going up a long flight of stairs. Hopping seems to meet all the requirements of beneficial exercise.

The exercises in individual hopping are easily understood from the pictures. The exercises should be done using each leg so that the development will be even. The exercises in massed hopping may be practiced for the fun and exercise alone, or they may be done by squads in the form of races to see which squad can arrive at a given place first, or, again, they may be in the form of contests to see which squad can travel in the best condition and retain the best form after arriving at the finish line.

The main points to bear in mind are: (1) hop on the toes; (2) agree on a starting and stopping signal to be given by the leader; (3) that all hop in unison or the result will be confusion; (4) keep a firm grip on your partner so that the line does not lag; (5) keep the head up and the shoulders back so as not to cramp the lungs; (6) breathe deep and full during and after the exercise.

A STRONG GRIPPER



Mr. Samuel G. Olmstead.

Mr. Samuel G. Olmstead, whose photograph is reproduced herewith, is an unusually enthusiastic physical culturist, and the possessor of an exception-degree of muscular vigor. He won honors in the Perfect Man Competition at the last Physical Culture Exhibition in Madison Square Garden. One of his remarkable feats is the performance of what is known as the "crucifix," on the flying rings. This consists in supporting the body, with the arms stretched out sideways, at right angles to the body, one hand on each ring, the entire body taking the form of a cross.

His most remarkable strength, however, lies in his forearm and grip. One noteworthy evidence of this is his ability to tear three packs of cards at one time, making a thickness of one hundred and fifty-six cards.

This is a feat for which Eugene Sandow is famous. Everyone who has the privilege of shaking hands with Mr. Olmstead is certain to remember the event, for it is like putting one's hand into an iron vise.

A Group of Champion Axemen of Australia, Tasmania and New Zealand

An Axemen's Carnival

By F. A. HORNIBROOK

An Interesting Form of Athletic Pursuit which is Practically Unknown Outside of New Zealand, Australia and Tasmania —These Meetings are Held Every Year in the Countries Named and Bring About a Gathering of Giants Who Wield Their Blades and Saws with Marvellous Speed.

AMONG the most interesting athletic events that take place in New Zealand is the International Axemen's Carnival. In various parts of New Zealand and Australia, these carnivals are held regularly every year, but in Canterbury, which has always been a thinly wooded district, the event had a recent interest as being the first Axemen's Carnival the town had ever witnessed. Several thousand spectators were present, in the midst of whom gathered the champions, surrounded by their accoutrements, the chopping blocks, the axes, and the saws.

There is no difficulty in picking out a good axeman. He has something about him which other men do not possess—a swing of the shoulder, a tilt of the hat, an air of muscular well-being—which mark him out as belonging to the advanced guard of pioneers. Tasmania produces some of the finest backwoodsmen in the world, who display marvelous skill in the use of the axe. A log-cutting match there, causes as

Mr. W. Chellis, Champion Axeman of Tasmania

keen an interest and enthusiasm as does a football match in Great Britain. This may be almost be termed the national sport of Tasmania, and a class of professional log-choppers has sprung up who practically earn their livelihood by engaging in these contests. But it is killing work, and the professional is likely to die young unless his heart is very sound. In no sport is the physical strain more severe. It is not unusual for competitors to faint, and indeed at most carnivals more than one man may be seen to drop exhausted or insensible to the ground as soon as he has delivered the last stroke that severed the block of wood before him. When one has witnessed a competition, he can understand why this is so fascinating a form of sport for the onlookers, and why the backers of the various competitors exhibit so intense an excitement.

The timber selected for all the exhibition events was New Zealand rimu, and though there was some grumbling at its variability, the competition as a whole, went off very well. As the logs differed in hardness of grain and in other respects, lots were drawn for them, and it was curious to observe each man delicately feeling with skilful fingers his particular log, appraising its qualities, selecting the side from which he would attack it best; and after careful measurement, chipping two little notches in it, one above and one below, to mark the proper range of his stroke and guide his eye. When the starting time came, each man in the light attire of the athlete stood by his log, axe in hand, raised ready for the starter's signal, with back bent, and thirsting to display his physical prowess. The pistol went off, the biting of the axes commenced, and it was a beautiful sight to see these experts wielding their tools.

As the chips flew around from the strong, deep strokes, the excitement of the crowd swelled into a roar of hurried directions: "Shake her up there," "Hurry up now, hurry up there," "Tasmania to win," "Bite it in deep," and so forth. Beside each competitor, stood his "coach," stooping hands on knees, eagerly watching, like a man's "second" in a boxing match, prompting, urging, giving hints as to how to deliver the strokes, telling him how his opponents were progressing, and so forth. It was wonderful to see the swing of

First Heat in the Underhand Contest.

W. Featherstone, Underhand Champion of Tasmania.

the wiry arms and the swaying of the lithe body of each competitor as he rained down the strokes with his heavy long-handled axe, with extraordinary rapidity, and still more extraordinary accuracy. At each stroke, the razor-sharp blade entered deep into the wood at the most effective spot, and huge chips—if one could apply such a term to them, for they weighed pounds and were often several inches in thickness—flew all over the ground.

With lightning strokes, upwards and downwards, the quick axe bit into the block its wedge-shaped cleft, often as exact and smooth as if machinery had cut it. As soon as a man had cloven his triangular cutting to the center of the block on one side, he would turn and attack the other side with fierce energy, until at last but a thin ridge of wood divided the two V-shaped clefts. Then with a few well-directed strokes the upper part of the block would totter and finally topple onto the ground.

The sawing championship was also watched with the keenest interest. The crowd held its breath as the long flexible ribbons of steel began to sing, bending so to the hands and motions of the men manipulating them that it did not seem possible that such mobile instruments could cut through the hard resinous rimu. But they flew back and forth, and when the song changed timbre slightly, the watchful second drove in the wedges to prevent the edges pinching, and the sawyers bent to their work, swaying back and forth. All this takes longer to tell than to do, for the top edge of the saw-blade had disappeared within a few seconds of the starting time, and the sharp resonant z-z-z-z, z-z-z-z-z! of its song lasted but twenty-two seconds. Then sharply, the winning sawyers dropped their weapons, and threw up their hands as a sign to the timekeeper that they were through.

A. J. Hartnett, New Zealand's Champion, (on right).

An Apparatus for Raising the Dead

By CORNELIUS JAMISON

PROF. GEORGE POE, of Washington, D. C., who for long had been studying on the problem, "When does life really leave the body," was led to the invention of his marvelous machine by an accident.

While he was engaged in working out the scheme of illumination of the Centennial of 1876, one of his employees brought in a rat trap containing a huge rat. After the rodent had been killed, the Professor, moved with pity, suddenly said: "Stand aside boys, and I will bring it back to life."

The men only laughed, but the Professor worked over the rat, pumping oxygen into its lungs, until he actually did revive it so that it leaped from the table and escaped into a hole.

This episode so encouraged the experimenter, that he redoubled his efforts to find out the exact moment when life ends and death sets in. It was about this time that he was stricken with paralysis, and was advised by his physicians to live in the country. He left his home in Washington, D. C., for South Norfolk, Va., and it was while in seclusion on the farm of his friend, A. C. Ostrander, that he perfected his artificial respiration apparatus.

Professor Poe and Arthur Ostrander

Not the least interesting feature of the invention, is the fact that a mere lad of twelve years old, Arthur Ostrander,

assisted the Professor in assembling the perfected apparatus, and in so doing did what the latter's dim eyes and palsied hands could not alone accomplish.

The invention is modeled directly after the human heart. The Professor knew that to revive persons drowned, suffocated or allegedly *dead* through accidental or ill-advised use of anæsthetics, it was necessary to remove the poison gases in the lungs, and force life-giving oxygen in their place. So he began experiments, many of which were failures. Studying the construction of the heart, he saw that it was that of a double cylinder, or rather two cylinders. He then built a working model in line with it—a simple machine with two cylinders, each having an inlet, and an outlet valve. The plungers of each cylinder are made to work simultaneously.

Thomas Black, a business man of Berkley, Va., on being shown the plans, asked permission to exhibit them to Dr. Francis M. Morgan, a local physician, who immediately saw what an immense boon to humanity the discovery appeared to be.

As a result of a conference, there was a demonstration before a committee of Berkley and Norfolk doctors who witnessed the smothering of rabbits and dogs to the point of what was declared professionally to be absolute death. Professor Poe then applied his apparatus, and in a very short time the rabbits and dogs were running around.

Reviving the "Dead" Rabbit

Socrates, the Professor's pretty white rabbit, like a Socrates of old, a seeker for the eternal cause and departure of life, was taken out of his cage and brought into the room. Putting the animal on the table, Dr. P. J. Jackson injected two grains of morphine in the rabbit's

leg—more than enough to kill a man unaccustomed to the drug. Then, four ounces of ether were given. Of course, Socrates was dead after this. The doctors applied every known test in the endeavor to discover signs of life, but finally, with one accord declared that life was positively extinct.

"Dig a grave for him, Arthur," said Dr. Wilson to young Ostrander. But Professor Poe applied the tubes to the rabbit's nostrils, and pumping out the poisons with one cylinder, and oxygen into the lungs with a simultaneous movement of the valves, within three minutes the rabbit was breathing naturally, and within six minutes was running around the room. He showed no effect of nausea, proving that the ether was entirely out of his system. Next a dog was brought and placed in a box containing an atmosphere of acetylene gas, and was smothered there for forty minutes. The animal was then taken out and doctors examined him and pronounced him dead beyond hope of resuscitation. But the little machine got in its work, and the dog, after four or five respirations, began breathing naturally, and soon its pulse was beating normally.

The inventor claims that his device makes anæsthetics perfectly safe, as the action of the heart can be sustained until the system regains its ordinary power of respiration. But he does *not* claim that it possesses infinite power over life, or that after the heart is worn out and broken down, the machine can supply vital power, though he does insist that it can resuscitate drowned persons, or those strangled or smothered to death.

It is true that the machine has not been tried on human beings, still, what would resuscitate a rabbit would probably resuscitate a man under like circumstances, so the Professor insists. He further states that by the aid of the machine, babies asphyxiated at birth will breathe artificially until the heart is so strengthened as to perform its part, and thus thousands of children yearly will escape death at birth.

Another of its important possibilities is that of sobering in a very few minutes drunken men who have fallen into stupor. It is the slow respiration caused by liquor that makes a man "drunk" and renders him helpless. Now by the help of the respirator, the poison will be carried out of his system.

A curious legal point could be raised by an experiment, in the case of a man hanged for murder, for Professor Poe declares that in the case of the neck of the former not being broken by the fall, he could restore him to life. Certainly, then, any murderer on whom the law would permit respiration to be tried could not again be hung for the crime,

The Rabbit Revived and Active

once the doctors had pronounced him dead. Subsequent revival by tests made outside the jurisdiction of the jail would not operate to place him again within the reach of the law, for he would be legally dead.

The Professor, who is naturally enthusiastic over the device, says that "The machine will be chiefly used for resuscitating asphyxiated persons.

"Coal mines and hotels where people 'blow out the gas,' and lodging houses in large cities where people use the deadly twenty-five cent meters, will increase the demand for the invention. Life-saving stations and ambulances will eventually be equipped with it.

It will be used to rescuscitate persons who have deliberately taken narcotic poisons with suicidal intent and have gotten past the stage of respiration. I myself, have inserted the plugs in my nostrils, and had the apparatus worked while holding my breath for ten minutes without feeling any inconvenience or desire to breathe. The machine was breathing for me. Anyone can make this test.

"Death through freezing is a form of asphyxiation. In arctic expeditions, the artificial respirator will cause heat through the use of oxygen. It goes without saying, that all life-saving stations will be equipped with the apparatus. And I believe that it would save thousands of lives a year."

Applications for patents for the device for foreign countries have been filed.

The Peasant Athletic Champion of Bavaria

By HENRY K. JONES, of Flensburg

SEPPL MANG, a Bavarian peasant, whose portrait appears on next page, recently sprung into athletic prominence in his native country through winning the wrestling championship of the great Ringkampt Tournament, held at Flensburg, Germany.

I was fortunate enough to be the witness of Mang's achieving muscular fame, and apart from the fact that he exhibited both enormous strength and great skill, the thing that struck me most in connection with him, was his simplicity of manner and good natured face.

The tournament took place in the Coliseum Theatre at Flensburg, in April last. The attendance was enormous, the town was *en fete* and among the contestants were representatives of most of the continental countries, including a great many athletic stars. Mang secured a comparatively easy victory over the men matched against him, including the big Hollander whom he met in the final bout. The manner in which he came forward to receive his prize was most typical of him. Wearing his peasant costume, as shown in the photograph, he just strolled on with entire self-confidence and not in the least disturbed by the tremendous outburst of cheering which greeted him when he appeared on the stage. On the contrary, he turned a big and beaming face on the audience, grabbed his prize, gave an awkward bow and walked off with a sort of rolling gait which is characteristic of his class. Just before he disappeared behind the wings, he gave an apathetic wave of his huge hand to his cheering auditors and that was the last that they saw of him.

When, a little later, I managed to corner him intending to secure an interview, I was, to tell the truth, unable to get very much out of him. He grinned amiably, was willing to talk wrestling to me, but seemed to fight shy of personalities. From another source, I learned that his habits of life were very simple, that he was of necessity in the open air most of the time and that curiously enough—as my informant stated—he ate but comparatively little and was abstinent in his habits in general. This was a matter of no small wonderment to the big German who was telling me about Mang, the former, like a good many of his excellent but mistaken type, seeming to think that a big, strong man must of necessity be somewhat of a glutton.

As I looked at Mang, when he turned to leave the stage, I thought to myself, "What a pity it will be if that boy's

nature and evident content with his circumstances are spoiled by too much prosperity." Just now, he is obviously in the game for its own sake. In other words, he represents the highest type of the athletic spirit. But in the future—who knows? It would be greatly regretted, at least by myself, if he should forget what is due to sport and becomes a simple money grabber. Hackenschmidt was just such another great unspoiled boy, I believe, when he reached England, and I am told that he has managed somehow or other to retain his good points in spite of the temptations that have surrounded him. What a pity it is that other champion athletes, either professional or amateur, do not follow his example!

It may perhaps interest readers to know that I have been trying very hard to form a boxing and wrestling club, and with a fair amount of success. It is true that the people fight rather shy of pugilism in any form. On the other hand, they are fond of wrestling, and a large percentage of them exhibit skill in the art. The men here, or the larger part of them at least, are built on wrestling lines, which probably accounts for the fact that they go in for this sport. However, I suppose that it takes a good many people to make up the athletic world, precisely as it does the social world.

At the same time, I must confess that my opinion is, that the two great English speaking nations are and will continue to be the true sport-loving nations, that is to say, as far as all-round sport is concerned. I don't know why, but the fact remains that on the continent of Europe there does not seem to be that instinctive love of athleticism that is so evident in England and America. There is any amount of athletic specialists in Germany, France, etc., but that is a vastly different proposition to the national spirit, or rather the general regard for athletic work that is so emphatic in Great Britain and the United States of America.

By the way, I almost forgot to say that Mang's official title is now Meisteringer Von Bayern, which you can translate as The Master Champion of Bavaria.

Seppl Mang, Champion Athlete of Bavaria

"If anything is sacred, the human body is sacred,
And the glory and sweet of a man, is the token of manhood untainted;
And in man or woman, a clean, strong, firm fibered body,
Is beautiful as the most beautiful face."

—Walt Whitman.

A Photographic Contest

IN this issue, as will be seen, is inaugurated a prize photographic competition to which we call the attention of our readers. Nowadays pretty nearly every household contains a camera, and the recognition of this fact has inspired the competition in question.

Physical culturists are, as a rule, an observant and sharp-witted class, who are keen to seize upon an idea or incident which has a bearing upon the natural methods of acquiring and retaining health. A reference to the Comment, Counsel and Criticism Department of this magazine will furnish proof of this fact. Now we want all good physical culturists, be they men, women or children, to not only write us relative to their experiences and those of their friends, but in addition, to send us pictures of such experiences in such cases as the latter are possible of illustration. In other words, we are looking for photographs of any and every kind and description which have a bearing upon physical culture, its principles and methods.

Thus, if your form is notable by reason of its contour and symmetry, tell of the benefits you have received from the practice of physical culture, and send us a picture of yourself. Or if you have a friend who has benefited in the same manner, let us have a photograph of him or her. If you have pictures of athletic feats, of outdoor sports and recreation; of unique or novel games; of physical culture life in the wild; of exercises, or fun-yielding pastimes which are your own invention; of anything whatever that illustrates any aspect of physical culture, send it on to us so that we may pass upon it. Even if it does not win a prize, it may possibly be bought by us for purposes of illustration.

Taking a Snapshot

The conditions of the contest are as follows: There will be one main prize of five dollars for a photograph which, in point of technical excellence, appropriateness, action, etc., is selected by our experts.

Other photographs sent us will receive honorable mention in accordance with their workmanlike quality and the bearing which they have upon physical culture.

We reserve to ourselves the right to purchase any photograph at from fifty cents each upward in accordance with what we consider the value of the picture to us from a publisher's standpoint.

All photographs are sent at the owners' risks and we cannot be responsible for their return unless stamps are enclosed for that purpose and the picture itself is registered.

It is clearly understood that the persons sending photographs yield to us their copyright privileges, if any, together with all and every other right connected therewith.

The owners of the photographs may, if they see fit, also send MS. relative to the pictures, but such MS. must not exceed five hundred words, and will, if accepted, be paid for at our usual space rates.

It is hardly necessary to add that those pictures which are appropriate to the issue of the magazine in which they are likely to appear, will receive precedence over others.

It must be remembered that this magazine goes to press about six weeks before it is issued. Consequently, the pictures intended for the December issue should reach us as soon as possible and it stands to reason that they should deal as much as possible with those exercises or sports which are possible during the winter. Photographs of such a description will, as intimated, receive more consideration than those which have to do with summer incidents or recreation. At the same time, we do not wish our friends to refrain from sending us those of this last named type, because even if we do not use them until next summer, they will be paid for on acceptation nevertheless.

In regard to the giving of the prize, the decision of the editor must be accepted as final.

Here is a chance to earn money and a little fame through the medium of your camera. Why not try to do both? The pleasure of actually taking, developing and printing the photograph, will be materially increased if you "see it in print," to say nothing of the incidental dollars which may await on your so doing.

Of course, you will gather from what has been said that although the competition will be conducted in this magazine, it is open to the *Beauty and Health* readers also, and indeed to anybody and everybody who is interested in the furtherance of the principles and practice of our cult.

A COMING CHAMPION

To the Editor:

Two years ago I was a physical wreck. I finally decided to follow your theories, and to-day I can hold my own in the best of company on a wheel. It may be well to state that I have competed with such champions as A. Chase, Sid Jenkins, and Harry Reynolds, winning my heat in fine style. I eat only two meals per day, and strange as it may seem, I am stronger than I ever have been. I am the coming champion of Wales.

I spend one hour per day in performing the exercises described in your magazine.

Evan Evans.

Abercynon, Glam.

Mr. Evan Evans

The Home of the President at Oyster Bay, L. I.

The Simple Life of the President and its Lessons

By HENRY COMYINGS

PRESIDENT ROOSEVELT is an exponent of a good many of those qualities which we see fit to consider as typically American. That this estimate of him is not without foundation, is evidenced by the fact that even his political opponents admit that he is the owner of some, if not all, of the qualities in question, this much though they take exception to some of his official acts and much of his national policy.

Pre-eminent among such characteristics is his simplicity of habit in regard to diet. Among the many temptations to depart from methods of right living which the public man is called upon to face and overcome (provided that he has the necessary will power), hardly any are more constant or insiduous than those presented by the dinner table. And the more prominent the position he occupies, the greater the temptation, for custom has so ordered it, that dinners and diplomacy go hand in hand, and the *chef* exercises no small part in the subtle craft of statesmanship. Hence then, the social demands made on the Chief Executive include a good many calls on his digestive powers, and unless he is consistently careful in this respect, the results are apt to be disastrous to him physically. This is saying nothing of the fact that a clogged mentality is about the last thing in the world that a President of the United States can afford to possess.

That President Roosevelt realizes all this, is made evident by the simplicity of his life in general, and of his diet in particular. In regard to this last, the daily regime is something like this: Breakfast: eggs, rolls and coffee. Luncheon: bread and milk, occasionally cold meat and fruit. Dinner: soup, a modest portion of meat, vegetables in season and good American pie, which, so it is said, the President insists shall be made after old fashioned recipes. If the weather is very warm, a light pudding is substituted for the pie and a

salad takes the place of the meat, partially or wholly. Sometimes, though not often, he takes a cup of weak tea at luncheon, but otherwise, there is but little drinking at meals even of water, while alcoholic beverages seem to be tabooed altogether, at least at the family table.

In regard to the eggs at breakfast, President Roosevelt admits to three or four at a sitting and these, so it is said, he prefers hard boiled. Among the many striking peculiarities of the President is his knack of upsetting or ignoring ancient fads or fancies, when he feels that they are opposed to common sense or the facts of his experience. Many illustrations of this characteristic of his, will without doubt, be remembered by the reader, including some that center around the time when he was Police Commissioner in New York City, and also during the Spanish-American War. And so he departs from the ordinary in the matter of his hard boiled eggs. Now the popular idea about eggs thus cooked is, that they are highly indigestible; or at all events, that they are food for the most strenuous only. While the President admits the strenuousity, he does not believe in the indigestibility. That his hard boiled eggs agree with him, no one will question who has ever had the privilege of seeing the Chief Executive in the flesh. And now comes science to reinforce the President's attitude in regard to the egg that has been immersed in boiling water for five or more minutes. It will be remembered that, some little time since, this egg question gave rise to a more or less amusing discussion on the part of medical men.

Thus Dr. C. A. L. Reed, of Cincinnati, who is supposed to be an authority on dietetic matters, declares "Strange as it may seem, hard boiled eggs are more easily digested than soft boiled. I think that the President is properly advised in eating his eggs well done." From Louisville comes these words of wisdom, Dr. Thomas K. Van Zandt: speaking: "I am not surprised that the President eats hard boiled eggs for breakfast. Judging by his vigor, it would not be remarkable if he were to eat and digest china ostrich eggs." The voice of Detroit is heard through the medium of Dr. Wm. J. Stapleton, Jr., who admits that: "There is undoubtedly great food value in the egg, even when eaten in the hard boiled form." On the other hand, Dr. L. J. Hirschman, cautiously remarks that: "Hard boiled eggs are a strenuous diet, suitable only for a strenuous man. When they can be properly assimilated, hard boiled eggs undoubtedly prove conducive to the strenuous life." But the doctor who apparently realizes the true facts of the case is Carl D. S. Fruh, M. D., of the Jefferson Medical College, of Philadelphia, who remarks: "The strenuous life is the healthy life. The robust health of President Roosevelt is due to a well ordered routine rather than to one or two articles of diet, including the ever useful egg, boiled soft or boiled hard. I would have more confidence in a combination that includes a clean body, an active mind, and a variety of simple and seasonable foods, than in any amount of medicine or in any special diet if I were in training for the strenuous life. Such a combination is the secret of the President's powers to easily digest hard boiled eggs, and indeed a whole lot of other viands, that are simply impossible for the squeamish stomach of the non-active individual."

