

## Vol. V. No. 12.

JUNE, 1921

Price, 15 Cents





8 10 38

## Sensational Feat

like the one shown in this picture, attracts and amuses theatre-goers, but to the enthusiastic physical culturist the build and strength of the man who does the feat is more intcresting than the feat itself. We go to the theatre and see a Strong Man perform, but long after we have forgotten about his act we remember the beauty of his figure 'and his marvelous muscular development.

Walking with a weight of 500 lbs. in the manner shown above requires strength in every part of the body. That this athlete has the strength is shown by his broad shoul-ders, well-rounded chest and magnificently muscled legs. Another Milo-Built Man and like all Milo Built Men, he has real strength in every part of the body. This picture will show you the type of men we are developing. We aim to create the maximum strength with the highest possible beauty of figure, and grace and agility of movement. If you can combine marked strength with marked agility you always have a

fine looking physical specimen.

There is nothing more fascinating than this body-building work, whether you are directing the work of others, as we do, or whether you are working on and studying your

own case, as you will learn to do if you enroll with us. In training our pupils strength is made a secondary consideration. The pupils are trained, first of all, for shapeliness and symmetry. In order to obtain a perfectly developed body, it is necessary to develop each and every part of it. If you can secure the develop-ment you get the health and strength as by-products. We know that a strong back means vigor and endurance, and that when you develop your legs you generally develop your lungs also; we know that certain arm and shoulder work spreads and enlarges the chest; above all, we know that well-developed muscles around the region of the waist help to invigorate the digestive and assimilative organs.

A large part of our success is due to the fact that we inspire our pupils with a desire to learn not only the exercises but the principle which controls the exercises. We do not endeavor to sell a pupil one course after another; our idea is to make each pupil perfect, physically, and also to give him a therough comprehensive knowledge of the theory cf muscular development.

#### OUR METHODS ARE WORTH INVESTIGATING

Any sound man or boy can develop himself by practicing our system. We do not accept the cases of confirmed invalids, of men who have organic diseases of long standing or men who have wrecked their constitutions by excesses-we do not claim to be able ing of him and all kinds of diseases—but we can positively take any man or boy who is in ordinary health (but slender and undeveloped), and in a few months' time turn him into a perfect physical specimen by means of our system of Progressive Dumbbell Exercise.

We don't ask you to take our word for it, but give you an absolute guarantee of satisfactory results or your money will be refunded. No red tape, no questions asked. You arc to be the judge, and your decision will not be questioned.

Our illustrated catalog will explain how you can obtain health and strength in a surprisingly short time. It is free. Send for it today.

#### THE MILO BAR BELL CO.

Physical Culture specialists and the largest manufacturers and distributors of bar bells. dumbbells and kettle bells in the world.

Dept. 18, 301 Diamond St., Philadelphia, Pa.

#### STRENGTH

## By the scores of thousands, men are turning to this new instrument of precision Patented January 13th, 1920



The New Improved GILLETTE SAFETY RAZOR

Uses the same fine Gillette Uses the same fine officite Blades as you have known for years — but now your Blades can give you *all* the luxury of the finest shaving edge in the world. Identify the New Im-proved Gillette by its

Fulcrum Shoulder Overhanging Cap Channeled Guard

- Micrometric Precision
- Automatic Adjustment Diamond Knurled Handle
- Diamond Trademark on Guard

Finer Shave - Longer Service More Shaves from your Blades

In SILVER and GOLD Shaving Sets and Traveler Outfits

\$5 to \$75

To Alexander Graham Bell will always belong the chief honor of inventing the telephone. Bell's work in itself superseded the efforts of Page, whose research was advanced in 1837; Bourseul in 1854; and Reis about 1860. In 1878 Bell's trans-mitter was itself superseded by Hunning's "granular carbon transmitter"; since perfected by A. C. White, whose "solid back transmitter" has practically displaced all earlier forms.