No one will deny that the abounding vitality which he possesses to such a remarkable degree, is responsible for no small portion of the President's success in life. This statement applies not only to his achievements as President of the United States, but to those other successes which have been his in an almost unbroken succession since the days that he left college. As cow-boy, ranchman, author, soldier, politician and statesman, he has attained the objectives which he set before him in so consistent a manner that it is not too much to say, that in this respect, he is perhaps without a peer in this country.

But there is many a man who has the will to do and dare, who finds that his physical powers are not in keeping with his ambitions. President Roosevelt is fortunate in being possessed of a physical personality, that is capable of fulfilling the tasks and encompassing the projects which are imposed upon it by his brain. And there is not the faintest doubt but

that his magnificent vitality, his superb virility, and his indomitable perseverance, are alike due to his habits of life. It is not too much to say, that President Roosevelt during his whole existence has followed very closely, the lines of strenuous physical culture. Read any of his books, scan any of his autobiographies, ponder on some of the many anecdotes regarding him, and you will find that in each and every instance, they emphasize the fact that he is an exponent of that form of the Simple Life, which is identified with the more vigorous tenets of physical culture.

For instance, he has from his cowboy days retained a regard for easy fitting garments. Notice in his photographs that even when he is compelled by the demands of conventionality to wear a "biled shirt" and starched linen, the accompanying vest is cut so as to allow of as much air as possible to reach him, and the collar is reduced to a minimum. Then again, cold water and plenty of it, is as much a part of his daily life as is food itself. As for exercise—why, he is an absolute glutton in this respect. The man seems to be literally made of iron, so untiring is he, no matter what shape or form the exercise of the moment or the hour takes. Who is not familiar with the stories of his all-night horseback rides on Long Island, undertaken "for fun," or his equally strenuous walking tours, of nights spent on the sands near Oyster Bay, with only a blanket between him and the salty dampness beneath, of his hunting tours, his cyclonic whirls "around the circle" for political or other reasons, and much more of the same. To a man of this kind, all things are possible, and the President in his own rugged person has proven the truth thereof.

There is no doubt whatever, but that the Roosevelt administration will go down into history as one of the most remarkable in the annals of our country. Beginning as it did in tragedy, and developing along the lines of one of the most bitterly fought political campaigns on record, it was punctuated by a number of events which have added to our prosperity at home, and our prestige abroad, not one of the least of these being the Peace of Portsmouth brought about and consummated mainly through the efforts of the President.

But, if President Roosevelt's term of office had been of the most commonplace sort, the nation would still labor under a debt of gratitude to him in view of his having given it a most emphatic object lesson on the potent possibilities that are to be found in a simple physical culture life. Everything that he is, all that he will be, and all too, that he has wrought for the good of his country are directly or indirectly traceable to that marvellous stamina of his which, again, is the outcome of his wholesome modes of living, and consequent clean and clear methods of thought. But the question arises, will the multitude read the lesson of his life aright, and seek to emulate it in part if not wholly? The writer regretfully believes that the great mass of the people will either ignore or fail to understand the prime teaching of the career of Theodore Roosevelt as just indicated. And so the majority of the population will continue to overeat, to underbreathe, to poison itself with be-fouled air, to clothe itself ridiculously, to bathe rarely, to exercise infrequently, and in other ways to live its life in a manner diametrically opposed to the rules of daily existence as formulated by the President. And the results are, that the doctors multiply, there is rarely a vacant bed in the hospitals, and the bank accounts of the undertakers wax fat.

"What avail the largest gifts of Heaven,
When drooping health and spirits go amiss?
How tasteless then whatever can be given!
Health is the vital principle of bliss,
And exercise of health."

—Thomson.

Good Soaps and Bad Soaps

By ELLINGTON WENTWORTH

SOME of the individuals and occupations to which we are pleased to apply the adjective "humble," are those upon which the comfort, the well-being and the very existence of the community hinges. Thus the tiller of the fields is pretty generally looked upon as a person who stand upon one of the lowest rungs of the social ladder. Nevertheless, the basis of all national wealth are the fruits of the earth which the farm-hand produces, or rather, which are the products of his toil. And because of this, "the man with the hoe" should sentimentally be accorded that consideration, which he rarely or never receives.

What is true in this connection in the world of human effort is equally true in the material world. And of the many "humble" articles of daily use, which we have almost ceased to be grateful for, because we are so accustomed to the benefits which they bring us, none is more worthy of a little thought than is the every-day cake of soap, whether we find it in the laundry, the bath-room, the kitchen sink, the bed-room or on the shaving bureau. Indeed it is hard to conceive of civilization without soap. True it is, that water and lots of it, provided that there is also an ample amount of time available, will, to a degree, do at length that which good soap will do almost instantly. But it must be remembered that nowadays, time is so precious a commodity, that we really couldn't afford to squander much of it, even for lavatorial purposes. And then again, consider what one's laundry bills would amount to, if this world were a soapless one and dirty linen had to be washed in the primitive manner that is still pursued in some parts of Europe where a running stream, a couple of flat stones, or a wooden "beetle" take the place of the washing powders and laundry soaps and all the rest of the preparations that in this and other favored lands, rob washing day of practically all of its old time terrors.

But it is not laundry or other household soaps which we shall alone concern ourselves in this article, however excellent and sanitary these may be and undoubtedly are. What we propose to talk about also are those soaps which are intended for toilet purposes. And in regard to these, we shall try to show what it is that makes the difference between a good soap, that is, one that does no harm and a great deal of benefit to the skin; and a bad soap that raises havoc with the cuticle and sometimes leads to skin maladies of a more or less serious nature.

Perhaps, as a preliminary, a little historical matter regarding soap may be in order. Certain it is that a reference to the past of such a useful article cannot be without interest. So then:

Contrary to the usual procedure of human discoveries, soap seems to have been a gift of barbarism to civilization instead of *vice versa*. Thus, Pliny speaks of soap as being used by the German barbarians—who, so he avers, had two kinds, the hard and the soft. Other ancient authors refer to the article being in common use among the other semi-savage tribes who, at the time in question, were overrunning the continent and threatening Imperial Rome herself. It is also said that the Gallic tribes used a kind of soap as a means of turning their hair to a bright shining hue. One of the old chroniclers intimates that the barbarians never went into battle without first washing themselves with this "*rutilandis capillis*" or "red-making" soap. So that the ante-combat cleanliness of the Japanese, isn't such a new thing after all.

The soaps mentioned in Scripture (Jer. ii:22 and Mal. iii:2) are now believed by the best commentators, to have been the ashes of plants containing a supply of alkalies, which thoroughly answered the purposes of the real

article. We need hardly remind our readers, that wood ashes form the basis of the soft soaps that even to this day, are made on many farms in this country.

After soap became adopted by the Romans, so to speak, its use extended over the whole of the then known and civilized world. In the Middle Ages it was one of the few things that served to distinguish life as it then was, from what we should now consider actual savagery. During the time of the Cavaliers and Puritans, the highly perfumed and expensive soaps in use among the former, were classed as among "deadlie and soul perverting vanities" by the latter. France, at that period, had a practical monopoly of the soap-making business. It is said that a cake of really "smart" soap, richly perfumed and "furbished" in the latest style, was worth a sum that was equivalent to about six dollars, modern money. Subsequently, some Englishmen woke up to the fact that there was no reason in the world why all the soap money should go to France, and so acquired a charter from King Charles the Second for the purpose of making the article. But domestic soap never seemed to have acquired the vogue of the foreign and it was not until the nineteenth century that British soap obtained that recognition at home and abroad to which it seems to have been entitled. It may be added that the soap men of the "tight little isle" were, right up to 1852, badly hampered by heavy inland revenue taxes amounting in some instances to one hundred per cent. on the commodity. Meantime American capitalists were becoming aware of the possibilities of the soap trade as far as home consumption was concerned, and were making arrangements for launching the infant industry with characteristic thoroughness. Without telling at length the story of the inauguration and the inevitable struggle for recognition which followed, it will be sufficient to say that to-day, soaps made in this country are not only the equal, but, so it is averred, the superior of any produced in any other part of the world. They have practically driven from the market all of their foreign rivals and have put themselves into successful competition with the latter on their own territories. And the main reasons why the soap manufacturers have accomplished all this, is the fact that they recognized the need of special goods for special purposes and that a soap for toilet purposes must have certain essential qualities from which there can be no departure. As a consequence there are American firms whose names are equivalent to all that is desirable in the matter of soap; and whose reputations in this respect are of an international kind. We need not mention such in this article because we are pretty sure that our readers know to whom we allude. "Good wine needs no bush" says the old proverb. And the maxim stands good of the soaps in question, as far as this screed is concerned.

Once upon a time, it was thought that soap was merely a simple mixture of fats and alkalies. But the researches of a French chemist at the beginning of the last century, proved that the article is a true chemical compound. And as you probably know, the difference between an ordinary mixture of two or more substances and a chemical mixture is, that the latter has qualities quite unknown to the substances of which it is composed. If you will think for a moment of the things that go to make up soap, and then note how totally unlike these things, both in appearance and action, soap is, you will realize the full force and meaning of the foregoing sentence.

From what has been said regarding the constituents of soap, it will be seen that there is a large range of substances available for its manufacture. Thus, as far as fats are concerned, these among others, are used by manufacturers: tallow, palm oil, palm kernel oil, olive oil, cotton-seed oil, sesame oil and cocoanut oil for hard and toilet soaps. In the making of soft soaps, fish-oils, linseed oil, marrow-fats, and some other oils are used. In the case of certain toilet and medicated soaps, almond oil, spermaceti (but rarely), cocoa butter, peanut oil, and so forth, are in demand. For so-called yellow soaps, animal fats, resins and colophony are the essentials. But for all this, certain fatty or oily products of petroleum or "rock oil," have, to a very great extent, taken the

place of many of the substances just named. And the change has been for the better in many respects. In the old days, animal fats were most extensively used for all sorts of soaps, and it would seem that the manufacturers were not very particular as to the condition or the source of the supply. In other words, it did not matter very much whether the animal's flesh was diseased or decomposed so long as it furnished a quota of fat. It need not be said that from both an hygienic as well as an æsthetic viewpoint, this habit of the "soap boilers," as the makers of the article were known, was equally reprehensible.

Happily, these bad old days seem to have gone forever, at least as far as the reputable concerns are concerned. Not only has honesty been found to be the best policy in the matter of soap as in everything else in life, but in addition, the availability of the petroleum fats has done away with the temptation to use animal matter of the type mentioned.

As has been said, the alkalies used in soap-making are soda and potash, and these in the form of caustic lyes which are the solutions of the respective hydrates in water. The actual operation, consists in boiling the fats and the lyes, treating the result with certain substances which separate the overplus of lye from the soap and placing the latter in o what are known as "frames," in which it cools and solidifies. This operation is a very gradual one depending on the size of the cakes or bars. All this applies to hard soaps.

In case of soft soaps, there is no attempt made to remove or nullify the "free" alkali, but, during the process of manufacture, the proportions of the in gredients are so carefully used that there is but comparatively little lye remaining in an original condition. The reason why soft soaps are not treated for "free" lye, as in the case of hard soaps is, that there are chemical reasons why such treatment would be impossible.

So the distinction between a good soap and a bad soap is, that the first named is practically free from alkali in an uncombined form and the latter is just the reverse. The result is, that while a soap of first-rate quality is an excellent thing for the skin, inasmuch as it removes dirt, and saponifies or actually turns into a sort of soap, the fatty matter that gathers on the skin, thus keeping the pores open and insuring health and beauty, a poor soap has an exactly opposite action. The free alkali in the latter acts as a corrosive on the skin, making it rough, harsh, and causing it to peel. Sometimes, it induces eczema in those who have a tendency to that disease, and instances have been known of blood poisoning caused by soap made from impure material and in which there was an excess of alkali.

Not only does soap of this latter kind have a harmful effect on the body, but in addition, it raises havoc with any material with which it comes into intimate contact. Thus a cheap, common soap if boiled with, say, a woolen garment, will "burn" the fibres of the latter, that is, reduce them to a sort of pulp. And the same statement applies to its effect on other materials. The term "common soap" applies to that form of the article which is badly made and of the cheapest materials and not as far as price is concerned. Thanks to the modern and ingenious machinery used in soap making, the article is now produced so cheaply that a household soap of high quality is sold at an incredibly small price. And the same remark applies in kind if not degree to toilet and other soaps.

It will be seen by the foregoing then, that this question of too much "free" alkali in one's soap, concerns not only my lady in her boudoir, but Mary in the kitchen or the laundry. In the one case, the garment furnished by Nature—the skin—is affected, and in the other, the garments supplied by the dry-goods men. In both instances, it is evident that the use of a poor soap doesn't pay. Contrawise, a good soap is an insurance against harm to cuticle or cloth or calico or what not. The moral is so evident, that we need not even indicate it to our readers.

Now the trend of all human industry is toward the saving of time, material and labor. The soap industry is no exception to this rule, that is among respectable firms. As the success of these last rests on their reputations for supplying

the public with an article which actually is as it is represented to be, it follows that it is a matter of obvious policy on their parts to have plants which shall assist them in keeping their compact with their patrons. The marvelous and huge ingenious machinery employed by the great soap-making firms, prove that this fact is generally recognized by the trade.

The writer has in his mind's eye one of such firms, whose offices are on the borders of the financial district and who in addition to soaps, produce a variety of other toilet articles. It is an old-established concern, dating back to the beginning of the last century. And its long life and constantly increasing trade, are alike due to the fact that it has always kept faith with its customers.

In 1806, when the business was established, it had one soap "kettle," with a capacity of just ten thousand pounds of the commodity. This "kettle," by the way, was heated by a fire built underneath it. To-day, the firm is the possessor of scores of "kettles" heated by steam, among them being ten which are four stories in height. Think of this—equal in height to a four-story building. The largest of the ten holds a million pounds of material; the others something like three-quarters of a million pounds. As for the others, the smallest can accommodate forty thousand pounds. And all through a policy of commercial honesty from which there has been no deviation since the day that the firm first began taking orders! Also, because the question of nullifying the "free" alkali was considered from every standpoint—scientific, economic, and so forth.

What stands good of this firm, is equally true in the case of several others. And hence it is, as has already been said, imported soaps are but little called for in the American market, while, conversely, there is a great and growing demand for American soaps in the markets abroad. Apart from the fact that Yankee ingenuity and trade honesty have brought about this happy result, the fact that this land of ours is particularly well placed in the matter of raw material must not be forgotten. All substances used in the making of soap are found in abundance within our boundaries, including a practically inexhaustible supply of petroleum. This constitutes a factor which counts heavily in our favor at present and in all likelihood will do even more so, in the future. And lastly, the American faculty for breaking away from obsolete tradition; worn-out methods and antiquated procedure, has received ample illustration in the matter of soap making. Our boast that we lead the world in most things is not always justified, so it would seem. But in the matter of soaps, the case is different. Thus for example, and in point of purity, delicacy and general quality, there is no doubt whatever but that the toilet soaps of the New World are greatly superior to those of Europe. This statement includes shaving soaps, in regard to which the writer can positively and from more or less painful experience, testify that those found on the other side of the water, are for the most part, apparently made for the purpose not only of trying men's chins and cheeks but men's souls also. The soft, creamy, soothing and more or less permanent shaving soap, that we are accustomed to in this country, appears to be an unknown quantity on the continent of Europe and in the British Isles.

What has just been said regarding toilet soaps, stands equally true in general of other forms of the article manufactured in America. And in this connection, it may be pointed out that it was our soap makers who first recognized the need and the commercial possibilities of putting on the market, soaps made especially for special purposes. An allusion to some of these will suffice for purposes of illustration. There are the laundry soaps that, in case they are the output of a firm of standing, do all that is claimed for them in the way of lightening the labors of the woman in front of the wash-tub and at the same time thoroughly cleansing the clothes. There are the dozens of so-called "washing powders," which are practically powerful soaps in a convenient form; there are the household soaps in which the basic material is mixed with a fine, "sharp" sand or powdered pumice stone, or it may be coarse hair, so that the

housewife can scour to her heart's content with only just the same expenditure of strength and energy as if she were merely washing her household articles in the ordinary way; there are soaps that will make painted things look like new; others that are intended for use in connection with the washing of fine linen or lace, yet others that are the exclusive property of His Majesty of the nursery, these being absolutely free from the minutest trace of an excess of alkali, so it is said, and still others, compounded for the purpose of keeping one's jewelry and other articles in prime and bright condition.

As for the medicated and toilet soaps, pure and proper, their name is legion in the matters of shape, size, odor, price, and so forth. Some indeed are made without perfume, but as a rule, the public seems to prefer the other kind, especially the feminine portion of it. And the desire is justifiable. There is a very large distinction between the vulgar use of perfumes and a mere suggestion of some flower or dainty odor. And the usual good taste of the established soap manufacturers of this country leads them to so use their toilet articles that there shall be an intimation rather than a broad assertion of odor in connection with them.

Not so many years ago, this delicacy of fragrance was more particularly an attribute of the French soaps. But our home manufacturers were not slow to recognize the worth or to inaugurate the methods which brought this class of goods into existence. And the result is as told. In Paris to-day, if you inquire for a really fine soap with a delicate perfume, you will probably be asked if you prefer the domestic or the American article. Which is but one of the many proofs which you can meet with abroad, of the position attained in the commercial world by the products of American soap pans.

It is not perhaps generally known that a pure soap is a capital dentifrice. If you don't believe this give it a test. Of course you want to try the experiment with a soap that is made from some vegetable oil and not that into which animal fats enter, for sufficient reasons. If the writer's memory serves him correctly, there have been soaps intended for the purpose just mentioned put on the market, but for some cause or the other, they did not appear to meet with public approval. On the other hand, some of the popular liquid dentifrices are nothing more or less than a solution of saponified matter, flavored and colored so as to give them an attractive appearance.

Speaking of perfumes, reminds one that there are two ways of using them in connection with soap. The cheap sorts of odored soaps, have the perfuming substance put into them while they —the soaps—are in a melted state. Of course it is necessary that the perfume shall be of such a kind chemically, that it will not be affected by the alkalies in the mixture or by heat. Most of the perfuming substances which fulfill this requirement, are of a powerful or "strong" sort. And hence it is that they affect some people in a disagreeable manner.

While we all know what soap is, yet a certain amount of interest attaches to its definition according to the scientists. These gentlemen state that it is "a body whose general characteristics are a certain greasiness to the touch, has a solubility in water with an attendant formation of a viscid solution which on agitation yields a tenacious froth or lather; has an indisposition to crystallize; readiness to amalgamate with small proportions of hot water into homogeneous 'slimes' which on cooling set into jellies or pastes. Soaps also give an alkaline reaction and a decidedly acrid taste. In a pure condition, a state never found in a commercial soap, they have neither smell nor taste. After much experiment the conclusion has been reached that soap owes its cleansing powers to an inherent property of its solution to emulsionized fats."

Finally and again, consider your soap as carefully as you do your diet or exercise. And when you buy it, see to it that it is made by a man or firm that has a reputation to maintain and a record to live up to. Then your skin shall be as velvet, your garments as snow, and your home a place of shining cleanliness.

Again the Water Question

By W. N. HULL, A. M.

All Forms of the Liquid, Except the Distilled, Open to Suspicion on Hygienic Grounds. Action of Water on the System.

Our readers must remember that the fact that we publish instructive articles, such as this is, does not imply that we necessarily endorse all the conclusions of the author. We shall be glad to hear from those who hold views to the contrary.—Bernarr Macfadden.

WE drink a glass of water. What becomes of it? Well, first it passes into the stomach, which, when empty, is like a limp sac or small bag, but stretches as it is filled till it will hold a gallon or more. If the water is cold, it chills the stomach slightly and is itself warmed as it is rolled over and over by the organ's motion; it is then absorbed after being heated to the temperature of the blood, ninety-eight to one hundred and seven degrees.

If the water is hot when drank, it reddens the glands, but does not burn, for the same reason—that it is rolled rapidly over and over. Hot water is beneficial at times and cold water at other times. The stomach cannot be overheated or overchilled, as is supposed. The water passes right through the tubular glands and muscular walls of the stomach and eighty per cent. of it mingles with and assists in making the blood. It is, as a matter of fact, the fluid part of the blood. The other constituents of the blood are the nutritious elements of the food which we have eaten, changed to a fluid, and red and white corpuscles. The latter give the blood its color. Of the twenty per cent. of water which the blood does not take up, some passes along with the food and some is absorbed into ducts, or permeates the tissues, and they drink it up as a sponge takes up water. It becomes a part of their substance.

Whatever is in the water when drank, goes with it, or is carried by it, until it finds its place or affinity. Like goes to like and is assimilated or becomes a part of the solid. Lime in the water goes to the bones, particle by particle. But a particle of lime may be caught in the bladder or gall cyst, another clings to it, then another and and another and another till quite a ball or stone is formed, difficult to crush or remove. These come from drinking "hard" water, or water loaded with lime. It may be clear as crystal—generally is—but its transparent solutions combined and multiplied are deadly in their effect.

The object of digestion is to change solid foods to fluids and when so changed much of it is absorbed through the stomach walls and enters the blood with the water. Some fluid food and some water, thus mingled, will pass the stomach into the intestines where more of it is absorbed into the blood vessels or passes into tissue. A large proportion of the body is water.

Now, we see the necessity of the water being pure. Some say it is as necessary to cook the water as to cook the food; that there would be as much sense in eating raw pork full of trichinae as in drinking raw water full of typhoid germs.

After the water passes the lips, it is beyond recall, and dirt, bacteria, poison, filth, etc., enter the stomach, which is fitted only for the reception of pure things. No wonder that it sometimes rebels and says, "I will not have it," and returns it to the outer world.

There is just now such a hue and cry about pure foods. Why not pure water? Man may be imposed upon, not so the stomach. If it does not want that which comes into it and is not comforted and soothed by it, it gets rid of the obnoxious substance as best it may.

A true stimulant helps an organ to perform its natural function—the

stomach to digest food, the heart to pump blood, the nerves to convey sensation messages, the muscles to contract and expand; but when alcohol is taken into the stomach, this organ stops the digestion of food and uses all its energy to expel the foreign substance; the heart jumps with fearful energy to drive off the unnatural element that is in the blood, the muscles twitch and jerk because they are not controlled by the nerves, the latter being unduly excited or deadened by the alcohol.

Water, on the contrary, is soothing, quieting, upbuilding. It comes as a friend, alcohol as an enemy; the one, a lover; the other, a destroyer.

If there is solid matter in the water, it may not be absorbed at all, but passed along with the fluid-food from stomach to intestines and so be gotten rid of. On the other hand, it may lodge in the body and irritate, causing inflammation, and even morbid growths.

Everyone should know, when he lifts a glass of water to his lips, that it is pure, but it is a singular and lamentable fact, that water, one of our chiefest foods—for such indeed it is—is treated with more neglect than anything else which we take into our systems via our mouths. Why this is so is a mystery, but the fact remains. And all of us seem to overlook the peculiar susceptibility to pollution from which water suffers. By which is meant that, except in regions far removed from cities and towns, water is apt to receive all sorts of poisonous elements due, for the most part, to drainage conditions, or to the ignorance and neglect of those charged with attending to the water supply of a community. As a case in point, a recent official report on the Hudson River showed that it was from a hygienic standpoint "a river of death," so befouled were its waters by reason of the output of thousands of factories, chemical works, and so on, and the sewerage from scores of villages and cities located on its banks.

It is true that the water of this river is not used for drinking purposes except in the case of its upper reaches. But what stands good of the Hudson, is equally true of other rivers whose waters are used as a beverage.

Sunken wells are peculiarly liable to pollution from the causes just cited. Even driven wells are, in some instances, not free from suspicion. It really would seem as if one could place confidence only in that water which bubbles direct from the rock, or that which is the product of a filter of the very latest scientific type.

Boiling water kills many of the disease germs, but does not remove the filth and sewage. Hold up to the light a glass of boiled water and see what you are drinking. Set away a glass of it for a day or two, then examine and judge of its purity. The best part passed off into the steam and you drink the dregs.

Boil a gallon of water until there is but a quart left, and the quart will contain all the impurities of the gallon and will be nearly four times as impure as before. By continuing the boiling all the impurities, animal, vegetable and mineral, except the gases thrown off, will be reduced to one solid mass. *The water which is evaporated and passes off as steam is very nearly pure.* In the boiling process the dangerous germs may have been killed, but their remains furnish excellent material for bacterial life to feed upon, says the *New York Journal.*

Professor Percy Frankland, Ph. D., F. R. S., the noted English scientist and recognized authority on water, says that the germs which propagate epidemic or zymotic diseases may be boiled three hours and yet not be destroyed.

Try a simple experiment. Put unboiled city water in one bottle, and the same that has been boiled for half an hour or more in another, cork tightly and keep in the sun or in a warm place for a week or longer, and note the difference. The unboiled water will show a marked depreciation in looks, taste and smell, but that which has boiled will be so much worse in these respects that no one would think of using it. In comparison with these you can submit a properly sealed bottle of pure distilled water to the same conditions, and at the end of a year it will be found to be as pure, sweet and perfect as when first bottled.

The moral is obvious.

Comment, Counsel and Criticism by Our Readers

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

A Warning to Boys

TO THE EDITOR:

In a sample copy of your good magazine for March, I read a letter under the above heading, and my sympathy went out to the author. I can understand his position and the state of his mind, because (I am ashamed to confess it even in an anonymous letter) I was formerly a victim of the same habit. I hardly know when I begun it, but I do know that at a very early age my mind was befouled by listening to older boys and men tell lascivious stories and discuss sex subjects in a way that always leads to harm. I cannot say that I blame them now, for the practice of talking this way was, and is, so general that few realize the evil of it. When one's thoughts are impure his acts will soon become so, for "As a man thinketh in his heart so is he." Oh, that all teachers of religion could be brought to realize that the only religion worth having or preaching is that which cleanses the mind.

With the editor's permission, I will give a few words of advice to the writer of the letter. First, do not cherish the belief that you are ruined mentally, morally, physically, and eternally. This notion is a great big lie, and brooding over it has no doubt sent many a poor fellow to the "bug house." Do not read any of old Dr. Robtheboys' literature or take any of his dope. Medicine will do you no good, but if you are still a worshipper at the shrine of Easculapius, consult some good old family doctor of your acquaintacne; he will at least give you sympathy and good advice.

Do not think that everyone you meet knows your fault; they do not, unless they are also guilty of it. The only way to cure this trouble is to quit it, and the way to quit it is to "forget it." Quit thinking about it in any way at all, and let Nature do the rest. Avoid every influence, as far as possible, that tends to make you think about sex subjects. Do not read about them or discuss them from any standpoint. Seek good company, read good books, get interested in your work or studies or games. Another point, and perhaps the most important of all, is to quit worrying about your physical condition and about certain symptoms. Do not bother about these things, for all the bad effects of the habit will gradually disappear after you reform, and if certain symptoms linger awhile, they cannot retard your progress toward right living.

As to physical culture, will say that (in my opinion) it is all right to go in for exercise in order to enjoy it and develop the muscles, but if it tends to fix your thoughts on your trouble, it will do no good. Your trouble is mental. As to dieting, I believe it is best to eat moderately of the food that is set before you, and do not make a nuisance of yourself by demanding certain foods prepared in a certain way.

As you mention church-going and prayer in this connection, will say that I believe both in repentance and prayer. But true repentance does not consist in worrying about the past, but rather in ceasing to do wrong. And the most acceptable prayer to our dear Heavenly Father is a constant desire to do right. "Let the dead past bury its dead." Live in the present, and live a clean, commonsense, natural life, full of kindly sympathy for mankind and simple faith in the Power that sustains us.

"A FRIEND."

Fasting in Cuba

TO THE EDITOR:

Since others have been giving their experience in fasting, I wish to add an account of my own experiment in this line. I took a short fast this summer and propose to repeat it each year, making it longer on each occasion. I intended to start fasting on June 1st, but my "grit was up" on May 19th and I went at it immediately. I took nothing but water until May 27th, then for three days I used a little fruit together with the water in which ground wheat had been soaked. Then for ten days I took what might be termed a fruit fast, that is to say, I lived on nothing but fruit.

It is easy to fast when one is sick, but it surely takes nerve when one is in fairly good health. I lost more in weight than I expected to, having parted with eighteen pounds

during the first nine days. One reason for this I think is to be found in the fact that I took a thorough cleaning out each day by means of an injection. I believe that one must employ this method, at least once each year, in order to realize the importance of a thorough house cleaning. I have now regained my natural weight and it is new and healthy flesh.

You can imagine how these people regarded me, never having heard of such a thing as fasting. They called me "locoed" (crazy) said I would die and prognosticated a number of other evils, but I am very much alive and thankful that as I was once blind, I now see.

I have been trying to convert the preachers down here, but they are a hard proposition. However, one Baptist minister promised to get your books and study up on physical culture, since he thought it would help his church work. I know that everyone that tries fasting will receive great benefit.

I have not had any meat in my house for many months and do not want any.

Camaguey, Cuba. E. J. SHARON.

Let Each One Do His Part

TO THE EDITOR:

While a number of subscribers to this magazine are writing you to keep on publishing your serial story "Growing to Manhood in Civilized (?) Society," how many of them are doing anything to stem the tide of ignorance which is prevalent among the younger generation in relation to sex matters?

I think it would be a good plan for every professed physical culturist to make it a point to enlighten such youngsters as they come in contact with on sex matters, as I am of the opinion that this would do more good than the serial story, for it would tend to have them look at these things in a different light than they would if getting such information out of books and magazines.

I have had the pleasure of informing several young fellows on sex matters, and they themselves have admitted that it had done them a world of good. The consequences were such that their filth-laden brains were cleaned, and the generative organs were looked upon as parts not to be ashamed of, but as organs which from that time on were considered as sacred.

If all physical culturists would take upon themselves the task of enlightening the young folks in their immediate vicinity, the word *prude* would soon become obsolete. This, in my mind, would accomplish more good than all the literature published on the subject.

Milwaukee, Wis. THEO. F. SCHROEDER.

Five Meals a Day and Indigestion

TO THE EDITOR:

For the last few months I have been traveling and working my way through the Western States, but making up my mind to come back East, I went to a news-stand to get something to read on the way. There I purchased a recent number of of your magazine. In it I read of your annual fast and determined to try fasting on the trip. For four days I ate nothing and drank nothing except the water I could get on the train and at the stations along the road. The first hunger wore off in about a day and a half, and for the rest of the time I felt fine.

After arriving in St. Paul, I hired out to a German farmer. Here we had three meals and two lunches a day, and I must admit that I have been fool enough to cram down the whole thing. In two weeks my stomach has gotten all out of order and my entire system run down.

The man I am working for says that he has been bothered with stomach trouble for years, and the only thing that keeps him in working trim is a big jug of whiskey.

To-day I went to St. Paul and got two more copies of your magazine. They have made a captive of me. So instead of trying my friend's whiskey cure, I am going to my home down in Iowa and see if I cannot cleanse my overtaxed system by physical culture methods.

St. Paul, Minn. C. C. W.

The Navy: Its Evils and Benefits

TO THE EDITOR:

In your July number I noticed an article criticising your statement in regard to the comparison between the average enlisted man in the Navy and the average man in civil life.

I beg to disagree with the author of this criticism in some respects, as I have served an apprenticeship in the Navy, and as far as I know from observing the condition of the men aboard ship I must say that I believe, that as a rule, the enlisted men are more healthy. than the average man in civil life.

I do not attribute this to the diet of the men, but I do believe that the reason there is so little sickness in the Navy is due to the fact that the sailors on a man-o'-war are compelled to take regular exercise, keep their clothes perfectly clean, wash their bodies regularly every morning, in short, I believe it is due to the fact that every sailor must take regular exercise, regular meals, and be perfectly clean at all times.

But I do not think that the life of a sailor on a man-o'-war is at all ideal from either a mental or physical standpoint, as there are many objectionable features to the life of any person being trained as a professional murderer. Some of the odious features of life in the Navy are: First, the diet consists of decayed and poisoned meats, white bread, very little fruit, hot coffee four times each day, and canned butter that smells more like a dead horse than anything else.

Second, the sailor is not permitted to think for himself, but must obey all orders whether they are consistent with his belief or not.

Third, sexual dissipation is encouraged by the officers. I have known of several cases where the doctors have given a man a special permit to go ashore to visit a house of prostitution when he should not have been allowed to go under the regulations of the Navy. But all things considered, I believe

that the sailor in the United States Navy will compare favorably with the average man in civil life from a physical standpoint. Of the officers I cannot say as much, for the reason that they disregard all regulations that do not suit their fancy, but I believe that the time is fast approaching when trained murderers will not be required, and then and then only will we be ready to away with the abuses in the Navy. FLOYD L. LEWIS.

Montavilla, Oregon.

Constipation Yields to Fasting

TO THE EDITOR:

In my June fast I was unable to hold out as I intended on account of my extreme nervous sensation, which trouble I was undertaking the fast to overcome. It seemed that the longer I abstained from food, the more keen and violent the nerve contraction became, so I was compelled to break it at the end of the sixth day. I then commenced again on the twentieth of June and continued four days, making in all ten days, which gave me, I think, quite a perceptible benefit, as it seems to have almost, if not entirely, broken up a very stubborn condition of constipation. My nervous headache, which is very keen and incessant, does not seem to have been benefited, and although with the aid of other short fasts that I intend to continue, and a course of careful right living, together with all the quiet sleep and rest I can get, I think I will yet come out all right. I feel that you are doing a noble work, although I think the mental attitude which is carried with the physical performances has more to do with building up and maintaining the true life than you seem to give it credit for. I think the mental state fosters the major portion of life's conditions, and will say in conclusion that I am very fond of deep psychological studies. S. B. DAVIS.

Webster Groves, Mo.

Proper Education versus Socialism

TO THE EDITOR:

I feel especially bound to express my hearty concurrence in some of the sentiments expressed by Mr. Sanford, of Langley, Wash. If he had concluded his words with a cry for education, I should have most solemnly added Amen to the whole. As it is, if you will allow me to ask him a question or two in a brotherly spirit, it would give me much gratification.

He says our one hope lies in co-operative brotherhood. We have in our country to-day an institution which we call the ballot, which gives to each citizen the opportunity and the right and power to benefit his own life by a wise selection of men to represent him in his dealings with the world at large. What use could a mass of men make of co-operative brotherhood, who are not, as a mass, sufficiently advanced as thinking men, to use such a simple, though powerful tool as the ballot for their own true welfare? Is it not a fact, that the so-called civilized life of to-day, is built upon the maxim of—Help yourself *first*, then, if you are able to help your fellowman, why, do so, and as far as the general judgment is concerned, you have fulfilled all obligations. In other words, if you find yourself in a bottomless pit with a great number of other men, why, get them under your feet, make stepping-stones of them if you can, anything to get out, anything but a brotherly joining of hands and brains, to solve the problem for *all*, then, when you have finally gained the top, you reach your hand over the brink and say—If you can get up here, I will pull you out. Is this not true? Is not this the doctrine which prevails, and are there not hundreds of such men, who imagine that they have by such act, fulfilled the law? As long as men and women are born and bred to this narrow and perverted principle, as long as they are ignorant of the free path to a higher life, with its clearer view, how can we entertain any hope of co-operation?

You cannot force a large idea into a mind too small for it. You must broaden the mind, and prepare it by the daily and patient reiteration and repetition of the school-room, if we are to hope for the final fruition of any truth which is opposed by every evil force in the land.

Now, when Mr. Sanford knows so well the absolute truth of the conditions he has pictured—and God grant they were overdrawn, but they are not—why can he not then believe that the worst must come? Must not effect follow cause? If American manhood, or womanhood anywhere, is not bred and, fostered and nursed, how can it remain always the positive force which it must be, if a nation is to leave a name, worthy of a place on the tablets of time? If we contend, as many do, that environment makes the man, we face at once the argument, that man, the *real* man, is a positive force, who *creates* his own environment, even overcoming Nature in so doing. Unless we are to argue forever, we must admit one or the other, and if we admit the latter agreement, then we admit also, that the solution of our social problems lies in the right education of the individual.

Can you teach him to see, and to comprehend truth, as *you* see and comprehend it? Can you by patient teaching raise his mind to a higher level, give him a *true* view of the life, of which he is a part? Can you do this, without having his newborn ambition run away with his calm judgment, while his feet are still chained fast to universal injustice? If you can do all this with a majority of our men and women, why then, the old riddle is solved!

But you *cannot!* In so far as concerns present conditions and the changing of them, men are but children, but *without* the practibility, and the adaptability of the child mind. Where our *real* hope, our strongest hope, *should* lie—the public school—what do we see there? Conservatism! Yes. In other words, a fold of the mantle of hypocrisy which covers all the nations of the earth! Is the co-operative brotherhood and its principles and aims inculcated there? Is the brotherhood of *all* men taught there, or that doc-

trine of the small and narrow, so well expressed by the words, "My country, right or wrong?"

Are the wonders and beauties and the care of the human body in all its grand completeness, taught and placed at the very top of the list of essentials that each child should carry out into the world as its truest guide to the highest usefulness? Bitterly we must say: *No!*

Again, is it ever explained to the childish mind why it is, that when such evils as alcohol and tobacco are so terrible in their effect on human life, a government of a nation which calls itself Christian, sells for cash the right to produce, distribute and perpetuate the curse—gives for cash the right, to the most unprincipled among us, to trade upon the weakness and ignorance of his fellows? Only too well do we know the answer. Only too well do we know how error and evil, if not counteracted by truth, must breed more error and evil. What may we expect of such a tree of hypocrisy? Certainly not sweet fruit!

Can ever sufficient denunciation be heaped upon men, who, having the power, the brain, and the opportunity to lift the load of misery from millions, do not lift a finger? No! But it is all in *vain*, all wasted power and effort. The true way, the only way of promise, I have always believed to be such work as the editor of this magazine, and other men of like moral courage, are doing. He not only teaches and preaches, he does what is infinitely more effective, he sets an example by his own daily life; he multiplies the great power of earnest words by contributing the word and the deed. What more can a fallible and mortal man do? Are *we*, who have seen the fight of truth, one and all doing as much? No! If we were, the ripple of true reform which to-day barely disturbs the surface of life, would shortly grow into a cyclone, which would topple the rotten structure of hypocrisy, which we call modern civilization, into ruins, and sweep every vestige of the rubbish into the sea of oblivion!

No! We are all bound slaves to the execrable maxim: "Look out for number one." Until men as a mass, shall be fit to cast it aside for the one of: "Humanity's cause, my cause; the world, my country!" conditions must continue to reflect the mental and moral state of men, in such pictures as Mr. Sanford and others have drawn. To my mind, nothing is plainer, than that, since the evil in our life, is simply the collective defects, viciousness and ignorance of individuals, any contemplated reform or improvement, must begin with the individual, and since a high standard of life requires high thinking, to produce high thinking, must we not first of all, have *clean living?* Surely, for it is impossible to combine low living and high thinking. Therefore, we who realize that those who are actively laboring at this task of teaching clean living, are giving their best gifts, are expending their powers at the very roots of things. Let us at least give them the support of approbation and sympathy; that withheld, their task is thankless indeed.

The cry of the widow, the orphan, and the child wage-slave, will continue to be heard throughout the world, until men become *real* men, ready and ripe to exchange selfishness for *justice*, personal pride for *truth;* ready to exchange the shell for the *kernel*. And nothing in all the world will prepare men for this except *truth*, and single truths stand alone against a thousand odds. Our President is represented as a man of unbounded ambition. In the propositions made to him from time to time by the editor of this publication, he should have seen an open road to the highest pinnacle of fame, which human life offers. If his mind is what it is supposed to be in the popular conception, he cannot but see how he may occupy the very *highest one* by giving the power of his mind and character, and of his position, to the lifting of the yoke from the necks of the masses, by lifting the veil from their eyes, by a fearless proclaiming of truth, as he knows it, *must* know it. True, he would no doubt, with his service, also give his life, and, Brother Sanford, even in death there is victory. He would have added tremendous strength to struggling truth, and a human life is, after all, but a sum total of achievement, the fulfilling of a purpose; that done, the change that follows—what does it matter?

Surely, if, through such men and means, as this magazine and its editor, we cannot hope to stop the decay of the nation, then truth is destined to speak forever behind prison bars. Leaders will come and go, but there will be no one to follow. Most certainly then, our fate is plain, and Mr. Sanford's apt illustration of the rank growth on the dunghill, will be only too true, and indeed, the fruit of a tree of once splendid promise will be nothing but a cancerous botch of dry-rot. But will not that be a perfectly natural result—when we consider who the gardeners were? On the one hand selfishness and greed, on the other, thoughtlessness and moral cowardice, and all of them more or less blind. And my final and uppermost thought is here, that through it all, humanity moves irresistiby forward. Shall the courageous, the sincere, the seeing ones among us, be swayed with the mass over the precipice that forms the end of the road? Or shall the voice of truth grow mighty enough to turn the heedless tide toward the heights of a sane life? Friend, it rests with you and me. It rests with you and me and every man who realizes that he is bound to humanity with eternal bonds, and that his very thought and act has a bearing upon its life, far beyond the tenets of his understanding. When we hear, then, the voice of moral courage, speaking for truth, we must add the full strength of our voice, the full measure of our feeling. Nothing less will suffice, for the call for simplicity and truth and justice, must roll over the world like a clap of thunder, or it must continue to be drowned by the clamor of the aimless throng that are rushing to and fro, in pursuit of——shadows.

C. W. LUNDBERG.

New London, Conn.

THE VIRTUES OF OUR METHODS PROVEN

Six Months of Physical Culture

To the Editor:

Previous to January 1st, 1907, I was a great sufferer from stomach and nervous troubles, also constipation and catarrh, having spent five or six years, and several hundreds of dollars as well, without relief. I finally purchased from one of our local newsdealers, one of your Physical Culture magazines, and after reading same through very carefully, I decided to try the physical culture life, and only lived this a few weeks until I could notice quite a change in my condition, and have lived up to the teachings from A to Z, from January 1st until the present time, and I am proud and happy to say that I have cured myself entirely of the above-mentioned disease and feel like a different person.

I have changed so much in my appearance that my friends all note the remarkable improvement. I have gained seventeen pounds in weight.

I talk physical culture every chance that I get, and I assure you that I shall do all that I can to further the advancement of physical culture ideas for the benefit of mankind.

I never fail to buy a Physical Culture magazine every month.

A. W. Bowlin.

Galesburg, Ill.

Natural Methods Cure Long-standing Rupture

To the Editor:

About one year ago I made the acquaintance of John Van Horn, 212 Audubon Road, Indianapolis, Ind. I was then ailing from a rupture; had been wearing a truss for years, and it was impossible for me to think of moving about without the aid of a good, strong truss.

To make a long story very short, I want to say that, by following the advice in your book "How to Cure Rupture by Physical Culture Methods" (I think that was the title), which Mr. Horn advised me to read, I am now cured.

Just three months ago I laid my truss away, and can truthfully state that not a sign of rupture is to be noticed. I feel like a new man. Yes, there are many ailments that can be cured without medicine—by simply practicing physical culture—but a person must not think of being cured unless willing to put the advice to the last test.

We are living in an age when thinking people recognize that medicine has outlived its usefulness. All hail to physical culture.

Harry Hermann.

Philadelphia, Pa.

Closed Windows and Catarrh

To the Editor:

My fresh air experience might interest the readers of this magazine. I used to have catarrh very bad. I annoyed our professor so; he told me he could not endure it any longer. But, when I kept all my windows wide open at night the catarrh left entirely. The worst trouble is the closing of my windows by my room-mate whenever he has a chance.

I do not catch cold in the coldest weather with only a sheet and quilt over me.

Kansas City, Mo. A College Student.

A Gain of Forty-Seven Pounds

To the Editor:

When I began reading your magazine three years ago, I only weighed eighty-three pounds; height, 5 feet 4 inches; age 20. I had no idea I could develop myself to my present condition, with which, however, I am not even yet satisfied.

My present weight is one hundred and thirty pounds, stripped; height, 5 feet 6 inches; age, 23 (this month). The fact of my being ashamed of my condition at the time, caused me to work hard for my present development. It looks as though I was stretching it, but it is true, the physical director at the Y. M. C. A. having taken my measurements.

Columbus, Ohio. P. A. L.

Cold Water Applications for the Voice

To the Editor:

I have read your magazine a long time and hope to do so for a longer time yet. I am ve y much interested in the water cure, and you have taught me to think that the body is very sympathetic, and if one part be cold the blood will immediately respond to that place. Of course, the blood does all the healing and building. Your ideas have led me to believe that a cold, wet towel placed on the affected part would immediately cause the blood to flow there, and restore and strengthen it.

I worked six months at St. Louis Exposition, and I had a room-mate whose occupation was "spieler" for an attraction on the Pike. He worked ten hours a day; he was simply a leather-lung. Every night he would rub down his neck for thirty or forty minutes, and then soak a towel in the coldest water he could get and wrap it round his neck, and sleep in it. His friends, along with myself, judged him the strongest and clearest voiced man on the Pike. W. G. Coutts.

Big Stone Gap, Va.

General Question Department

By BERNARR MACFADDEN

In connection with the subscription department, there has been organized a competent staff, including the editor, for the special treatment of ailments in accordance with the theories we advocate, and each applicant will secure the same individual attention as he would if he applied to a competent physician for treatment. Write for full particulars and refer to "Offer Q." If you are willing to solicit subscriptions you can secure our treatment free in return for your services.

Tired Legs

Q. I wish to become a long-distance runner, but although my lungs are apparently sound and my endurance good, I find that my legs seem to be weak. This is not only true when I am running, but even when walking. At nearly all times during the day, my legs feel very tired. I do no hard work and cannot account for this. Can you advise me how to overcome the sensation?