1

OST inventions develop slowly. Here a little detail. There another—and so on, until you can hardly tell when the perfected device finally took shape.

Here in the New Improved Gillette is one of the startling exceptions. At one stroke-micrometric precision, exact to 1/1000 inch. and these three fundamental discoveries, the Fulcrum Shoulder, Overhanging Cap and Channeled Guard.

The result of the unequalled Gillette experience and resources, developed by nearly 20 years' service to the shaving needs of every civilized people on the surface of the globe.

Even measured against your old-type Gillette, the New Improved Gillette Safety Razor represents an advance of 75% in shaving comfort and efficiency.

To the man who has never used an old-type Gillette, we say this: Compare the New Improved Gillette with any shaving method or device you know now.

It opens up an entirely new era in shaving-the era of precision, of exact and predictable results.

It is worth any man's money-no matter how attached he may be to his old-fashioned razor or old-type Gillette.

NOTE: - The Gillette Company assumes responsibility for the ser-vice of Gillette Blades when used in any CENUINE Gillette Razor -either old-type or New Improved Gillette. But with IMITATIONS of the genuine Gillette, it cannot take responsibility for service of Blades.



#### STRENGTH

Tune, 1921

# Secrets of Glorious Daily Health!

Bernart Macfadden's Encyclopedia of Physical Culture Reveals Nature's Methods and Secrets of Perfect Health. A Wonderful Service for Those Wishing to Banish Sickness From Their Lives and to Gain Glorious Health That Never Skips a Day, a Powerful Physique, and Vitalized Energy Unlimited-Don't Fail to Read About This Special Free Offer.

W should you "feel great" only some of the time? Why have only half health, half energy, half life? The state of your health is up to you. You can be nervous, weak, and sickly-or, you can be strong, healthy, and sick-proof.

healthy, and sick-proof. You rule your health as surely as you rule your actions. If you are not enjoying the too per cent, health which makes life so much worth the living it is merely because you haven't em-ployed the methods provided by Na-ture to keep you well. "But what are these methods?" you say. "How can I learn these secrets of glorious daily health?"

daily health?" These methods and secrets of per-fect health are now unfolded to you. The lifethme experience of Bernard Maefadden, America's greatest health advisor, is now put before you. In his wonderful inve-volume Encyclo-pedia of Physical Culture are the methods which have brought perfect health to thousands of sufferers from all manner of ill-health.

#### Why Lose \$4100?

\$4100 is about what sickness costs \$4100 is about what sickness costs the average person during his life-time. The person who does not un-derstand Nature's methods of prevent-ing and curing sickness is ill an avering and curing stekness is in an aver-age of z1½ days each year-or a to-tal of about 3½ years in his life-time. Suppose that person earned the very moderate salary of \$20 a week-his total loss would he about \$3700. Then think of the worry of sickness, the inconvenience, the doctor and hos-pital bills, the pain-whatever of this can be figured in mere money would bring the average person's loss because of sickness to about \$4100.

Why be among this class who must be economical in order to pay bills due to ill-health, who must suffer the pain and inconvenience, of sickness, all be-cause they do not know how to build health?

#### Feel 10 Years Behind Your Real Age

The way you feel and not the number of your years is the real barometer of your age. Why eatch up to your

#### A Complete Education in PHYSICAL CULTURE

This set of five volumes con-tains a complete education in Physical Culture and Natural Curative Methods-