A. One reason why you experience the tired feeling in your legs is just because you do not do any really hard work. This weakness is due simply to a lack of muscular development. You require more powerful muscles in your limbs, and as soon as you take sufficient strenuous exercise for these parts to build up the necessary muscular vigor, you will no longer be troubled with the tired feeling complained of. I feel certain of this because of the fact that your lungs are in good condition, and for the further reason that the fair endurance which you claim to possess, is generally the result of a pretty good constitutional condition, when it is not the result of a long period of previous training. That is to say, your lungs and heart, together with the blood-making organs, are probably in fairly good condition. I would suggest ordinary exercises for the legs, such as rising high on the toes until the calves tire, in fact, until they ache. From a standing position lower the body to a squatting position and rise again, repeating the movement until the thighs tire. This will build up the needed strength in these parts. Perhaps a more satisfactory plan in your case would be to practice sprinting, that is to say, high-speed running, or even running upstairs, two or three steps at a time. Either of these methods would serve to build the increased muscular vigor that you require in your legs. Long-distance running does not require such a powerful muscular development as sprinting, which explains why you may appear to have some endurance with legs that are comparatively weak. Sports which call for endurance depend largely upon the condition of the heart and lungs, as stated above. Nevertheless, the possession of powerful legs is a great advantage in long-distance running. And besides, vigorous strength is absolutely necessary if you hope to be in a condtion to spurt or sprint at any time during or at the close of a long-distance run.

Nut Grinders

Q. Kindly tell me what is meant by an "ordinary nut grinder." I wish to secure one, but do not know where I can buy it?

A. Any department store could supply you with what you wish at a very moderate expense. If your dealer does not understand what you mean by a nut grinder, then ask for a meat grinder, commonly used for grinding sausages at home. These devices are usually equipped with attachments of varying sizes for grinding bread crumbs, vegetables, meats, spices, nuts, and even peanut butter. You can even use these little machines for grinding wheat meal, the meal being ground either fine or coarse according to the size of the attachment used. Some of my readers have suggested the use of the ordinary hand coffee mills which can be purchased almost anywhere. These mills, as a rule, will grind either wheat or nuts just as well as coffee.

Hemorrhoids

Q. I have been troubled with gas in the stomach and piles for the past sixteen or eighteen years. I have tried many things to help me get rid of them, but without success. Is not an operation to be recommended in a case like this?

A. There is only one radical, complete, satisfactory and permanent cure for such a condition, and that is by removing the cause, or causes of your complaints. It is simply a question of strict, right living in your case. Even though an operation were resorted to as a temporary and palliative remedy for the piles, you could depend upon a recurrence of your troubles, or at least the appearance of other complaints equally serious, coming as the inevitable result of the action of the same causes which at first induced the ailments mentioned. Your habits and conditions of life must be so altered as to permit of the enjoyment of a good circulation, func-

tional as well as muscular strength, and general good health. Naturally, I could not prescribe in detail in your case without knowing definitely all your circumstances, and your exact condition. Gases in the stomach indicate digestive disorders, as a result of dietetic errors and perhaps general constitutional weakness. Hemorrhoids are invariably the result of constipation, poor circulation and general weakness. The manner of remedying same, therefore, is obvious, though as to detailed treatment it might be necessary for you to get some expert assistance if you are not thoroughly familiar with physical culture methods.

Perfect and Symmetrical Development

Q. Will you kindly advise me if there is any special set of exercises which will produce a perfect development of the entire body, and which will at the same time, give perfect grace and symmetry to the figure? I realize that mere muscular development is incomplete without the possession of poise and grace.

A. Your inquiry is one that is easily answered in a general way, although it would be impossible in this limited space to give any specific or detailed reply. I would say simply that any system of exercise which calls into active and vigorous use all of the muscles of the body, will be certain to bring about a symmetrical and practically faultless development. Of course, it is necessary that such a system would employ some movements tending to stretch and raise the head and upper body, thus bringing the shoulders back, rounding out the chest, and bringing all the vital and functional organs of the body up to their proper positions. For a general "sagging down" and misplacement of many of the important organs of the body is a condition very common among those who have drooping shoulders and who lack the general development and carriage of a well trained gymnast or athlete. The mere possession of strength in every part of the body and the enjoyment of that exhilarating degree of vitality, which perfect health inevitably brings, will insure the possession of the poise and grace which you refer to. I would say, also, that nearly all active athletic games are inclined to develop such grace, though dancing, and particularly fancy dancing, can be recommended for this purpose. And finally, remember that it is not so important just what system of movements you may practice, as the fact that each day you thoroughly exercise all of the muscles of the body, no matter by what methods.

Weak Heart

Q. Would you kindly state the best exercise for strengthening a weak heart, caused by the excessive use of tobacco?

A. There is no special exercise that will quickly and absolutely eradicate the results of such vices as smoking and other debilitating habits. It is first of all necessary that you avoid such mistakes in the future, and, furthermore, that you live a consistent and careful physical culture life, which does not mean simply the practice of physical exercises. The physical culture life, broadly speaking, includes everything in the way of diet, pure air, suitable clothing, proper bathing habits, and wholesome surroundings generally, in fact, everything inclined to bring about an improvement in the general health. The only way that you can strengthen your heart is through a general constitutional improvement, as a result of which all the tissues and organs of the body, the heart included, will be benefited proportionately. Of course, suitable exercise will necessarily play an important part in the treatment, inasmuch as a certain amount of appropriate exercise is absolutely necessary in order to build strength not only of the external muscular system, but also of the functional system and all the important vital organs. Naturally, you should avoid violence in exercise as long as your heart is weak, though it is likewise important that you avoid being over-energetic for the sake of your muscles and the other organs of the body, which in your condition, are also weak. I could give you no more definite or detailed information in the limited space at my disposal here.

SLEEPING IN AN UNUSUAL POSITION

To the Editor:

I have been experimenting along physical culture lines of late. I slept out of doors, on the roof, this summer, and never rested better in my life. Now I sleep in a room with windows wide open. Sometimes in the night I awake, and find myself lying on my back or side and quite cold, and I have found that by lying on my stomach, face downward, I become warm all over. What is the explanation? I lay perfectly quiet and seem to keep warm as long as I lay that way. I took cold baths and a swim daily until the temperature of the water became forty-eight degrees, in the forepart of November. I have worn no underclothing or overcoat for two years and have not been sick or had colds, so you see I thrive on the methods of living you advocate. I like it. George E. Starkweather.

Norwich, Conn.

The Organs and Their Purposes

No. 9.—THE SYMPATHETIC NERVOUS SYSTEM

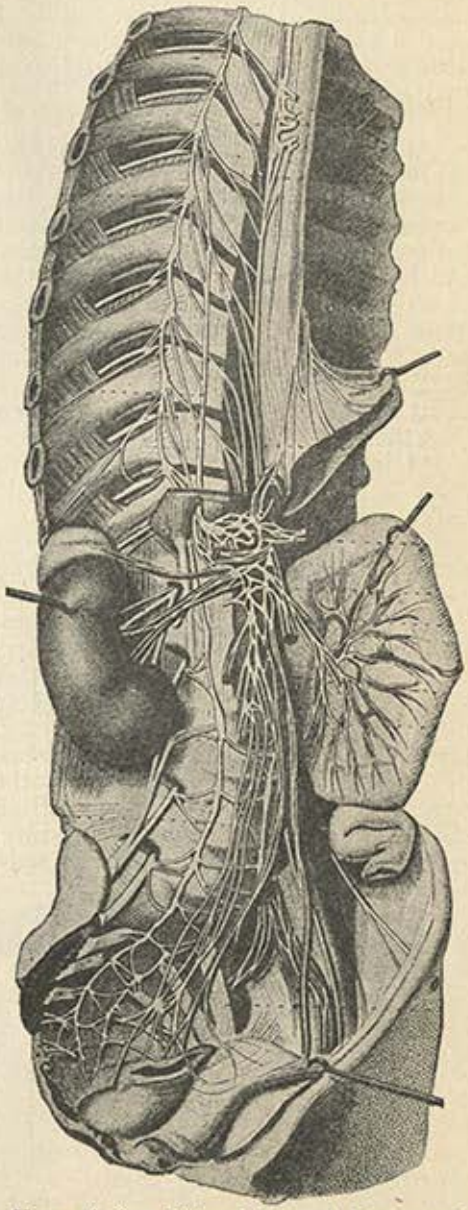
THIS part of the general nervous organism of the body, although as widely distributed as the cerebro-spinal system, or even more so, is infinitely less generally understood even by scientific men.

It has been considered, for ages, to be the source of the sympathetic workings of the internal organs of the body, and the seat of human feelings or passions, hence its name. This statement, however, is no more true of the sympathetic system than the cerebro-spinal, as may be seen by reading this series of articles.

The sympathetic system, so-called, consists of two parts: First, ganglia, which are small masses of nerve cells, gray in color; and second, nerve fibers, also gray in color.

The main or central sets of ganglia are situated symmetrically on each side of the spinal column, within the cavities of the body. They are not as numerous as the spinal vertebræ, and are situated as follows: In the head there are four on each side, and one additional single one; in the region of the neck there are three pairs; in the dorsal or chest region, twelve on each side; in the lunibar region or loins, there are four pairs, and in the pelvis there are five on each side and one single one.

These ganglia, or masses of gray cells are connected with each other not only up and down in the body, but across in front of the spinal column. In other words, each ganglion is not only connected by a nerve with the next one above it and the one immediately below it, but also with its fellow of the opposite side. Thus we see that all these ganglia, which are located in pairs along the sides of the spinal columnn, from the brain to the lower tip of the spine—from the single one at the top, which is situated directly at the under surface of the



View of One Side of Central Portion of Sympathetic Nervous System

brain, to the single one on the pelvis directly in front of the tip of the spine—are all connected with each other in every conceivable way.

Besides those ganglia already mentioned there is a subsidiary series of similar ganglia situated in the cavities of the body, being generally placed near or upon some one of the greater blood vessels.

Still further, there are large numbers of still smaller ganglia, yet more secondary in character, scattered all over the body in the various tissues. They are found in the heart, in the liver, in the spleen, in the kidneys, in the lungs, in the brain, between the voluntary muscles, under the skin, close to the secreting glands of the body, between the coats of the stomach and intestines, and in and about the walls of all the blood vessels. In fact there is no definite specialized tissue of the whole body which has not more or less of this ganglionic tissue situated somewhere in or about it. Thus it may be seen that the entire body is abundantly provided in every nook and corner with more or less of these gray, sympathetic nerve cells.

These ganglionic masses act in exactly the same way as does the gray matter of the brain and spinal cord. That is, they are originating or receptive centers of more or less ability. From the central or spinal column ganglia first described, nerve fibers originate and pass outward, to enter, after ramifying into a mazy network of connecting fibers, into one of the primary subsidiary ganglia. From thence, fibers again pass out, ramify, re-collect and enter the secondary subsidiary ganglia in the organs.

From this third set of ganglia, fibers finally pass to various tissues of the organs of the body, such as the involuntary muscular fibers of the heart, the muscular fibers which control the motion of the stomach and intestines, the plain muscular fibers in the skin whose contractions cause the appearance known as goose-flesh; the tiny muscles in the pupil of the eye (the activity of which changes the size of the pupil), or the tiny muscles in the walls of the blood vessels, the function of which is to increase or decrease the size of thees vessels. They also pass to the cells of such organs as the liver, spleen, kidneys, salivary glands, sweat glands, etc., whose work it is to secrete certain materials used in the chemistry of the body.

Now that we have looked for a few moments at the superficial anatomy of this great part of the nervous system, let us try to obtain a good general view of its purpose: In the first place, the sympathetic system controls and energizes all the muscular power of the body, which is involuntary in action. In other words, it is the source of the nerve power of all those muscular activities of the body which so rhythmically and untiringly manifest themselves without the aid of will power. It keeps the heart in action, and, with the assistance of the cranial nerve known as the pneumogastric, regulates and controls that action. It is the source of the muscular activity of the stomach, intestines and other similar organs which at stated times and under certain forms of stimulus, carry out their duty. It is largely by the nerve force of the sympathetic system, that the closing and opening of the gates of the bladder and rectum are controlled. By its force the quantity of light allowed to enter the eye is regulated. Through its nerve energy, the tension of the blood current in the whole body or in any local part is increased or diminished. By means of this system, the salivary, gastric and other glands pour forth their digestive fluids at the proper time.

Besides these functions of muscular, nutritive and controlling power previously mentioned, the sympathetic portion of the nervous system is a means to the reception and conveyance to the brain of peculiar sensory impsessions. It is by this means that sensations of temperature, such as heat and cold, are given to the mind. Through it, also, is conveyed that peculiar form of sensation which is known as muscular sense. For example, the impression of pressure, hardness, softness, etc., are obtained in this manner. Impressions of pain in the internal organs of the body are carried to the mind in this way. Through this channel also we probably obtain knowledge of more or less distant presence of bodies.

Common-Sense Shoes and the Growing Demand for Them

By CULLEN DENIS

THE estimate which this magazine places on the conventional boot or shoe, is so well known to its readers, that it hardly need be restated in this instance. Suffice it to say, that it believes that the high-heels, pointed toes or other regrettable features of ordinary footgear—mostly of foreign design—which ignore the construction or needs of the human foot, work serious harm to the wearers of the same.

Now the manufacturers of these same shoes, are not so much to blame as is the public for demanding the same. Or to put it in another way, the American public—or a portion of it at least—still sticks to fashions which have their inception in Paris or elsewhere abroad, instead of accepting those which are born at home and which, for the most part, make for comfort rather than for corns—for apt usage instead of senseless "appearance."

The native good qualities of American-made shoes, of pretty nearly every kind, including excellence of material, lack of weight, and grace of form, have made them such favorites on the other side of the water that they are, to a very great extent, superseding the English, German or French-made articles in the countries in question. In London, Berlin and Paris, the sign "American Shoe Shop" is by no means uncommon. During a recent trip to the English capital, the writer saw in the window of a Bond Street shoe store, this notice: "Walking shoes and boots made on American lasts." Bond Street, be it remembered, is in the heart of the "swell" district of London. And when the conservative Briton surrenders his cherished beliefs in regard to the unassailable supremacy of the British-made boot, why, that which makes him do so, must indeed, be invested with remarkable attributes.

A Typical "Good-Sense" Shoe

Perhaps that which more than all else, accounts for the growing favor accorded to the out-put of American shoe factories both at home and abroad, is, the trend toward footwear patterns which ignore "fashion" in favor of the physiological demands of the foot itself. It would be too much to expect that this change for the better is, or will be, of a sudden sort. But that it is a fact, and a growing one at that, but little observation is needed to prove. Public prejudice, especially that type of it which favors the retention of a stupid hobby or a harmful fashion, is a hard thing to combat and for the most part, its aiders and abettors stand ready to accept all challenges, looking to the overthrow of the same. Hence the apparent wisdom of the American shoe magnates in seeking to educate their patrons in the matter of shoes made to fit the foot, *versus* shoes made to fit the prevailing fashion.

Not so many years ago the average boot and shoe of civilization was worse than a mistake—it was a crime. That is to say, it was a crime against the comfort, the needs and the physiology of the race. It answered but one of the purposes for which it was created, that of protecting the feet against bruises, cuts or other injuries. In all else, it was a failure or nearly so. The mere fact that the "breaking-in" of a pair of new shoes was then usually a dreaded and more or less painful process, prove that the principle of their construction, called for a radical change in theory and a revolution in the methods of their manufacture.

Happily, this fact was recognized, not only by the larger portion of the long-suf-

ffering public but by the boot makers themselves. And the result was, and is, a growing demand for and an increasing output of sane and sensible footwear to which the general term of "common-sense" may be applied. Such are intended to be aids instead of hindrances to locomotion. Also and in their shaping respect is shown to those muscles which are brought into action during walking or running and at the same time consideration is given to the poise and distribution of the weight of the frame when in movement. When you stop to consider that these things are partially or entirely ignored in the case of say, a shoe of fashionable French design, you will have obtained a clue to the main reasons of the enlarging popularity of "common-sense" footgear of American workmanship. For the purposes of this article we shall use the term "common-sense" as signifying all and every kind of shoe that gives the foot entire freedom, that protects it and that by its conformity to plain physiological facts, does not interfere with the obvious intentions of Nature as far as the body in movement is concerned.

The moccasin of our Indians and the high-heeled, pointed-toed footgear of fashionable folk mark the extreme of "shoe-sense" in one direction and the maximum of "foot-folly" in the other. The deer-hide covering of the pedal extremities of the red man are an almost ideal adaptation of means to needs, while the manner and material in which the "swells" encase their feet are precisely the opposite. It will be seen then, that the original American shoemaker and the American shoemaker of to-day were alike in that, they worked from the same model—the human foot itself. "That," said the merchant who was displaying the travesties on foot-gear as it should be, "is the latest thing in ladies' wear. It is a very *chic* article, fresh from Paris, and will be very much worn this season. We are selling them to the best people in New York."

Comfort and Common Sense in Leather

And the writer couldn't help inwardly exclaiming "If the upper end of the 'best people in New York' prompts them to wear those things on their lower ends, what must be the calibre of the former?"

If an optician attempted to sell you a pair of spectacles that distorted the vision, caused you a good deal of pain and wrought more or less premature injury to your eyes, you would probably express your opinion of him in no measured terms. Now while your foot is not so complicated a piece of mechanism as is your eye, for all that, it is a most complex and delicate part of the human body. It has thirty-six bones, its joints are most ingeniously formed, and its construction in general is intricate and delicate. So far from it being squeezed and compressed and tortured into a shoe of an arbitrary shape which ignores the needs of the foot altogether, it should be treated with that consideration, even deference, which its usefulness warrants and its structure demands. And we must not overlook the added fact, that the welfare of the body, particularly that of the brain or nervous system, is directly impaired by any ailment of the foot. The reason of this will be made plain if you will give a few moment's study to the arrangements that Nature has made in order to preserve the brain from shock. If you will remember that each step that you take in walking or running sends, or rather would send, a jar through the nervous system which would be in proportion to your weight, if it were not for the arrangements in question, you will realize the necessity of not attempting to interfere with the mechanism of the human body in this same regard. And

that Nature attaches the utmost importance to the preservation of the brain and nerve from shock or jar is shown by the elaborate devices which she has vented in order to prevent the former. Let us relate some of these:

First of all the brain itself is safe from all jars by floating in a sort of water-bed. In the spinal column, there is a double curve formation which is equivalent to a double spring, and again, there is a pad of cartilage inserted between each pair of vertebræ that breaks all shocks traveling up the bones to the head. Then there is a remarkable arrangement at the base of the spine that is almost the same as the "C" springs of a carriage, which neutralizes jars received the spinal column, no matter from what direction they come. The femur, or thigh bone is at right angles to the shaft, which again reduces the force of shock. Then there is what the doctors call "the slant of the femur to the middle line." Again at the knee, we have, between the bones, two strong pads of cartilage to prevent all jarring. An important portion of the whole, is the "keystone" which forms the instep of the foot. Its narrow end rests on a stout band of fibers which absorbs all jars. In the case of the foot itself, the hinder end of its arch comes straight down to the ground and is formed of one bone commonly called the heel. But the front pier slopes over gradually like a spring and is composed of twenty-four bones. Thus we get in the foot-arch, solidity behind and elasticity in front.

Now any interference with the intent of Nature in regard to either the normal action of the foot in locomotion, or in any motion of the body whatever, leads to more or less suffering, and when such interference becomes permanent, it follows that the discomfort and the disorder that it breeds become permanent also. So then, it is apparent that any boot or shoe which comes between Nature and her intention as told—that destroys the poise and counteracts the work of the anti-jar device as set forth—must of necessity, have its effect upon the spinal marrow and the brain, such effects being in a great many instances of a far more serious type than are usually imagined.

I suppose that a great majority of us who have reached middle life remember the tired, over-worked, nervous sensation which was the outcome of wearing a pair of new shoes for the first time in earlier days. We felt that we had been under a mental strain, as if something was about to, or had "happened." We were irritable, out of sorts with ourselves and with the world in general. All of which was due, *not* to the local pain in the foot, caused by the new shoes, but by the fact that these latter upset the nervous system by the means related, that the brain had been jarred, and jarred and jarred until it was fatigued and somewhat congested, and in short, that we were paying the penalty for the folly which not infrequently waits upon so-called fashion.

But there was even more than this. The high heel of the average shoe of the old days and the modern French school, by tilting the body forward and thus destroying its poise, throws some of the organs out of position. The law of gravity is as manifest in the case of our internal organs as it is in the instance of a plumb line. It follows then, that if they—the organs—are disarranged by high heels, or indeed anything else, something of a harmful nature must follow. What these somethings are, have been told time and again in the pages of this magazine. In the case of women, especially, they include maladies of the female sexual organs that almost invariably become chronic unless the cause is ascertained and eliminated.

The man or woman who has passed say, thirty, having a proper pride in their personal appearance, dares venture to exhibit his or her naked feet to casual observers is few and far be-

Here are both style and recognition of the needs of the foot

tween, thanks to the shoe as it used to be generally made, shaped and worn. Toes crowded out of all resemblance to the name which they disgrace, corns, bunions, ingrowing nails and all the rest of it, are characteristic of the feet of most people, so much so indeed, that we have actually learned to think of the foot as an ugly and mis-shaped member. As a matter of fact it is totally other wise.

Once upon a time, the writer was privileged to see the feet of a certain famous model, whom Whistler declared to be the only perfect woman that God had ever sent to his studio. The members in question are like old ivory in tint, each toe being perfectly shaped and tipped with a pinky nail. The foot was as admirable from an artistic standpoint as is a perfectly shaped hand, and by the way, was taken as much care of by its owner as were her hands themselves. This young woman stated that never in her life had she worn a shoe which she "felt," and heels of any description were an abomination to her.

So much for the boot or shoe of the one time everyday sort. Now let us see wherein lies the advantages of footgear of the other kind—the common-sense type—that is annually finding more favor with the public. There are several varieties of these, but in each and every instance, they seek to demonstrate the principle already stated, that footgear should be made for the feet and that the requirements of the latter should never be ignored. Which, as intimated, is in direct contradiction to the theories of the conventional shoe manufacturer.

In the first place, our common-sense shoes are made of material which afford or should afford that ventilation which the foot needs and which the shoe itself should give. If we stop to consider that during two-thirds of our lives our feet are covered either by the senseless or the common-sense shoe, the importance of this same ventilation will be obvious. And it is brought about—speaking in a general sense—by using leather which, while possessed of all the requistie qualities, has nevertheless, a porosity of its own which permits of the influx and outflux of air, the same being to an extent brought about by the act of walking.

Again shoes of this description, are devoid of a superabundance of seams. As a rule, the discomfort and pain experienced from new shoes are due either to their not affording the foot sufficient space, or from the seams that seem to be inseparable from the ordinary gear. The consequence is that a shoe such as physical culture aproves of, has the seams reduced to a minimum or either abolished altogether. It is in a sense, a return to the methods of the moccasin-maker, and he knew full well that a seam of an apparently innocent nature, would be sure to make itself known to the disadvantage of its wearer, when the latter had a hard day's tramping or hunting to do. It should be added in this connection, that softness and flexibility characterize the material from which these shoes are constructed. This again is a recognition of the soundness of the principles of shoemaking as it existed among the red men, long before Fifth Avenue and its corns were ever dreamed of and centuries prior to the bunions of Belgravia or Mayfair.

As to the sole of our ideal shoe, it is comparatively thin and pliable also. If you will walk slowly across the room and observe that with each step, the foot in advance raises the body from the toe upward and forward, you will note also, that the sole of the foot from the beginning of the forward part of its arch bends, so to speak, Now this bending would be impossible or nearly so were the sole of the shoe rigid. This is another reason why common-sense footgear is not trying upon the nerves and strength.

But one of the chief charms of the common-sense shoe is, that it follows the outlines of the foot; in consequence of which it fits like the proverbial glove, only that the latter very often produces in a minor degree, some of the discomforts that are identified with the fit of the fashionable shoe. Seriously, though, the relief and pleasure that is experienced by the individual who has the courage and sanity to adopt shoes of the type of which we approve, will be in the nature of a revelation to him. And

what is more, after a time, the sense of the artistic fitness of these shoes will make themselves manifest and he will realize that they are not merely comfortable but beautiful also, inasmuch as they follow Nature's lines in regard to the foot.

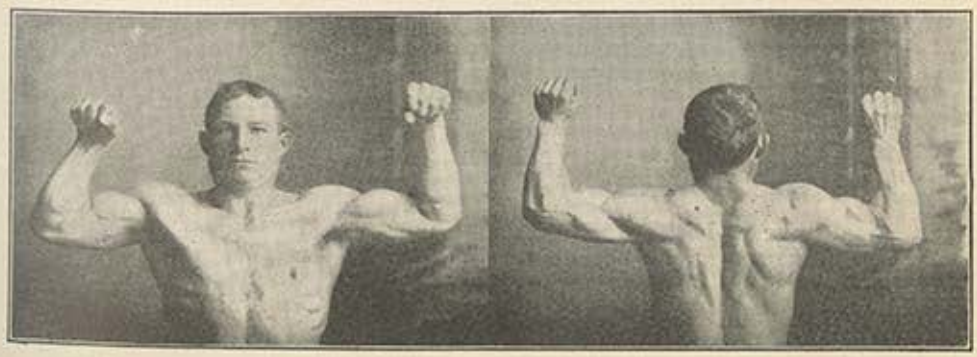
"Fallen arch" is one of the maladies which is the outcome of improper footgear, and it is much more prevalent than is generally imagined. In the vast majority of cases it is due to the entire weight of the body being thrown on the forward part of the foot, which causes the gradual breaking down of the muscles and bony structure of the part involved, this being the arch. It is true that in some instances, there is an hereditary tendency towards the "fallen arch," but this could be eliminated by due attention to the foot-wear. As intimated, the most general causes of this excruciating malady, are high heels and the general construction of the conventional boot and shoe of to-day.

While the beginning of this complaint is not always attended by pain, its last stages are those of sheer agony. The signs of the trouble are a dull, heavy pain in the heel of the foot, usually worst in the morning, next, sharp, shooting pains through the arch of the foot, extending up the leg as far as the calf and later, an exaggeration of these symptoms. There is sometimes an annoying sensation as though one was walking on one's heels. Also is there an interference with the circulation of the blood and in the extreme cases, the formation of deep-seated abscesses in the instep. The foregoing symptoms are quoted from an authority on the matter.

The cause of the malady suggests its cure. A properly constructed shoe will, in almost all cases, bring relief and the final disappearance of the fallen arch. There are cumbersome and costly surgical appliances to the same end, but those common-sense shoes which are made for the express purpose of combating the disease will in nine cases out of ten fulfil the object of their conception.

Some kinds of common-sense shoes are fitted with special linings or with cushions. The spring-heel shoe, the name of which may seem to be a little misleading, inasmuch as there is practically no heel connected with it, is a type of the common-sense article, the value of which has been recognized. This form of footgear is also said to be valuable in cases of fallen arch and indeed in any of those other maladies which arise from improper wear. And there are yet other modifications or improvements on the shoe which we have been discussing, which we think our readers will do well to consider if they are thinking about the necessity of giving their feet that chance in life to which they are so obviously entitled.

Necessarily the subject has been covered somewhat briefly, and certainly not to the extent which its importance demands. But if it has set our readers to thinking on the subject, its purposes will be fulfilled and the happiness and the health of humanity will be more or less increased.



Unusual Muscular Development of Mr. Henry Ling, of Kennett, California

Two Views of a Bachelor Artist's "Den," Serving as Combined Studio, Music Room, Library, Parlor, Dining Room, Kitchen and Bed Room.

How I Kept Bachelor's Hall

By HARRY B. BRADFORD

IT is no unusual thing in these days for bachelors to occupy quarters in apartments, which are provided with little kitchens, so that they may prepare one or all of their own meals as they prefer.

I have found by experience that this manner of living is far more satisfactory than the average boarding house of moderate price.

If a man can cook his meals in camp, where few conveniences are at hand, how much better can he do it when surrounded by every convenience, and with markets close by?

I suppose every artist has a Bohemian streak somewhere in his makeup, and I think mine is probably quite strong, as I prefer to board myself rather than walk down-town to a restaurant, or sample the fare of any boarding house in my vicinity.

My bachelor's hall consisted of one large alcove-room, and a small hall-room on the third floor of a private house.

One would have had little idea that this large room served as my bed-room, dining-room, kitchen, studio, music-room, library and parlor combined.

A few male friends, and sometimes one of my sisters, greatly added to my pleasure by dining with me now and then, but the cleaning-up performance later was not quite as much to my taste as the meal and social enjoyment.

Three of my fair friends seriously questioned my culinary ability, or were very curious to know what a man could do in that line, so it was agreed that if they would prepare a dinner for me which they cooked without help, I would prepare a lunch for them.

At the appointed hour I was on hand and enjoyed an excellent dinner, but on inquiring which one of the three girls made the various dishes that were served, I found that the mother had prepared practically all of the dinner.

Unfortunately, on the date set for my luncheon, I was suddenly obliged to visit the dentist and have a large tooth extracted. There was no time to send my guests word of my predicament and postpone the luncheon, so I scurried about and prepared a generous, if not elaborate, meal for them which I could proudly say I had made ready without anyone's assistance.

They arrived at the hour set, and found things ready. On explaining my unhappy experience of the morning, and telling them that my chances for lunching with them were impossible,

they all wished to postpone the affair till I was able to join them, but I insisted, and said I couldn't eat well and help others, too, so I would prefer to have them stay, as I had everything ready.

We all had a splendid time, and they pronounced my luncheon a success.

After it was concluded they insisted on having the dishes cleaned up at once, and on helping me do it. I was somewhat mortified to think of my company as turning about in their finery and washing dishes, but they asked how I did it, and where my towels, dish-pan, etc. were, so that I had to "'fess up" and we all turned in and cleared up things in a jiffy.

Awhile previous to my occupying these bachelor quarters I had provided quite a collection of house-keeping articles, and as I found use for others, they were added later. Such as I bought were of good quality and consisted of pans, saucepans and a double boiler of granite iron ware, some aluminum ware and a steel and soapstone griddle (this latter being very convenient as it required no greasing nor did it cause any smoke). Cast-iron gem pans were first purchased but later, the lighter and more convenient block tin ones.

For cooking, I secured an oil stove (shown at the left in the second photo). This is the kind Dr. Nansen used on his polar expeditions, and I can testify that it was a very powerful little heater. It generated a gas from kerosene, and its blue flame deposited no soot or dirt on anything, so it was well adopted for use in an apartment. Another stove, (to the right) working on somewhat the same principle, was added later, as my skill in dinner-getting increased. The oil stove shown in center of photo completed that part of my outfit. This latter stove was used for toast and to keep things warm.

As my bill of fare did not include meat, my living apartment was free from all smoke and odor, except when I now and then succumbed to the temptation to indulge in a dish of fried onions.

The little stoves were kept on a closet shelf, but when in use were placed on a small folding table (shown in foreground, in front of my dining table).

Boxes of cereals and tin boxes of "goodies" were hidden in a lower chiffonier drawer, while plates, napkins, knives, forks and spoons were kept in a large drawer in my dining table, conveniently within reach without getting up from the table.

From our old tried and trusted colored cook, Martha, I got some recipes of my favorite dishes, which I had to reduce to proportionate quantities from a supply for a family of six, to that necessary for one person. My bill of fare consisted of the following articles, which I varied as much as possible from week to week: Fresh fruits in season, also nuts, figs and dates; bread, butter, eggs, cheese, smear-case, a variety of cereals, such as cracked wheat, rolled oats, barley, hominy, cornmeal, rice and graham flour. Sugar, maple syrup and honey made up my supply of sweets, and canned and fresh vegetables were a regular part of my fare. One pint of milk was delivered to me every morning and one loaf of the best Graham bread I could procure twice a week. The little hall-room was used as a store room for supplies of various kinds.

My breakfasts consisted of baked apples, with cream, Graham crackers, bread and butter, and sometimes a dish of cereal with cream and sugar. When I had more time I treated myself to griddle cakes, which I learned to make to perfection.

As my four large windows were never all closed, night or day, my room was always well ventilated and none of that closeness so common to indoors was ever discernible.

My cereal was often started cooking just after I arose (ready-cooked stuff had no attractions for me) and by the time I had exercised, bathed and dressed, my breakfast was ready. In cold weather, I baked apples in my little oven, which was placed on top of the stove first mentioned. These were cooked in some quantity during the evenings and eaten cold with cream in the mornings.

Lunches, when away from home,

consisted of fruit, with date, fig or nut-butter sandwiches and occasionally fig cakes or other fancy cakes. When I lunched at home, I had eggs on toast, sliced raw tomatoes with lettuce, and a glass of buttermilk.

Dinner, which was taken in the evening, consisted of eggs beaten in milk, soft-boiled, poached, baked or scrambled, nuts, cheese, or baked beans (canned) as a nitrogenous food, and potatoes, baked, or fried with onions. Raw cabbage, lettuce, tomatoes or celery supplied my starches and bulky material. To vary my Graham bread diet, I made delicious cornmeal, rice, barley or graham "gems," with raisins or dates in them. Desserts, when any were provided, were from fruits entirely, or rice pudding and baked apples with cream.

Cooking was soon reduced to such a science that little time was lost and failures were very rare. Two things I determined to make successfully—graham gems, and griddlecakes. After considerable batter had been thrown away in experimenting, I finally succeeded in making just enough for one hungry man. (I never have been hungry enough to have eaten some of those first cakes I made).

As an itemized list of a month's expenses would be of little practical value, (because supplies of dates, figs, flour, potatoes, onions, crackers, cereals, sugar, etc., were bought which lasted some time) I will give my average monthly expenses.

My monthly food bills arranged from $7.50 to $10.00. Cereals, I found to be the cheapest foods, while fruits were the most expensive. My monthly fruit bill was from $2.00 to $4.00. The amount spent on cereals in six months averaged only sixty-three cents per month.

A delicious dish, and one I heartily enjoyed, I prepared of steamed whole-wheat with stoned Fard dates added just before eating. This, with a generous covering of rich cream, was thoroughly enjoyed by all who tried it. I made a steamer from a large tin pail which cooked my wheat, barley, rice or hominy to perfection, and cold gems, steamed, were better than when first baked.

A Complete Culinary Equipment, Including Table Dishes, for a Bachelor. Note the Compact Arrangement.

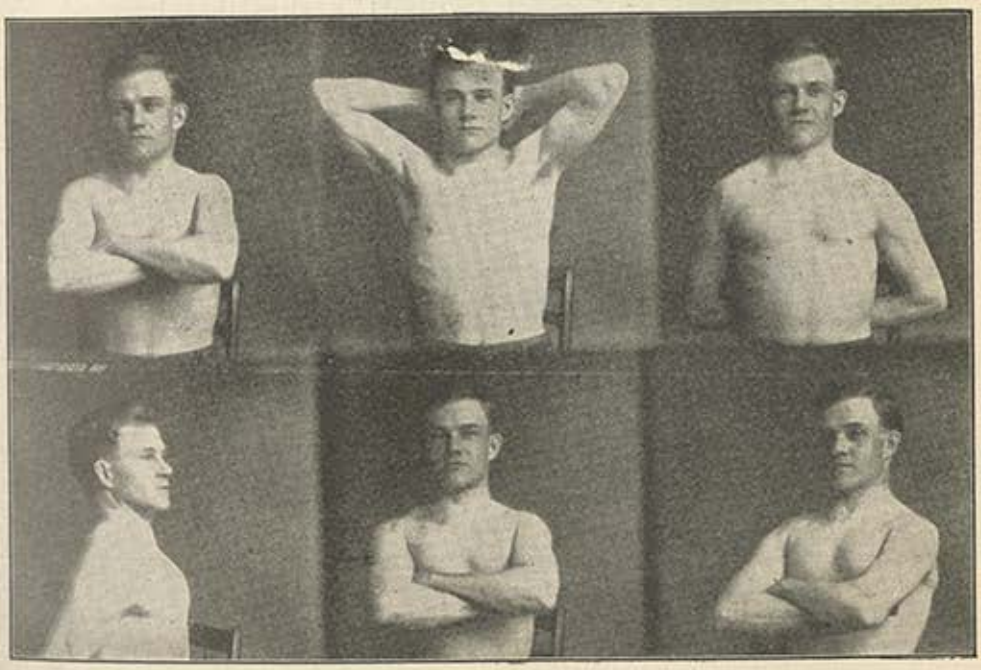
The bottom of this pail was punctured with a quantity of nail holes, and a conical cover (to send condensed steam down the sides instead of on the food) was made to order for sixty cents by a tinsmith, so my steamer's total cost was about eighty cents. The food to be steamed was placed in a small pan, and this was put on a stand made from one-third section of a tomato can, which elevated the pan above the holes in the bottom of the pail so the steam could have free and direct access to the food. The bottom of a double boiler was used to set the steamer on, and when more water was needed, all that was necessary was to lift off the pail and pour more hot water into the boiler beneath. Thus the food was undisturbed till thoroughly cooked. The finest toast I ever tasted was quickly made, without burning, on a wire screen, placed on a circular sheet of iron on any of the stoves.

I arranged my cooking utensils on my two tables and sent a photo of them to the girl whom I intended to marry. She showed it to her mother, who declared it was more of an outfit than she had while feeding a family of six.

A year or so later, when I held her hand, before the clergyman, and repeating the phrase, "with all my worldly goods I thee endow," it was difficult to suppress a smile on that solemn occasion, as the vision of all these wares came up before me.

In these days, after marriage, when my wife is on a summer vacation, before I can accompany her, I have a chance to renew my old acquaintance with the pots and pans of earlier days, and I must continue to say I find it better than boarding-out.

A STURDY PHYSICAL CULTURIST



Mr. F. Morton Yale, a Health Enthusiast of Cairo, Ill.

Surprises for Boys and Girls

By HARRY WELLINGTON

THE photographs presented herewith, represent some very amusing and surprising little tricks which will furnish great fun at a party or any other gathering of young people. They might really be called "impossible exercises," because the things to be done cannot possibly be accomplished if one holds to the conditions and rules that apply in each case. In fact these "stunts" are not very valuable from the stand-point of exercise, their real value lying in their capacity to create amusement and laughter. My readers will recollect the little contests which were illustrated in this magazine last month, among them being the attempt of one person to pull apart the hands of a comrade when held in a certain position. The diversions now presented will furnish equally as much or more amusement, though they do not call for the expenditure of very much physical strength.

Photo No. 1.—Stand with the back against a wall with both heels touching the wall. Now without moving either foot, try to bend forward and pick up some money that is placed on the floor a couple of feet in front of you. You will find it impossible to do so.

Some of my readers who have become enthusiastic upon the subject of exercise, may wonder what relation these "stunts" may have to the development of health and strength, inasmuch as these are chiefly mirth-producing and fun-provoking, rather than muscular tissue making. I would explain, then, that laughter is one of the most valuable of all health-building methods. The very act of laughing is an exercise in itself. A merry "ha ha" not only constitutes a breathing exercise, but requires quick and vigorous action of the muscles about the stomach and sides, as well as the diaphragm. But in addition to the actual exercise which is involved in laughing, it also exerts a most beneficial influence on the general health by reason of the happy frame of mind which accompanies it.

Happiness always tends to bring about a healthful state of the body. The enjoyment of any wholesome fun will make the blood circulate more freely and perfectly, thus causing all of the tissues of the body to be more perfectly nourished and strengthened. A feeling of joy invariably causes the lungs to expand, the heart to beat faster, and brings about a general quickening of the activity of all the important vital organs of the body.

On the other hand, pain and unhappiness check the circulation, bow the head, cramp the chest, interfere with the breathing and exercise a depressing and injurious influence upon the entire body generally. Grief will make one sick, and continued trouble and care will "wear one out."

From this, my young readers will understand the need of laughter, and laughter is just as important to "grown ups" as it is to children. No matter what one's age may be, he or she should never lose an opportunity to have a "good time." That is the reason we have always advised that exercises should, as much as possible, take the form of play. The more you enjoy anything, the more good it will do you, and even those tricks and games which do not call for any special physical activity, will nevertheless have a pronounced physical effect upon the body, and tend to build improved health, simply because they cause a rise in spirits, brighten our minds and make us laugh. In fact, the health inducing properties of mirth and fun have always been recognized by intelligent people, and gave rise to the old-time saying, "Laugh and grow fat." This expression was originated at a time when people apparently thought that it was healthful to be fat. In the present more enlightened age, we know that extreme fat is not desirable, in fact, unhealthy. But an extreme lack of flesh is equally so, and there is no doubt but that laughter and good cheer, will help to build a normal amount of firm and healthful flesh, and increase the vitality and general functional vigor of the entire body.

In the first illustration, the little girl is trying to pick up from the floor a number of coins about two feet in front of her. She has been told that if she can pick up the coins, she will be privileged to keep them. The condition is, that she must keep both heels against the wall. I wish each of my readers to try this, and so find out how impossible it is to pick up anything a little distance in front of you, unless one of your feet is moved from the wall.

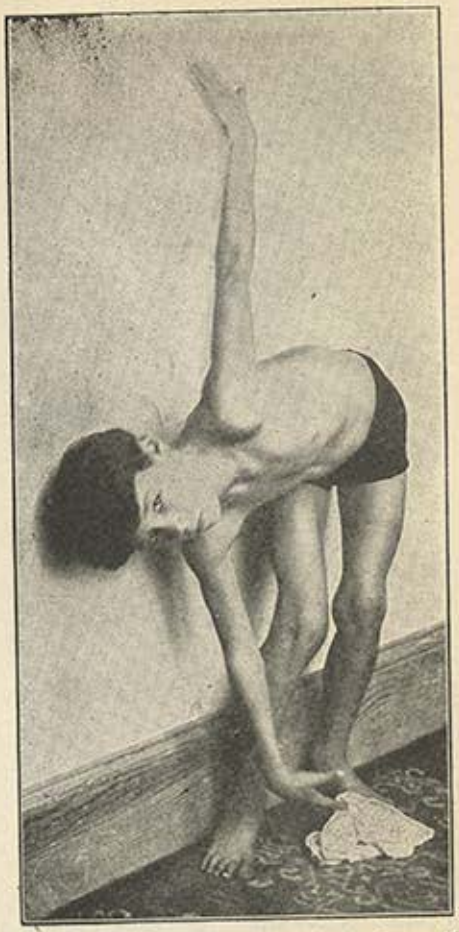


Photo No. 2.—This illustration shows the only manner in which one can pick up an article from the position shown in the previous photograph. Bend the knees and reach down sideways. This plan, however, will only work when the object to be picked up is not very far in front of you.

In the second illustration, we have shown the only method by which one can pick up something in front of him. In this case it is a handkerchief. The method of accomplishing the feat is to

bend the knees somewhat, reach down sideways and keep the hips and back and head as near the wall as possible. I would say, however, that even by this method, it is impossible to pick up anything unless it is very close to the feet. If it is very far in front of you, you cannot accomplish the trick, even by this means.

Photo No. 3.—Stand sideways against a wall, with the right foot, right shoulder and head touching same, as in illustration. In this position, try to lift the left foot off the floor and hold it up. You will find it impossible to do so.

The third photograph illustrates an extremely interesting and amusing little trick. Ask one of your friends to stand up against a wall, turning the right side of your body to the wall with the right foot, the right shoulder and the head all leaning against or touching it. Now, when he has assumed this position, ask him to lift his left foot from the floor and still keep the foot, shoulder and head against the wall. He will find it a physical impossibility, for the reason when he lifts his left foot he will fall away from the wall. Try it.

It is an error that is but too common among boys and girls to imagine that exercises and games involving more or less strength or endurance, are only suited to those who are by nature strong and athletic. The fact is, that exercises are more valuable to one who is weakly and continuously ill, than to one who is already in robust health. Of course, it need not be said that one whose condition of health is extremely poor would find it injurious to attempt those tasks or pastimes which a normally healthy person might attempt, with pleasure and success. However, if the former will but inaugurate a series of exercises of a nature fi ted to their particular needs, they will soon find that exercise is as pleasurable and beneficial to them as to more vigorous individuals.

ACROBATIC WILLIE

I want to be an acrobat—
  Turn somersaults, hand-springs and things;
Or else a bare-back rider
  That dives through tissue-paper rings.
Or, best of all, "a tower of strength"
  With tights that show my muscles through;
Or daring bike performer
  Who climbs a hundred stairs or two.

But just when I am planning out
  The kind of circus man I'll be,
Ma hollers from the door-way—
  "You're loafing by that apple-tree!
And there's that waiting pile of wood.
  You'll chop it, sir, if you are wise!"
I think Ma's downright cruel;
  She knows I just *hate* exercise!

—MARION SHORT.

Food and Conduct

By JAMES THORNE

NATIONAL decay may be said to begin in the stomach of the individual. A general practice of the science of dietetics will solve nine-tenths of the social and political problems that vex our age and time.

That knowledge is of most worth in life which teaches us how to live, says one of the officials of the United States Department of Agriculture. How to keep the body in a healthy condition should be the foundation of all wisdom.

The power of the mind depends upon the power of the body—even the moral virtues are influenced, almost controlled by the bodily health which receives its strength from the food consumed.

There is no one thing over which we have control that exerts so marked an influence upon our physical, moral and mental prosperity as the food we eat.

Well selected food renders the partaker superior to his fellow mortals in those qualities which will enable him to cope most successfully with life's difficulties.

A man is known by what he eats—his food suggests his moral nature. Many a Christian is trying to do by prayer that which cannot be done except through correct diet.

If our bodies are built of the food that we eat, what nobler work can possibly engage the thoughts of man than the building of a human body, wherein may dwell the spirit of a god?

In the health of a people lies the strength of a nation. Nine-tenths of all diseases have their origin in the stomach, caused from impure and improper food.

The purposes of food are to promote growth, to supply force and heat and to furnish material to repair the waste which is constantly taking place in the body.

The human body is composed of eighteen different chemical elements—oxygen, hydrogen, carbon, nitrogen, calcium, phosphorus and sulphur being the principal ones. These elements are supplied by similar elements in our food.

In both body and food the elements are so combined as to form a great variety of compounds. The most important kinds of compounds in the body and in food are protein, fats, carbohydrates, mineral matter and water.

A deficiency or an overabundance of any one of the chemical elements of the body produces disease, caused by an error in the supply of the proper proportionate amount of elements in the food consumed.

Disease is cured by supplying that deficiency or decreasing that oversupply of the chemical elements of the body through a proper regulation in the supply of corresponding elements in the food consumed.

Foods should be selected for their nutritive value—not simply because they are pleasing to the taste. Occupation, climate and age should regulate the quality and quantity of food consumed.

"If a bloated, pimpled moral degenerate, sorely afflicted with intestinal diseases, which have been declared to be chronic, can be brought to normal weight, purified in complexion, cured of a craving for drink and put in possession of natural manhood without the use of medicine, but only with proper attention to diet, and all within three months, what may not be the possibilities involved?"

"The vocation of a literary man is far more perilous than that of a frontier dragoon. The latter dies at most but once, by an Indian bullet; the former dies daily, unless he be warned in time, and take occasional refuge in the saddle and the prairie with the dragoon."—Higginson.

A Mechanical Pugilistic Champion

By ARTHUR CRUIKSHANK

THIS is the "less" age. We have smokeless powder, wireless telegraphy, horseless carriages and incidentally, too many nerveless men and women. Upton Sinclair's book developed the fact that there are chickenless "chicken pates" and tongueless "potted tongue." The corsetless woman is, unluckily, still in the minority, while the same remark applies to the heel-less shoe. The majority of fashions remain senseless, and so do those who follow them. And last of all, there has advented the fleshless, bloodless, and muscleless pugilist who, notwithstanding, will put up as pretty a "go" as any lover of the gloves could desire, so is it claimed.

The Automatic Pugilist in Action

Mr. Charles Lindsley, of New Britain, Conn., is the inventor of this mechanical scrapper. He—the man, not the machine—is the author of other and curious applications of mechanical principles to out-of-the-way devices. But if the reports of eye-witnesses and Mr. Lindsley himself are to be trusted, the latest child of his brain, with which this article has to do, is the most ingenious apparatus that he has so far evolved.

The picture given with this article, will furnish the reader with a fair idea of the boxer who, while possessed of some faults, perhaps, is the owner of many sterling virtues. Thus, he never quits; he won't sham a "knock-out"; you can't get him to "fake" a fight; he refuses to be "fixed;" he won't decline to go on because the gate money isn't big enough, and he doesn't raise objections to the time-keeper, the referee, the other chap's seconds, the gloves, the lighting, the photographers, and so forth, as human "pugs" are apt to do. What is best of all, he is always in the pink of condition and ready to fight as many rounds as you want him to.

"But how does he manage to do it all?" you will ask. Well, we will try to tell you in a way devoid of technical terms. "He" is an arrangement of wheels, springs and levers, to say nothing of his noble head with its expressive face, and his stalwart legs, well developed arms, and physical culture costume. Collectively, he is bolted to a small platform as shown in the picture, the upper and lower portions of which

have ball-bearings between them. The lower part is mounted on four easy-running wheels.

A description of "him" as given by Mr. Lindsley, is as follows:

"He is the only life-sized mechanical boxer in the world and is as good as he looks. Never quarrels, or 'shoots off' his mouth; doesn't go on theatrical starring tours or break into bughouses; hasn't a greedy spot in his make-up and is the easiest gent to manage that you ever heard of. As we see him in the picture, he stands six feet in heighth, has a long reach, can hit lightly or heavily, just as desired, and will keep the cleverest human boxer guessing and going all the time. He lands—or tries to land—blows on the face or body, and in rapid succession, hands out swings, hooks, jabs, straight leads, feints, short-arm blows, upper-cuts and other artistic furnishings of the ring. He hits, stops, blocks, and gets away, in a manner that is simply marvelous."

It was at this point that the writer interrupted Mr. Lindsley's fine flow of language to ask whether there wasn't a slight touch of—ah—imagination in the statement that the figure would "get away" to avoid punishment.

"Certainly not," replied the inventor, "My object has been to make a machine whose actions shall exactly imitate those of a trained boxer. And I've succeeded Of course, I don't mean to say that he watches your eye and retreats at the critical movement. But if you punish him, he kind of stalls off and retreats as if he were getting his wind and strength back a bit. Then he'll duck—oh! he ducks beautifully, I assure you."

Mr. Lindsley also avers that "he," the boxer, will break a clinch in the cleverest manner, and when he gets free, will start fighting again without the loss of a moment. It is this unceasing work of the device that makes "him" so desirable as a developer of endurance.

"I am just perfecting a simple clock-work apparatus," the inventor added, "that can be attached to the motor, and by means of which he will box three one-minute rounds with a rest of one minute between, as called for by Marquis of Queensbury rules. I tell you that the man who will stay with 'him' for a round, will get just as much good out of that one round as he would out of three rounds boxed with a human opponent, for the reason that in the first case, the fighting is fast and continuous throughout. Also, it can be made 'furious' by a slight adjustment of the motor."

Mr. Lindsley furthermore observed that "he" can be so keyed up, that Jim Jeffries himself couldn't last a half minute before "him." For this reason and because of "his" untiring nature, the inventor thinks that the device will be found in all up-to-date training camps in the future.

The work of the boxer is brought about thus, so it is explained: When the motor is set going, the machinery in the body acts in a two-fold manner; first, it advances one side of the trunk and then the other, not in regular and alternate fashion, but somewhat erratically. The result is, that the boxer appears precisely as if he were watching and moving for an opening. Then again, the motor sets the arms going in a sort of sparring manner, varied by the blows already named. The eccentrics that form a part of the machinery, are reinforced by springs which give added rapidity to "his" blows and other motions. When "he" is struck, the upper portion of the platform momentarily retreats, but a powerful spring quickly brings the boxer back into position. The "duck" usually occurs after a heavy blow in the solar-plexus region, the theory of the inventor being, that in actual work in the ring, a try for the jaw would naturally follow on a jab in the stomach. A clinch necessitates the human fighter resting some of his weight on the platform, whereupon his wood-and-steel-opponent gets a fit of the jumps and shakes which breaks the hold without fail.

Mr. Lindsley says that, considered as a piece of gymnastic apparatus, his boxer has everything else in the market beaten to a foamy frazzle. Now while an inventor is apt to think that the chicks of his brain-hatchery are always broilers from the start, it really does seem as if "he" was a good thing in a physical culture sense. This is why this magazine tells about "him."

On Freedom in Literature

By ROBERT BUCHANAN

I HAVE never held (and I do not hold now) the opinion that drainage is a fit subject for art, that men grow any better by the contemplation of what is bestial and unpleasant; indeed, I have always been Puritan enough to think pornography a nuisance. It is one thing, however, to dislike the obtrusion of things unsavory and abominable, and quite another to regard any allusion to them as positively criminal. A description even of pigsties, moreover, may sometimes be made tolerable by the cunning of a great artist, and M. Zola, though a dullard *au fond*, for the simple reason that he regards pigsties as the only foreground for his lurid moral landscapes, appears to be so much better and nobler than myself, in so much as he loves truth more and fears consequences less, that I have again and again taken off my hat to him in open day. His zeal may be mistaken, but it is self-evident; his information may be horrible, but it is certainly given in all good faith; and an honest man being the rarest of phenomena in all literature, this man has my sympathy —though my instinct is to get as far away from him as possible.

Little as I sympathize with his views of life, greatly as I loathe his pictures of human vice and depravity, I have learned much from him, and others may learn much; and had I been unable to read French, these translations would have been to me an intellectual help and boon. I like to have the Devil's case thoroughly stated, because I know it refutes itself. As an artist, Zola is unjustifiable; as a moralist, he is answerable; but as a free man, a man of letters, he can decline to accept the *fiat* of a criminal tribunal. It seems to me that it would be as rational to consult the first area-hunting policeman on the ethical quality of literature, as to accept the evidence of a censor who is either a mischief-maker or an ignoramus.

Does any sane man imagine that it is really corrupt books that destroy society, and that any suppression of literature will make society any better? No; these books, where they are corrupt, merely represent corruption already existing—are merely signs and symbols of social disease. The argument that they bring "blushes to the cheek of a young person" is irrelevant. They are not written for the young person; and if they are, the young person will get at them, now and forever, in spite of the policeman. Criticize them, attack them, point out their deformities and absurdities as much as you please and as much as I myself have done; but do not imagine that you will purify the air by suppressing literature, or that you can make people virtuous by penal clauses and Acts of Parliament.

No; these things must be veiled, the argument on the other side must not be stated, the descent into hell must never be alluded to, except by those who are supposed to keep the keys (so we are told). Surely there is no truth which science or art can bring to light, which infallibility should fear? Surely Satan should be permitted to argue out his case? "No," says the Vigilance Committee and the Lord Chamberlain, "no, a thousand times; since sewerage is a mystery, and children and young persons might overhear the argument and be contaminated—that is to say, converted." A foolish fear! A feeble superstition! The argument will out somehow, in spite of all inquisitions. Human nature will not suffer its own salvation or damnation to be discussed *in camera*. The matter must be fought in open day.

There are zealots who would burn the works of Shakespeare, as there were zealots who cursed and anathemized the works of Burns. To a certain order of intelligence, *all* literature is profane, dangerous, inexpedient. Large portions of the community believe any

stage play whatsoever is an abomination; large portions warn us that the reading of any work of fiction or fairy tale is sinful and pernicious.

Just as certainly as the light which leads astray may (as Burns protested) be "light from heaven," so may the light which guides and saves be light from hell. To drape one half of the human figure is not to prove the whole structure to be celestial; to ignore the existence of evil is not to ensure the triumph of good. The literature of hell is God's literature too.

The fact that, ashamed of our nakedness, we have made ourselves an apron, does not justify us in covering all our flesh with old-fashioned steel armor. The knowledge we have secured, at the cost of our innocence, at the price of our moral peace, is not to be abandoned. In other words, we cannot save ourselves *now* by ignorance, nor can we be saved by providential suppression.

The point for which I have always contended is that both cynical pessimism and coarse realism are alike infinitely *absurd*. A thoroughly unclean book is almost invariably a thoroughly foolish one. Zola, for example, is, at his coarsest, merely a subject for laughter; the dirt sticks to him who writes, not to him who reads, and makes the writer look ridiculous. The sense of the absurd, in fact, is the *granum salis* which keeps literature wholesome. Even *Justine* becomes innocuous, even Petronius becomes harmless, when disinfected. Yet when I look at Rabelais in his easy chair, I need no grain of salt, for I am thinking only of the broad humanity of the man. Even Sterne's dirty snigger is forgotten in his quaint humanities. *Nihil humani a me alienum puto;* nothing in literary humanities injures me one hair. My eyes are yonder on Mount Pisgah, and though I yearn for the region of stainless snow, I know my way lies through the mud.

For, as I have said, evil *is*, and we must know it, and to know it is, in the end, to abominate and to avoid it. We are not celestial beings, yet. We are earthly and human enough to fancy that the diet of celestial beings is very often insipid. We want the records of human sin and pain. We crave for the elemental passions. We tire even of plum pudding, and thirst to eat husks with the swine. We miss the tasty leaven, in super-celestial food. And so, when we are sick of a surfeit of holiness, we turn to Farquhar for gay rascality, to Swift for brute-banality, to Byron for lightsome deviltry, to Goethe for intellectual concupiscence, to Heine for the persiflage which scorns all sanctities and laughs at all the gods, and to Zola for gruesome testimony against sunlight and human nature. When this is done, after we have seen the Satyr romp and heard the hiccup of Silenus, after we have seen Rabelais charging the monks on his ass Panurge, and left Whitman loafing naked on the seashore, do we turn again with less appetite, with less eager insight, towards the shining documents of heaven?

Of all the great writers who have been canonized by humanity, there is scarcely one who, under the proposed inquisition of Messrs. Shallow and Dogberry, would not have been "run in," pilloried, fined, or imprisoned. The author of Pericles would do his six months as a first-class misdemeanant, in company with the author of Œdipus and other foreigners of reputation. Sappho, for one little set of verses, would be tied to the cart's tail, in company with Nanon and Mrs. Behn. In one long chain, the dramatists of the Elizabethan age would go to the moral galleys, followed by the dirtier dramatists of the Restoration. Fielding and Smollett would find no mercy, Richardson himself would only escape with a warning not to offend any more. To come down to contemporaries, I think Mr. Browning might be adjudged an offender against the law of modest reticence, and Mr. George Meredith a revolutionary in the region of sensuous passion. Not all his odes to infancy, not all his apotheosis of the coral and the lollipop, would save Mr. Swinburne. But the authors of the "Heir of Redcliffe" and "A Knight Errant" would rise up to the stainless shrines of literature, and Mr. Slippery Sweetsong might become the laureate of the new age of moral drapery and popular *mauvaise honte*. How good then would humanity become, bereft of Shakespeare's feudal glory,

denied even a glimpse of frisky blue stockings under the ballet skirts of Ouida. Morality would be saved, possibly. All would be innocence, a moral constabulary, and good society. We should have choked up with tracts and pretty poems and proper novelettes the mouth of a sleeping vulcano; but when Ætna, or Sheol, or Hell, had its periodical eruption, what would happen then?

Personally, I claim the right of free deliverance, free speech, free thought, and what I claim for myself I claim for every human being. I claim the right to attack and to defend. I claim the right to justify the Devil, if I want to. I can be suppressed by wiser argument, by deeper insight, by greater knowledge, but not by the magistrate, civil or literary. I would stand even by Judas Iscariot in the dock, if his Judge denied him a free hearing, a fair trial. The truth, if she is great as we assume her to be, must prevail. The evidence of the Devil is necessary to secure the triumph of God; if it were otherwise, the Devil, not his Judge, would be omnipotent.

In this country, I believe, only two classes are specially pornographic: those who never read at all, because they cannot or will not, and those who are sufficiently wealthy to buy and read *editions de luxe*. Mr. Vizetelly's publications cannot affect the former classes, and their existence is a matter of indifference to the latter, who finger their Casanova at leisure, and pay readily for costly works like Burton's translation of the Arabian Nights. The point of the persecution, therefore, appears be that Mr. Vizetelly's books are sufficiently attractive and cheap to reach those classes who are pornographic in neither their habits nor their tastes: young clerks, frisky milliners, *et hoc genus omne*. Now these people are precisely those who are robust and healthy-minded enough, familiar with the world enough, to discriminate for themselves. Whatever they choose to read will make them neither better nor worse. The milliner will frisk without the aid of a Zola, and the young clerk will follow the milliner, even within the protective shadow of a Young Men's Christian Association. Wholesale corruption never yet came from corrupt literature which is the effect, not the cause, of social libertinage. Do we find morality so plentiful amongst the godly farmers and drovers of Annandale, or among the "*unco' gude*" of Ayrshire or Dumfriesshire—thumbers of the Bible, sheep of the kirk? Stands Scotland anywhere but where it did, though it has not yet acquired an æsthetic taste for the abominable, but merely realizes occasionally the primitive instincts of *La Terre*? Dwells perfect purity in Brittany and in Normandy, despite the fact that Zola there is an unknown quantity, and Paris itself a thing of dream? Bestialism, animalism, sensualism, realism, call it by what name you will, is antecedent to the triumphant over all books whatsoever. Books may reflect it, that is all; and I fail to see why they should not, since it exists. I love my Burns and like my Byron, though neither was a virtuous or even a "decent" person. My Juvenal, my Lucretius, my Catullus, and even my *porcus porcorum* Petronius, are well read. My Decameron, with all its incidence of amativeness, is a breeding nest of poets. Age cannot wither, nor custom stale, La Fontaine's infinite variety. But I take such books as these, as I take all such mental food, *cum grano salis*, a pinch of which keeps each from corruption. Even the fly-blown Gautier looks—well, cold and inedible, on a sideboard, garnished with Style's fresh parsley. But I have never found that what my teeth nibble at has any power to pollute my immortal part. I must stand on the earth, with Montaigne and Rabelais, but does that prevent me from flying heavenward with Jean Paul, or walking the mountain tops with the Shepherd of Rydal? Inspection of the dung-heaps and slaughter-houses with Jonathan Swift and Zola only makes me more anxious to get away, with Rousseau to the peaceful height where the Savoyard Vicar prays. By evil only, shall ye distinguish good, says the Master; yea, and by the husks shall ye know the grain

The man who says that a book has power to pollute his soul ranks his soul below a book. I rank mine infinitely higher.

A Doctor on "Doctors' Fallacies"

Remarkable Statement of a Distinguished Physician, which Amounts to a Confession that the most Advanced Medical Thought and Practice is Founded on Physical Culture Principles

LEONARD KEENE HIRSHBERG, M. D., is the author of an article on "Popular Medical Fallacies," which was published in the *American* magazine. He has a professional reputation of an enviable sort, and hence anything that comes from his pen is sure to be received with attention by his medical brethren, while it should be given due respect by the public on the score of his being a member of the common-sense natural school of physics. Dr. Hirshberg is frank in regard to many matters which other physicians prefer to surround with mystery. He is outspoken where most are reticent, and he does not hesitate to condemn a host of the pet humbugs that are carefully fostered by the average general practitioner for selfish ends. Because of this, we now quote him at some length, commending his remarks to the attention of our readers, not only because of the sincerity which characterizes his beliefs, but because those same beliefs are so entirely in accord with the teachings of this magazine. He says, among other things:

"Boils appear on the neck so often for the reason that the collars worn by men, being stiff and full of filth embalmed in starch, irritate the skin and force organisms into it. Women, who ordinarily wear soft collars, do not have nearly so many boils as men. Poets, who wear low, loose collars, usually escape the boil of the neck variety altogether.

"Of course, there are a great many blood and general diseases that have, for symptoms, eruptions of the skin. Smallpox, as everyone knows, is one of them, and various familiar functional disorders are others. But your true boil—as its unlucky victim understands the word—is not a symptom, but a disease. It is a blood-brother to the pimple, the blackhead and the other enemies of shining beauty. All of them are caused by the entry of unwelcome intruders into the pores and sweat glands. Contrary to popular opinion, the absorption of wholesale doses of sulphur and molasses and other so-called 'tonics' does not cure them, or prevent them. The best thing to do, when you have one, is to help the white corpuscles in their battle by touching the boil with some genial assassin of itinerant bacilli such as a lancet.

"The notion that boils purify the blood and 'tone up' the system is but one of ten thousand popular medical fallacies. Some of them are confined to the ignorant—such, for instance, as the idea that gin is 'good' for the kidneys (whatever that may mean), or that camomile tea cures indigestion—but a great many of them, unfortunately, still find acceptance among the more empiric and unscientific family doctors.

"Water is the active agent in thousands of cures credited to other things. One of these is that soggy companion of our childhood, the flaxseed poultice. It was prescribed by grandma for a hundred and one complaints—swollen jaws, bee stings, bruises, 'bumps' on the cranium, boils, sprains, sore muscles, and so on. It was sloppy, hot and unpleasant, but we submitted to its loathsome embraces because we knew that it oftentimes cured. And yet it would have cured just as often if it had been made of bran or sawdust. The thing of chief value in the flaxseed poultice—and in nearly every other sort of poultice of days gone by—was the heat. This heat in the water alone, without the flaxseed, would have cured just as quickly. The sole virtue of the

meal lay in the fact that it enabled the water to retain a comparatively high temperature a bit longer than plain water might have done. To-day, we enclose the water in a rubber bag and do without the flaxseed. The rubber bag is dry, handy and clean. The flaxseed poultice was wet, uncomfortable, and very dirty.

"Another old-time remedy that owed all of its virtue to hot water was sage tea. Those of my readers who are not more than thirty, probably remember swallowing immense cauldrons of it in in their early youth. It was a famous panacea for sore throat, slight fevers and other familiar disorders. Sometimes in place of sage, grandma used flaxseed, tapioca, mullen or saxifrage. But if these fearsome 'teas' ever really accomplished any cures at all, it was the hot water in them that did the work. More likely, the sore throat got well because sore throats will generally do that, sooner or later, if left alone. More likely, the ghastly pains of stomach ache disappeared because Nature has wisely provided that a stomach ache shall run its course and then vanish.

"Beef tea, another old favorite, is a brother to sage tea. As it is commonly brewed, it contains as much nourishment, to the quart, as a piece of beef an inch long. The hungry sufferer who painfully swallows half a pint of it, is about as well fed as if he ate a radish. Most of the good effects he experiences are due to the stimulation of the hot water, the mental healing of his trusted and confident nurse, and the beneficent exuberance of his own imagination. The heat warms his stomach and makes him feel well all over and tradition and faith do the rest.

"Still other old friends are the porous plaster, the liver pad and the liniment—'for man and beast.' The principle upon which some of these aids to the injured are based is that of counter-irritation, which, under certain circumstances, is almost respectable. But as a rule, the idea expressed in the directions and implanted in the minds of the users is, that the powerful drugs in the plaster or the liniment penetrate the skin and do battle with the sore muscles or disease germs within. As a matter of fact, we have the word of a scientific pharmacologist for the axiom that 'the human skin, except when blistered, is almost impervious to any drug but mercury.' In other words, the epidermis of a healthy man, is as much chloroform-proof, or camphor-proof or other liniment-proof as the side of a warship.

"You may urge against all this, gentle reader, the fact that you yourself have cured sore muscles and stiff necks with your favorite liniment. There is no doubt of it whatever; you are a witness to it. And you are perfectly right. You played tennis too long and your forearm felt as if it had been run through rollers. You got out your bottle of Old Reliable, shook it according to directions, and gave your arm a good hard rubbing. Next day, the muscles were pliant again and the pain was gone. All of these things undoubtedly happened, but the fact remains *that it was the rubbing and not the liniment that effected the cure.* If you don't believe it, try olive oil or hot water or Worcestershire sauce the next time.

"Vigorous massage is probably the best of all remedies for muscular pains. It causes a healthy circulation of the blood in the affected part, and in addition, the rhythmic motion has a peculiar psychic effect. There is really more than a mere superstition in the laying on of hands. Stroke the hair of a person suffering pain and sometimes the pain abates. Rub your hand over the brow of a headache patient and now and then you cure the headache. Hypnotists, osteopaths, physical culture advocates and others take profitable account of this mysterious method of bringing jangled nerves back into tune.

"Another fortunate circumstance for the makers of lotions and liniments is the fact that nine-tenths of all human aches and ills are normally of short duration. This tendency of the human body to cure its own ills seems to be little understood by the laity. *It is the popular impression that there is a specific for every malady and that nothing but this specific will cure it. As a matter of fact, the great majority of minor diseases cure themselves.*

"There are on the market to-day,

more than a thousand ready-made 'cures' for colds, and every adult American, according to Mark Twain, has a private remedy of his own. But in the vast majority of cases, colds cure themselves. Like pneumonia and other more serious diseases, they run a definite course. They appear, they make their victims miserable and then they disappear. Nature effects the cure, and some one of the multitude of specifics gets the credit. Once, when Dr. William Osler was asked by a patient to write a prescription for a cold in the head, he said: 'I will give you four days.' The patient abided the time—and was cured. Mustard footbaths, hot lemonade, hot Scotch whiskey and quinine, powders and all other familiar remedies have little or no direct effect. Their value—if they have any at all—lies in the fact that they ease the patient's mind and satisfy the universal yearning to 'take something for it.'

"Half the drugs known to materia medica have been used for pneumonia. Years ago patients were bled. Then came an era of counter-irritation, which was followed by one of antipyretics. Quinine gave way to aconite, which, in turn, was displaced by whiskey, strychnine, digitalis and ice packs. *To-day, the more advanced physicians let Nature combat the disease. All they do to help is to keep the patient clean and comfortable and give him plenty of nourishment and air. The use of drugs is well nigh abandoned, the body fights its battle alone, and six or eight times out of ten it wins.*

"Typhoid and tuberculosis are certainly serious diseases, and yet all the physician can do is to give Nature an opportunity to effect a cure, under the most favorable possible conditions. The germ of consumption is proof against all the antitoxins, germicides and other specifics ever invented, but if the patient is kept clean and well nourished by both good food and good air, and reasonably calm in mind, his white corpuscles will fight for his life, and, in the majority of cases, win. It is so with a hundred and one other diseases. Medicines, in many cases, do more harm than good, but when they are swallowed and poor Nature, in spite of them, effects a cure, they get all the credit. This credit is equally false and fraudulent whether they be patented and advertised cure-alls or the fearful and wonderful prescriptions of empiric physicians.

"There are a million other fallacies of this sort—the products of ignorance that refuses to die. Two hundred years ago, people believed that the seventh son of a seventh son was foreordained for the medical art. To-day, their descendants believe that the crisis in such diseases as pneumonia always comes on an odd day—the third, the seventh or the ninth. The one idea is as ridiculous as the other. A great many persons—including not a few so-called physicians—still believe that victims of obesity who desire to reduce their weight, should drink as little water as possible, that water should be kept from fever patients, that dyes in stockings are sometimes poisonous and cause sores on the feet, that sleeping after meals is unhealthful, that lime water taken internally will cure warts, and that metallic 'electric' belts will ward off various ghastly maladies.

"I pass over the vast host of superstitions regarding talismans, charms, and the influence of the planets. These last-named 'remedies' are by no means the resort of the uneducated only, but they are so obviously the product of lingering superstition and chaotic mental processes that they are scarcely worth considering. Some of the plausible fallacies are far more dangerous.

"Fortunately, modern medicine is fast destroying these ancient delusions. A latter-day scientific physician tries to avoid, beyond all things, hasty jumping at conclusions or too ready dependence upon formulæ. Like the legendary man from Missouri, he demands 'to be shown.' He asks of a doctrine, not whether it is classical or respectable, but whether it is true.

"As a result, the art of healing is making far greater strides than most laymen imagine. Surgery is now an exact science—as exact, almost, as chemistry or physics—and the other branch of the medical mystery is following not far behind. Charlatanry, which was not rare a few years ago, is fast disappearing. Your modern physician is not afraid to say 'I don't know.'"

A Generous Offer

D. B. Lyre Makes a Proposition to the Editor of this Publication which is Chiefly Remarkable by Reason of its Usefulness and Benevolence.

EDITER, FIZICAL CULTURE:

DEER SIR—I notis in the last ishue of your maggerzeen you are talkin' some 'bout sellin' most o' your int'rest in that paper.

Now I got a propersition to offer you. I have a remeddy whitch I diskovered myself. This here remeddy is the best thing you ever seen to cure any kind o' ake, pain, disease or sickness. All you need to do to cure anybody is to take a little of this here "World Beatin' Mixture" (that's what I named it) on the tips o' yer fingers an' touch the disease an' it's gone.

It's the only sure cure for consumshun, an' appendyceetus simply can't stay where the Mixture is.

Reckon you heerd o' A. B. Leever, why he's a nayber o, mine an' he had appendyceetus so bad that the doctors was all there and was goin' to cut him when in rushes a frend o' his'n with a box o' my "World Beatin' Mixture," an' begs 'em to wait till he gives it a try. As soon as the Mixture touched him, he set up an' yelled "Scat" to them doctors, an' in 2 days was out workin' agin'. I have Mr. Leever's own testimoney to this.

Then another case was Mr. Wood B. Beat. He had rumatiz the worst kind of a way. He jest rubbed a little o' the Mixture on the bed posts fer two nights an' the third day he throwed his crutches away. I got a good testimoney from him too.

I'll give you jest one more case to convince you. Mr. E. Z. Faked had consumshun so bad that he was give up to die. He was a frend o' mine an' I went over to his place to see him. He complained of pains on his chist. I happened to have a box of the Mixture in my pocket. Would you believe it, he got better 'fore I had the lid clean off'n the box! In jest three days, he was doin' a good day's work an' had no signs o' his consumshun. You should heer him blessin' me an' the Mixture fer savin' his life. I have his testimoney with his picters on it. One of his picters shows how he looked when he was dyin' an' t'other one how he looked 2 days after. I had lots o' cases to docter after that.

Now Mister Editer the propersition I have to offer you is this: I'll give you a haf int'rest in the Mixture if you'll give me the same in yer paper. You want to lecture an' I want to git the Mixture interduced 'round the country.

Now after you was through lecturin' each night you could offer to cure anyone in the house, an' do it too, fer the Mixture never fails. It would be easier fer you an' you wouldn't have to worry 'bout bein' 'rested fer havin' picters of girls 'thout no clothes on. I'd 'tend to that part of it. I have a boy Sile who could help me with the paper. We would run it jest like you be runnin' it now. Sile he's good at figgers but I'd hev to do the spellin' an' writin', you know.

I reckon you're jest the feller as could push the Mixture along an' make big money out o' it. My reasons fer sellin' half int'rest is I'm gettin' too old fer work an' want to make money easy. The Mixture sells fer $1 a box an' that makes about ninety-eight cents profit. I want to sell to some feller that don't want to take it fer the money they's in it, but jest to help a sick brother.

Let me heer from you at onest.

Yours truly,

A. D. B. LYRE.

P. S.—Keep the good work goin'. Roast them fellers what's advertisin' all kinds o' fake medicin's jest to git people's money.

The Physical Deterioration of the American Negro

By PRENTISS B. READ

THE American Negro is the descendant of the Negro tribes occupying the west coast of Africa. The slave traders who first brought him to the Colonies naturally chose that portion of the African continent lying nearest America as the base of their operations, and, until the abolition of their trade in 1808, shipped thousands annually to the slave-purchasing ports.

The Southern Colonies, because of their demand for agricultural laborers, and because of the discontinuance of slavery among the Northern, soon absorbed the bulk of the slaves. And of the nine million Negroes at present living within the bounds of the United States, eight millions are to be found in the South.

Prior to the Civil War the Negro was an excellent physical specimen. A "likely" adult male was worth from twelve to fifteen hundred dollars, and the others in proportion, so to his master, if for no other reason, it was a simple business proposition to keep him in the best physical condition. Under the regime of the Southern plantation there was little indoor work as compared with the duties to be performed in the open air. Most of the slaves, both men and women, worked in the fields from corn planting time in March until the cotton was picked out in September and October. Their diet was uniform and simple. It had as its base, corn bread and fat meat, to which the various products of the Southern garden were added as they came in season. The abundance of oxygen breathed in during the long hours spent in physical exertion in the fields demanded a large amount of carbon, which was well supplied by the corn-field and the pig-pen. The patrol, commonly called by the Negroes "de patterollers," required the slaves to remain on their masters' premises at night, unless given a pass to visit, and this insured a sufficient amount of sleep to develop the best possible condition.

Drunkenness could not be tolerated, because it reduced efficiency. Hence the slave was unweakened by alcohol. His clothing was made to suit the seasons, and turned over to him at stated times; and as far as possible a monogamous form of marriage was required against the loose customs that had prevailed in Africa. The women wore no corsets, childbirth giving little inconvenience, and diseases of the female organs were almost unknown. That the Negro lived under good conditions to develop physically is decidedly proved by the fact that at the outbreak of the Civil War he was far ahead of his African progenitors in size, strength, and powers of endurance.

But when the Negro was freed, and no longer had a compulsory trainer in his master, who would look after his physical condition, the regular rounds of his life were sadly broken into. He was no longer compelled to work in the open air; his food supply was uncertain; he could drink when he pleased; and there was no patrol to prevent him from staying out all night or changing mistresses as often as he chose. From that day he has deteriorated in the physical scale, until now the cry of the South is "Give us immigrant labor to work our cotton fields." The contrast of conditions is startling. Prior to the war, consumption was unknown, yet in the fall of 1900, I found that seven children of an ex-slave had died in the two or three years previous of this disease. Pneumonia becomes every year more fatal among this suffering race, and as it is shot through and through with syphilis, all diseases find but feeble resistance. In his West-African home, the Negro had not developed chastity, and the three hundred years

in America have not been sufficient to make more than a beginning toward this virtue. Consequently, syphilis has made tremendous headway, though among the black Negroes of itself it causes little inconvenience. To the Mulattoes, however, it is almost uniformally fatal.

Alcoholism has also taken its toll. Drunkenness is rampant among the Negroes, and Saturday's sunset is but the signal for a general spree.

Under such conditions, it is but natural that this race should have shown a marked deterioration physically in the last two decades. Continued violation of the laws of hygiene has exhausted the vigor inherited from strong slave ancestors, who worked hard in the open air, and the census figures show that the death rate of the Negro is constantly gaining on the birth rate. Another sign of declining vigor is the fact that the Negroes no longer hold the records in the fields where once they were supreme. They have lost the Georgia record for cotton picking, and the Negro blacksmiths are fast disappearing before stronger men.

There is nowhere to be found a stronger affirmation of the principles advocated by PHYSICAL CULTURE than in the example of this unfortunate race. Its rise from the savage, with his protruding abdomen and underdeveloped legs and arms, to a powerful physique when proper physical conditions were thrown around it, and its decline when, as it were, it broke training, is proof positive that a race can be developed or will deteriorate in accordance with its regard for the laws of Nature, whether that regard be willing or enforced. Ignorance of hygiene, and a love of indolence, born of the enervating climate of the tropics, have conspired to reduce a splendid physical specimen to a degenerate who is constantly sinking. Drunkenness, sexual debauchery, corset wearing by the women, and the newer vice of cocaine sniffing; overeating one day and starving the next; herding together with no idea of ventilation or sanitary precaution—the results of these are lessons for us all, and should never be forgotten.

Here and there in the country districts some of the old physical vigor of the Negro survives, the just reward of physical activity in the open air; but these are exceptions that call sharp attention to the prevailing degeneracy.

The Negro problem gives promise that it will settle itself unless the leaders of of the race can instil into its mass the great principles of correct living which every race that has ever fallen departed from and thus paved the way to its own destruction.

PHYSICAL CULTURE SOCIETY NOTES

We wish to call attention to a change in address of the Secretary of the Physical Culture Club of Chicago, as noted below. This society is a particularly energetic and prosperous one, the members enjoying unusual benefits from weekly lectures and outings. The club regularly participates in long walks, picnics and various excursions.

The physical culture enthusiasts of St. Louis also have at last a strong and prosperous organization. They have concluded to call their society the Macfadden Physical Culture Club, and look forward to a year of marked activity. All subscribers in the vicinity of St. Louis will profit by writing to the Secretary, whose address is given below, with the view of joining this organization.

W. Hoboken, N. J.—Garabed Sabonjohn, 410 West St.
Brooklyn, N. Y.—Mr. John J. Costello, 117 Carlton Ave.
Philadelphia, Pa.—Mr. J. C. Edwards, Bryn Mawr, Pa.
Trinidad, Col.—Mr. Daniel Sandoval, P. O. Box 354.
Detroit, Mich.—Miss Josephine P. Scott, 57 Hancock Av.
Denver, Col.—Miss A. Reed, 1648 St. Paul St.
Colorado Springs, Col.—Thomas Brasil, 1513 Grant Ave.
Minneapolis, Minn.—Mrs. Lora C. Little, 1114 12th St., N.
Buffalo, N. Y.—Mr. Frank L. DeBoy, Jr., 454 William St.
Toronto, Can.—Mr. A. M. Kennedy, 9 Adelaide St.
Newark, N.J.—Miss Anna A. Jackson, 129 Lombardy St.
Manhattan, N. Y.—R. R. Purdy, P. O. Address, Ossining, N. Y., Box 204.
Pittsburg, Pa.—Dr. S. M. Stauffer, Bell Phone, Court 1286, 524 Pennsylvania Avenue.
Montreal, Quebec, Can.—Miss B. Allen, 438 Dorchester St.
Cleveland, O.—Miss C. J. Lowrie, 229 Arcade.
Chicago, Ill.—Mr. A. G. Gobrecht, 10425 Walden Parkway.
Paterson, N. J.—Mr. Frank Berdan, 35 Clinton St.
St. Louis, Mo.—Mr. Brown Hamilton, Buckingham Hotel.

Some Jiu-Jitsu Jolts

By O. Y.

JOTTINGS FROM THE JOURNAL OF A JAPANESE TRAVELER

A Charitable Child

"Where are you going my little maid?" I asked a girl with an angel face and a covered tin pail. "None of your business," she said, but added in a whisper that in return for a nickel she would let me have a drink in the next alley.

A Sanitary Precaution

In a village of western Missouri, a man was jailed for refusing to have his son vaccinated. Indignant neighbors demanded his release and finally gathered in force, but could not break the prison doors before the vaccinators had accomplished their purpose. Culture, says an American philosopher, can advance only by international co-operation, and the incident gives me an opportunity to pay the kindness of a Caucasian traveler's advice to our Formosa colonists: That in settlements subject to barbarous aggression, every housekeeper ought to own a howitzer.

Eccentric Heathens

A week ago the peace of the metropolis was disturbed by a drunken row that broke out again and again. Citizens repeatedly invoked the police headquarters for help, but it seems that the main force of their district was busy raiding a number of Chinamen who were assembled around an opium camp. They were violently clubbed, and jailed on a charge of disorderly conduct. "Un-American conduct," one of their captors called it—perhaps in allusion to the fact that his prisoners were not armed even with a bribe.

Public Benefactors

The public, it seems, is going to be educated by the exhibition of art-masterpieces. I now begin to understand the patriotism that covers hillsides and barn gates with the highly artistic advertisements of patent medicine philanthropists. In the ardor of competition these same philanthropists cause their agents to decorate wayside trees and the ceilings of trolley cars. They even pay for the privilege of thus promoting the culture of their fellow-men.

The Risk of Immortality

It used to puzzle me greatly why exhibitions of the sort just named are discouraged in the most civilized countries of Europe. But I now begin to conjecture that they cannot afford to brave the risk of physical immortality. Overpopulation has already reached an embarrassing extreme, and cure-all compounds would soon result in the "standing room only" sign being placed on the earth.

Magnanimous Tariff

The increased duty on Eastern opium I considered, after all, a most encouraging sign of the times, till I learned to my surprise that the Department of Agriculture is experimenting with poppy plants in order to produce the dreaded poison at home. The explanation is that the moralists of this model republic are trying to reclaim foreigners at the expense of native sinners.

Latter-Day Miracles

A society for the promotion of municipal reform invokes divine blessing on the success of its agents who enforced the prosecution of 2210 citizens, caught in the attempt to take a free bath, but then justifies its faith in miracles by adding that in the course of the same year only five thousand tenement dwellers succumbed to summer epidemics.

More About Legalized Murderers

By ALBERT SOMMERS

THAT which at first appears to be incredible, can, through constant occurrence, become commonplace. Once upon a time, the writer would have branded as an infamous falsehood the statement that a physician practiced his profession "for what there was in it," and that the recovery or even the life of a patient was a secondary consideration, or a matter of no consideration at all in the presence of the incidental fee. But the confessions of some doctors—such as have appeared in this magazine—and the protestation on the part of the more reputable medical organs in regard to this frightful condition, are of so frequent a nature that he now confesses that the idea of a medical practitioner jeopardizing the life of a sick man or woman, simply because there is "big money" in the incidental operation, no longer appals as it once did by reason of its admitted frequency.

Lest it be considered that the foregoing is an exaggeration of a rare condition, that which follows is quoted from the *American Journal of Clinical Medicine*. There is no need to call attention to the obvious moral or the plain meaning of the article. The point about it is, that the evil with which the editorial deals is, apparently, so general, that while it calls for protest, it does not bring forth that outburst of indignant denunciation which the subject so eminently deserves. The *Journal* says:

"Take that case of pneumonia. You were called immediately after the occurrence of the chill and had a splendid opportunity to study it throughout its entire course. It was a beautiful case—and the patient was so tractable, a nice young fellow, and lent himself so cheerfully to your studies. How beautifully you elicited all the classic signs—the increased vocal fremitus, the Skodaic resonance, the percussion dulness, the bronchial breathing * * * * *

pity nothing can be done for such a condition.

"What's that? O! He died. You know we really can do very little in a case of this kind. Of course, you say, 'I provided a good nurse and gave him oxygen at the last. But it was an extremely interesting case from a scientific point of view.'

"Yes, I made—let me see—about thirty calls; got about sixty dollars out of it—enough for a new Abbe condenser—"

And that case of typhoid? Sad case, wasn't it? Mother in her prime—left three little children. Rather tough on her husband. If ever a case was studied with the *utmost* scientific precision that one was. Widal reaction positive on the eighth day. Diazo showed the changing colors in the urine beautifully. You incised a rose spot and found the bacilli typhosi in large numbers—also in the general circulation, a little later. The splenic enlargement was most painstakingly mapped out. Your study of the sulphoconjugate acids was an exceedingly careful one and served as a basis for your paper in the *Journal*.

"Treatment—let me see. Well—you see the Widal was not positive until the eighth day, and there being some uncertainty regarding the diagnosis, I thought it unwise to administer any medicaments. Dieted carefully, of course. You know it is a self-limited disease. After that we gave the Brand baths. Yes, she was rather nervous about them—made too much fuss, I thought. Can't say that they did much good; nevertheless, all the authorities now endorse this method. There seemed to be an unusual amount of tympanites. Possibly this explains the large amount of the sulphoconjugate acids—I shall look into it farther.

"I took in about one hundred and fifty dollars on the case—bought the wife a new diamond ring—"

"Did you earn it? God forgive the scientific do-nothing—we can't."

Editorial Comment and Items from Everywhere

By BERNARR MACFADDEN

A Farmer's Advice

The farmer of to-day not only cultivates the earth, but his brain also—at least in many cases. Time was when literature and the plough were divorced, or nearly so, except in the case of a few brilliant instances such as Burns.

The truth of the foregoing is proven by the communication which follows, comment on which is unnecessary, as it tells its own story, so to speak. We trust that Mr. Smith's example will be followed by other readers in the matter of discussing topics which appear in this department.

TO THE EDITOR:

Seeing the article "Souls and Cereals" in the department entitled 'Editorial Comment and Items from Everywhere,' I am moved to write an answer. Accepting Maurice Maeterlinck as correct, I would say that Prince Troubetskoi can partake of pure extract of honey and rich warm milk and not prick his conscience regarding the crime of taking life, for milk and honey were created solely for the purpose of prolonging life. To overcome the constipating effect of such a diet one would have to either eat absolutely *no* more than the system required or use enemas.

EDWARD J. SMITH, 2D.
Great Elm Farm, Romeo, Mich.

Mrs. Bowman's Life Lesson

In Brooklyn, N. Y., lives an aged colored woman, Mrs. Mary Morocco Bowman by name, who, as nearly as can be ascertained, was born in 1779, several months before the death of George Washington. She is, according to those who are in a position to speak on the matter, "one of the fast disappearing type of the negro Mammy, which in the days before the war, was such a prominent type all through the South." Just now she is living with a daughter of hers in comparative comfort. The old lady's memory is good, and with the exception of her sight being affected, her senses are in excellent working order. Naturally, her history is an interesting one from an historical viewpoint, and it may be added that four of her sons fell during the Civil War fighting on the Union side. The point about her case is this: Nearly all of her life, she has been accustomed to a more or less open air life, frugal diet, and hard work, backed by a cheerful disposition. Personally, she attributes her longevity to her activity and non-use of all forms of alcoholic drinks and narcotics. Her daily regime is also significant. She eats but little, rises at 7 A. M. every morning and takes a seat in an arm-chair by the open window, where she remains until eight or nine o'clock in the evening, when she is helped to bed. Thus we have a stomach which is not over-worked, plenty of fresh air and lots of sleep. And with these and a good conscience, it is no wonder that she has attained the years which she has.

Advocates Nudity for All Children

Professor Frederick Starr, of Chicago, who is well known to the scientific world in connection with Congo explorations, has the right idea in regard to the garb of children. And what is more he gives practical expression to his theories. Recently he made the public assertion that children should wear no clothing until they are ten years old. Shortly afterward it became definitely known that several university professors are to experiment on cures for the "family problem" in specially constructed "paradise flats" at Fifty-sixth Street and Lexington Avenue. Here Professor Starr's theories will be tried, rumor says:

"Children," said Professor Starr, in his usual terse, emphatic fashion, "should

wear no clothing until they are ten years of age.

"No, not a stitch," he added, with even more emphasis. 'This is right from both physiological and moral grounds."

These are the families, all prominent socially, who have joined in what is called the most remarkable "home experiment" since Mrs. Katherine Tingley built her colony at Point Loma, Cal.:

Professor Edwin Erle Sparks, the noted historical authority and lecturer, and Mrs. Sparks, with their daughter Ethel, aged twelve years; Professor Harry A. Bigelow, of the University Law School, and Mrs. Bigelow; Professor Clarke B. Whittier, of the University Law School, and Mrs. Whittier, with their daughter Florence, aged six years; Dr. Charles Fredric Millspaugh and Mrs. Millspaugh; Mr. and Mrs. Andrews Allen, the former noted as a mechanical engineer.

The grounds will be laid out by a landscape gardener, and all the theories with regard to child raising will be employed by the educational leaders who will constitute the "culture colony."

Poisoned by an Injected Poison

This magazine has repeatedly protested against that aspect or method of medical science which holds that a disease produced by body poison can be cured by injecting another poison into the affected body. The facts of the case as told by a newspaper are as follows. We admit that comment on them is hardly necessary except that it would appear that doctors can trifle with human lives with no fear of the law before them: "Following an injection of anti-toxin, administered as a remedy for asthma, Miss Jessie Redfield, of Hood River, came to her death in the office of Dr. W. B. Hamilton, at 549½ Williams Avenue. Her death is not believed to be directly the effect of the anti-toxin, but the effect of a severe asthmatic paroxysm, brought on largely by the nervous strain.

"Miss Redfield, who was nineteen years of age, had for several years been a sufferer from asthma. Some time ago she came to Portland where she had been staying with Dr. and Mrs. E. C. Rossman, at 1080 Cleveland Avenue. She recently decided to take the anti-toxine treatment.

"Soon after receiving the injection, Miss Redfield was seized with a severe attack of asthma, and it was soon evident her condition was serious. Drs. Rossman, Hays, Brewster and Nichols were called in but the young woman expired in spite of all that could be done for her. Coroner Finley was notified and after investigating said he believed no blame attaches to anyone connected with the case."

Coroners seem to be in the habit of "attaching no blame to anyone" in such cases.

When Water Was Unpopular

A general belief in pretty nearly anything is not infrequently a general error, unless indeed it is founded on common sense. It is simply astounding how the public can hypnotize itself, so to speak, into an obsession of the most ludicrously misleading, and that too for no reason whatever. The results it need hardly be added, are either unsatisfactory or harmful. When at length the delusion comes to an end, it has bred mischief which not infrequently outlives its remembrance. Even water—honest drinking water—has been the object of criticism, suspicion and even dislike by unthinking and ignorant communities.

It needed a very bold man to resist the medical testimony of three centuries ago against water drinking. Few writers can be found to say a good word for it. One or two only are concerned to maintain that, "when begun in early life, it may be freely drunk with impunity," and they quote the curious instance given by Sir Thomas Elyot in his "Castle of Health" (1541), of the Cornishmen, "many of the poorer sort, which never, or very seldom, drink any other drink, be notwithstanding strong of body and like and live well until they be of great age." Thomas Cogan, the medical schoolmaster of Manchester fame, confessed in his "Haven of Health" (1589), designed for the use of students, that he knew some who drink cold water at night or fasting in the morning without hurt, and Dr. James Hart, writing about fifty years later,

could even claim among his acquaintance "some honorable and worshipful ladies," says the *London Telegraph*, "who drink little other drink, and yet enjoy more perfect health than most of them that drink the strongest." The phenomenon was undeniable, but the natural inference was none the less to be resisted.

Sir Thomas Elyot himself is very certain, in spite of the Cornishmen, that "there be in water causes of divers diseases, as of swelling of the spleen and liver." He complains oddly also that "it flitteth and swimmeth," and concludes that "to young men, and them that be of hot complexions, it doeth less harm, and, sometimes it profiteth, but to them that are feeble, old and melancholy it is not convenient." "Water is not wholesome good by itself for an Englishman," was the version of Andrew Borde—monk, physician, bishop, ambassador and writer on sanitation—as the result of a life's experience. And to quote the "Englishman's Doctor:"

Both water and small beer, we make no question,
Are enemies to health and good digestion.

But the most formal indictment against water is that of Venner, who, writing in 1622, ponderously pronounces "to dwellers in cold countries it doth very greatly deject their appetites, destroy the natural heat and overthrow the strength of the stomach."

The Vaccination Idiocy

South Groveland, Massachusetts, has been the scene of one of those vaccinating crazes which are sporadic in this country and that too, in spite of the protestations of the majority of sober-minded citizens. The incident, as is usually the case, furnishes not only a moral, but an illustration of the purblindness of the authorities and medical men. There was an outbreak of smallpox in the town in question which up to the early part of August, numbered fifteen cases, all of which—please mark this—were located in "the thickly settled district around the outlet of Johnson's Pond, known as the Navy Yard." Observe that the disease had its birth at the mouth of a pond in which drains and refuse and sewage from the surrounding crowded houses, and that the district itself is "thickly populated." A very little reflection will suggest the conditions which accompanied and were responsible for the epidemic. Given a foul pond, a teeming section of the town, indifferent ventilation and sewerage arrangements, possibly polluted water and inevitable dirt, the incidental invitation to an outbreak of a filthy disease such as smallpox is, will be obvious. It will be also be evident that with the amendment or removal of these conditions the disease would disappear. Nevertheless, what do the medical sages of the town do? They insist upon vaccinating practically everybody within its precincts. According to a press report "Scores of residents have been vaccinated, crowding the town-hall for several hours each day evening waiting their turn to have their arms stripped and punctured." This herding together of the residents was due to threats by the police as to what would happen to them in the event of their not baring their arms to the poison-tipped lancet of the doctors. But in addition to this, we are further informed that the section in which the outbreak occurred, "has been quarantined." Without doubt, there will be a purification of the water supply, the pond will be looked after, chloride of lime will be used, the hose-carts will be called into requisition, there will be an overhauling of crowded tenements and noisome alleys and with the advent of all this cleanliness, the smallpox will disappear and the vaccine virus will get the credit. And the only thing that can be said under the circumstances is "what fools we mortals be."

Forest Planting a Necessity

Directly or indirectly, everybody is interested in the preservation or the restoration of forests. The axe and the saw of the lumberman and still later, the machines for lumbering purposes, have and are raising havoc with our native trees. A note of warning has been raised again and again, in regard to what follows the persistent and wholesale destruction of trees in a country, but so far, without much results. Thanks

to President Roosevelt and public opinion in certain sections of this country, however, there are now forest reserves which are immune from the lumberman. At the same time, the impressing on our citizens of the need for consistent effort to the end of replanting forests has been no small portion of the work of the United States Department of Agriculture.

The relation between physical culture and forests may not seem to be very evident at the first glance. But, nevertheless, healthy people are the product of a healthy land, that is, a land in which the hygienic conditions are of a normal nature. Now no land is healthy in this sense, which has not a liberal or at least due amount of forests. Tree-covered areas are in the first place, natural water reservoirs and as such have a wholesome influence upon neighboring climatic conditions. Again, they are barriers against freshets, floods, etc. The emanations from forests are universally acknowledged to be of a beneficial nature. And they are also held responsible for no small portion of the rain-fall which occurs within their territory. Without them, a land would be barren and comparatively unhealthy, while much of its material wealth, to say nothing of its natural beauty, would be absent. If you will write to the United States Department of Agriculture, at Washington, D. C., it will send you a circular in regard to what the forest service of the Department is doing to the end of preserving or restoring the tree growth of this country.

While the necessity for tree planting has not been felt in the Eastern part of the United States so keenly as it has been, for instance, in the treeless West, yet sufficient planting has been done in the past to prove that the growing of wood crops is entirely practicable.

Large areas of land in this region are fit for forest growth only, and from an economic standpoint it is important that these lands be put into a state of productiveness. Extensive investment in forest planting has thus far been unduly discouraged by present methods of taxation and, in parts of the region, by difficulty in securing adequate fire protection. The true value of forest land and its rightful place among the permanent resources are, however, becoming appreciated, and an enlightened public sentiment is rapidly making this form of investment safe and desirable.

Throughout this region there are large lumbered areas on which successive fires have destroyed all young trees of valuable species. Inferior trees, such as aspen, fire cherry, scrub oak, and red maple, as well as shrubs, have sprung up. This land is worthless in its present condition, but where adequate fire protection can be provided, forest planting will bring it again to productiveness.

The barren sand plains of Connecticut, Rhode Island, New Hampshire, Massachusetts, New Jersey, and Michigan, which cannot be tilled and are a source of expense to their owners, will in many instances support a good growth of white pine, or at least one of the more hardy species of pine.

The protection of city watersheds demands urgent attention. The annual spring floods, which bring destruction to thousands of homes in the lower-lying fertile valleys and are generally followed by epidemics of serious diseases, would in a great measure be prevented were the slopes covered by forest. Forests regulate the flow of streams, prevent erosion and turbidity, and make waste areas beautiful and productive, besides insuring a source of pure water supply. Wherever natural reproduction cannot be depended upon to cover the denuded and burned-over lands of most of these watersheds, tree-planting operations must be undertaken. While the immediate object of this reforesting will be protective, timber crops will eventually be produced which will yield good profits on all such investments.

Nearly every farm has at least a few acres which are of little value for growing agricultural crops. This land should be set aside for a woodlot and devoted to the production of fuel, fence posts, and timber for farm uses.

The species best suited for plantations of these various sorts, as well as planting directions, and advice as to protective measures, are given in the circular.

Here is a physical culture profession indeed.

The Editor's Viewpoint

Some Plain Talk
Railroad Dust and Soot
Horrors of Insane Asylums

THE need of the knowledge supplied by the physical culture propaganda is so appalling that it might be termed almost tragical. Even the readers of this magazine who may perhaps be justifiably under the impression that they understand in their entirety the theories underlying this movement, no doubt at times feel dissatisfied with their physical and mental condition. They are not at all times thrilled with the intensities of life and health that make one's duties a pleasure and the mere act of living a privilege.

SOME PLAIN TALK

A great many acquire the impression that there is but little to learn about physical culture—that it consists of dieting, exercise, an occasional fast, and a few other simple things that anyone without any previous experience can put into practice with benefit. There was never a greater error. There is more to learn and it takes longer to acquire the knowledge essential to one becoming a thorough physical culturist, than it does to secure a thorough and technical medical education. I have been an ardent student of physical culture for over twenty-five years. Like many others who have acquired a little knowledge on these subjects, after three or four years of study, I was impressed with the idea that I knew about it all that there was to know. But the more time I give to the study of this wonderful science of body-building, the less confident I am of the completeness of my knowledge. And the more too, I realize the vast possibilities of this field of learning.

WRONG IMPRESSIONS OF PHYSICAL CULTURE

How I would like to have all the readers of this magazine collected before me in one vast audience for a few minutes, in order that I might emphasize with greater strength the truths that we are attempting to teach in our publications. Nature is all-powerful. The body is self-curative. Disease is needless. Weakness is a sin and a crime. Mental and physical suffering come from simple causes that can be easily avoided. Nearly all of the suffering, that at times becomes so intense as to be excruciatingly unbearable, need not be endured. Think, my friends, of the marvelous change that could be made in human life, if the statements I have just made, which are truth and fact, could be fully realized. Perhaps life, then, might be "one grand sweet song." Labor would cease to be work. It would be play—continuous recreation, day after day, until the end of life. Am I a mere dreamer, making statements based on a mythical foundation, or is it possible that a thorough understanding of life in all its details would bring about a reformation that would make men and women see and tread the paths that lead to the constant health and happiness that I believe humanity can easily attain?

DISEASE IS NEEDLESS

Everywhere you find human suffering. The countenance of the average individual tells a tale of woe. The smiling features are only a mask to unhappiness. Behind them are skeletons that often tear the soul almost beyond human endurance. We live in a hypocritical age and the quotation "Laugh and the world laughs with you, weep and you weep alone" is weighted with truth.

PHYSICAL CULTURE AND HUMAN SUFFERING

But what has physical culture to do with human suffering, many of my new readers might ask. It has everything to do with it. It

might be termed the science of harmoniously blending the characteristics and instincts that guide a human career. The larger part of human suffering comes from physical weakness or perverted instincts. Both of these defects are evolved from prenatal influences and the characterististics, physical and otherwise, that are created by our environments, as we grow into manhood and womanhood. You, dear reader, do not control your career. You are a creature of your environments. Have you slipped into the easiest path along life's road? Do you follow the crowd? And is your poor, miserable soul also torn with the same agonizing tortures that the rest of your throng of fellow creatures have at times to bear?

Ah! if I could only make every reader of this magazine realize the importance of standing alone! Get away from the crowd. Think for yourself. Don't be a human sheep. You have just as much and as many rights, with your God-given power of reasoning, as any other man, regardless of whether or not he might be termed an "authority." But no one HAS a right to be classed as an authority. No one has a right to accept any statement as truth, until he has reasoned from the facts and made the conclusion a part of himself. I repeat, stand alone! By yourself! Don't be a duplicate. The world is full of stereotypes and the need of to-day is men and women who have faith in themselves and in the divine power of the human intellect.

The physical culture movement stands for a higher morality—for a superior manhood and a finer womanhood. It stands for everything that is clean, and true, and uplifting. It abhors dishonesty and hypocrisy. It recognizes the prude as a most fiendish enemy of human enlightenment and human advancement. It is the gospel of wholesomeness of thought and action.

PHYSICAL CULTURE STANDS FOR A HIGHER MORALITY

Ah! dear friends, I know that you say to yourself, that I have made these statements before. You are perhaps so busy, most of you, that you have not time to give such things more than a passing thought, but every man owes it to himself—and when I say man, I mean woman too—to get all there is out of life, for the so doing, simply means a full development of all of one's powers.

A little over ten years ago, this magazine started as a small pamphlet. There was a ring about my editorials and articles that attracted attention. Many said I seemed to be a man with a purpose. I want to say right now, that this purpose is just as definite, just as firmly intrenched and defined now as it ever was. I believe in myself and in the work I am trying to do. I believe that the time is coming when the civilized nations of this earth will have to recognize the importance of the truths taught in this publication or else their fate will be swift and certain oblivion.

The fruits of the present immoralities and abnormalities stare us in the face at every turn. We are truly a race of semi-invalids. Man—and I repeat again that when I say man I mean woman too—is to-day about the ugliest animal upon the face of the earth. Just walk down Broadway, for instance, in that great city of New York, the home of graft and mental and moral corruption, to an extent almost beyond the human mind to conceive, and imagine that each and every specimen of humankind that passes you by, has suddenly been divested of clothing. Ah! no wonder they wear clothes—they certainly need to wear them, for the average man and the average woman of to-day is a superior specimen of human ugliness—almost malformation. Seeing this Broadway crowd, with all its hidden homeliness, would you for one moment, imagine that we have any excuse for calling ourselves civilized? If our miserably distorted, weakened and diseased bodies are marks of civilization, then truly we are civilized. If the fat and bejewelled women with their high heels and horribly squeezed-up waists and generally distorted figures, are a sign of civilization, then we are surely civilized.

THE NAKED BROADWAY CROWD

Ah! what a story would be told by the pitiful specimens that would be seen under such circumstance. Upon the body of each would be written the past as plainly as an open book, and when we realize that we as a people are to blame for this monstrous human weakness and ugliness one is inclined to brand this so-called civilization as a

degree of savagery worse than man ever dreamed of. What right have we to call ourselves enlightened, when the most important truths in life are absolutely ignored, or veiled in vulgar mystery? What right have we to talk of advancement when boys and girls are allowed to grow to the age of manhood and womanhood with but slight semblance of the strength and beauty of body and power of mind that should be their inalienable right?

You, dear reader, may think that this is a rambling editorial, and perhaps it is, but I must admit that at times I feel a little disheartened. There is so much to do, such a mighty revolution in human life must be achieved before we can stem the tide of degeneracy that is running rampant everywhere at the present time. No one can imagine, who has given this subject but little thought, what a mighty change must be brought about in order to give us, one and all, strong and beautiful bodies. Nearly every one of us came into the world under abnormal conditions. The prenatal influences in nearly every home are decidedly bad, and even with the best of environments, we have the perverted instincts of our forefathers with which to contend. But, sad to relate, the environments are usually as perverted as are the prenatal influences and then, we, the fruits of modern so-called enlightnement, have the incomprehensible audacity to boast of the results of what we term civilization.

A MIGHTY REVOLUTION NEEDED

The conception of life held by the average man of to-day is grossly perverted. During early manhood the nerves are doped and the body devitalized. Such a man goes through life in this same condition. He is usually drugged with tobacco—stimulated or benumbed with alcohol. And these things—how can we call them real men—are the examples which the majority of our children must look to when searching for their ideals.

DOPED AND BENUMBED MANHOOD

The field of true civilization has never been touched—it has not been scratched by the point of a pin. This is exclusively a commercial age. It is measured entirely by dollars and cents, by pounds, shillings and pence. Manhood or womanhood in their truest sense, have never been appreciated, have never been understood, and the eternal contention, the terrible, intense competition that is going on everywhere and at all times, for money, for fame, for success, social and otherwise, is to a large extent, wasted efforts. It only serves as a means for giving vent to the doped and perverted energies of the average man.

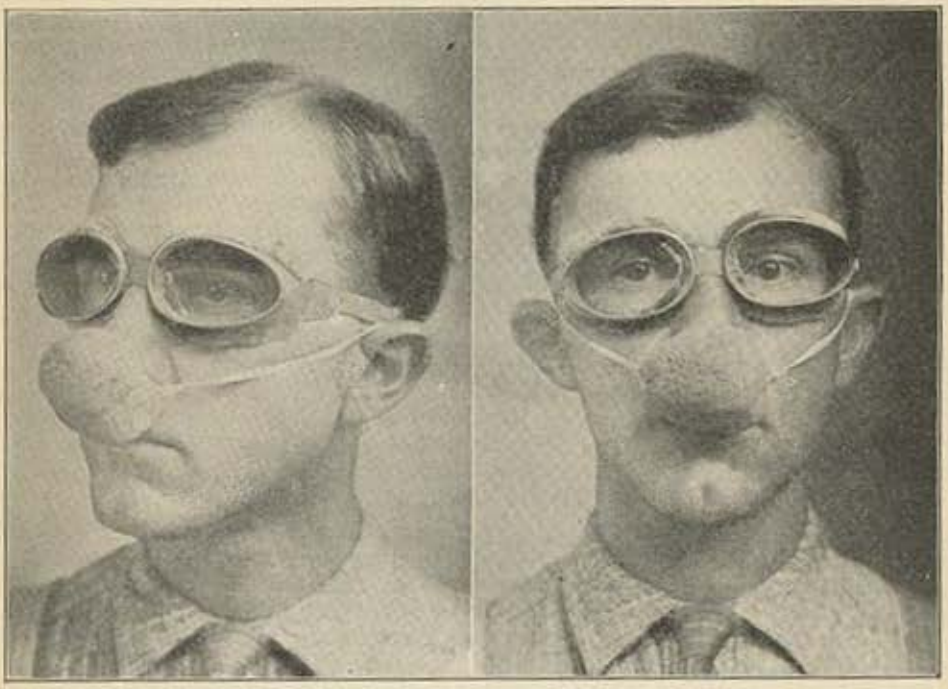
Perhaps I am talking too plainly. Sometimes I am almost afraid to let my friends see the conclusions that I have evolved from the many years I have spent in this work. But a coward never accomplished anything, and whatever I may have failed to say through caution in the past, I can assure my readers, will be said some time in the future.

The changes for which I am contending are infinitely more needed than are the combined reforms of all who are striving for a superior humanity. They are the foundation, the beginning of all reform. There must be plain speaking, clear thinking, if the human wrecks and the miserable specimens of human degeneracy that meet our eyes everywhere, are to become things of the past. How many of my readers will join in a work of up-building the human race? Prurient prudery and other mental sewerage must be eliminated and it is beyond the power of humanity to calculate the work that is before those who have this mighty task to perform.

WHEN traveling on the railroads, throughout the United States, with possibly a few exceptions, one is compelled to breathe large quantities of minute cinders and other particles of dust. There is absolutely no excuse for the existence

of this state of affairs. There are many methods whereby the railroad companies could easily free their cars from this dreadful evil. The human lungs were not made for the purpose of absorbing materials of this kind. Consumption is caused in a great number of cases by breathing of such dust. Various diseases of the lungs are brought about from a similar cause and where actual disease or weakness is not produced, harm to the organs of respiration unquestionably results therefrom.

RAILROAD DUST AND SOOT



This Sort of Apparatus is Necessary to Protect the Eyes and Lungs of Travelers from Dust and Dirt on the Trains of Many of Our Railroad Systems

A few railroad companies have somewhat eliminated this evil by using hard coal, and they deserve credit for this interest in the well-being of their patrons. But soft coal, in the majority of cases, is a standard fuel in the engines of our large railroad corporations, and the consequent cinders and other minute particles that settle on the faces and bodies and in the lungs of travelers, need no detailed description. Everyone who has patronized a railroad has had experiences of this kind. The nuisance is almost universal, and why the patrons of these dust- and dirt-cursed railroads do not rise up in arms and compel the directors of the latter to protect them from this discomfort and danger, is beyond my comprehension.

That is one reason why I detest railroad travel. You are in constant fear of blinding your eyes and clogging your lungs. On more than one occasion I have ended a brief journey with my lungs so full of these particles of foreign matter that I have had severe pains as a result. In fact, it is really a question whether good ventilation under these circumstances is to be commended. It might even be better to close yourself up so tightly that these tiny atoms cannot enter, rather than to have good ventilation and be compelled breathe the dust-laden air that would result from the latter.

There are so many simple and comparatively inexpensive appliances which the railroad companies could use to free their patrons from this evil that it is hardly worth while to describe them in detail. They could, for instance, burn hard coal instead of

soft. They could filter the air which passes into their carriages through damp cloths, or it would be a comparatively simple matter to force it through water, which would absolutely eliminate every particle of dust. They could carry the smoke that comes from the engine, over the top of the passenger coaches and discharge it at the end of the last passenger coach. Or they could use smoke consumers on the engines. However, there is no need of making suggestions. Methods can easily be contrived for protecting railroad passengers from this evil, if the managers of these companies care to give the matter attention.

HORRORS OF INSANE ASYLUMS

MAN'S inhumanity to man has been the text of countless discourses and protests. It is a sad commentary on our race, which according to an authority held by millions to be divine, is "but a little lower than the angels," that of all species of created beings it, and it alone preys upon its own members. Except in the case of food or of mating, all those creatures to which we are accustomed to refer as "the lower animals" rarely if ever ill-treat or slaughter each other. But with man it is otherwise. From the earliest dawn of history up to the present, the history of man has been blotted with bloodshed and stained with cruelty as far as his fellows were concerned. It is true that humanity appears to be at last realizing the folly, to say nothing of the wickedness, of this, and that there is in consequence a growing disposition on the part of the nations to draw the sword only as a last resort. The recent Peace Conferences, the national disputes which within the last decade have been settled by arbitration, and much more of the same, are significant of the attitude of the world at large in regard to war and all the horrors for which it stand.

Yet in a great many respects, the old cruelties, the ancient barbarities and established brutalities remain. Especially is this so when men are entrusted with an authority of an irresponsible sort. Then it is that the lamentable fact is made manifest that although human nature in the aggregate may be improving, yet in an individual sense it is much the same as it always was—a veneer of civilization covering the worst instincts of savagery. Point is given to all this by a series of articles entitled "Confessions of an Insane Asylum Keeper," which begins in this issue of PHYSICAL CULTURE.

Wherever there is an abuse there must be a cause for it. Wherever there is a disease there must be a cure for it. The ex-keeper author will not only relate the cause of the terrible conditions with which he deals, but will also show the methods by which they may be eliminated. His so doing is the reason and justification of his writings.

It is quite possible that the social prude, with nose uplifted and hands raised in assumed horror, will object to these articles on the score of their "sensationalism," so-called. The objection would be well taken were they published for sensational purposes only. But they are not. They are intended wholly and solely, for the purpose of pointing out a menace to the community of which the latter has but little exact knowledge, and directing attention to centers of cruelty regarding which the truth is but too little known. Light, so scientists say, is a certain enemy of disease. In other words, if sunlight be allowed to play upon a pestilential, reeking and disease-breeding spot or locality, it ceases to be that which it was and becomes healthful, fruitful and beneficent. So with the insane asylums. When the light of truth is played upon them, as it will be in this connection, it is hoped and indeed believed, that some of them at least, will be transformed from sinks of iniquity into those wholesome institutions which they should and can be.

Bernarr Macfadden

Some of the Students and Part of the Faculty of the Bernarr Macfadden Institute at Physical Culture City