- complete work on An-613 atomy.
- (2) A Physiology in plain language, and embracing many illustrations
- (3) A reliable and comprehen-sive handbook on Diet.
- (4) A complete Cook Book. (5)
- A book on Exercise in Its Relation to Health. (6)
- A Handbook on Gymnas-tics, with full instructions on drills and apparatus work. (7)
- A book on every form of Indoor and Outdoor Exer-cises, Boxing, Wrestling,
- Handsome colored charts and instructions for Devel-oping a Powerful Physique. (8)
- (9) A most complete and entersive work on Fasting. ex-(10)
- A comprehensive work on Hydrotherapy, including water treatments of every variety,
- A book on Mechanical Therapeutics, giving full details, many illustrations of physicultopathic treat-morits. (11)
- A thorough work on First Aid with drugless methods. (12)
- A complete work on Diag-nosis, giving plainly writ-ten instructions for detect-ing diseases and finding (13) their cause.
- 1141 A comprehensive, illustrated book on Home Tr mant for All Diseases, Treat-
- (15) An Anatomy of the Sexual Organs,
- Sexual Weakness and Dis-case, Their Cause and (16) case, Cure,
- (17) Rules for Happy Marriage and Parentheod.
- A complete work on Chlid-birth-how to make it safe. (15)

years? Nature's methods of keeping you healthy will keep you young too. Learn them. You can look and feel at least ten years behind your real age. Thru learning Nature's scorets San-ford Bennett at 70 brought himself physically back to 50. You too can apply the natural methods of bringing back youthful "pep," vitality, and bod-ily vigor. Thru these methods hun-dreds have been guided by Bernarr Macfadden to renewed youth and won-derful health that never skips a day.

#### The Daily Guide to Perfect Health

Guiding health seekers for more than 30 years-this has been Bernarr Mac-fadden's preparation for this remarkable work, the Encyclopedia of Physi-cal Culture.

This great work is a complete "nat-ural-method" doctor. It tells how to build health, vitality and strength for every member of the household, young and old. It describes the symptoms of every known disease and gives detailed instructions for treatment. It contains invaluable information on fasting, diet, exercise and hydropathy for health and exercise and hydropathy for nealth and beauty building. A thorough and ex-tensive treatment is given of the laws of sex, the attainment of virile man-hood and womanhood, and happy, suc-cessful parenthood, together with de-tails for the diagnosis and treatment of all sexual diseases. Handsomely illus-tened alerts on another and the trated charts on anatomy and physiology are given.

A reading of the two panels printed here will give you a better idea of the vast scope of this Encyclopedia of Phy-sical Culture. In it is contained the equivalent of at least twenty complete books. The Encyclopedia contains more than 3,000 pages and 1,200 illustra-tions, besides scores of color plates.

Because it is impossible for us to explain adequately about this Encyclo-pedia in this space, we therefore want you to mail the coupon printed on the next page so that we can send you any volume of the Encyclopedia you select for free examination. Read the full de-tails of this offer and mail the coupon at once.

2

#### STRENGTH

UNCEALORY

ENCICLOPE DOF # PHYSICAL

Markona NCM Loss An JOR & PHYSIOL CULT 16

## A Complete Guide-Course to Perfect Health bv

## Bernarr Macfadden

Read About OUR OFFER to Send for Free Examination anv Volume You Select.

If this Offer is Accepted. the Price Includes a Year's Subscription to Physical Culture

#### The Most Valuable Health **Course Ever Prepared**

Bernarr Macfadden has had more than 30 years of experience in guid-ing thousands to renewed health. The methods that have brought exhilarating health and physical power to others will prove valuable to you. If you want to enjoy glorious health every day in the year—if you want your family to en-joy the health which makes home life radiate joy and happiness—if you want to drop a few years from your age and have more success-winning energy, pow-er, and vitality than ever before-select the volume of the Encyclopedia which you wish to examine, and mail the coupon for it today. The general contents of each of the five volumes are as follows: Bernarr Macfadden has had more contents of ea are as follows: Vol. I. —Ana

- -Anatomy, physiology, diet, Vol. II. -Physical Training.
- gymuascorrective tics; exercise.
- Vol. III.—Fasting, hydrotherapy, first aid, spinal manipulation, mechanical diet and regimens.
- Vol. IV.-Diagnosis and detailed treat-ment for individual diseases alphabetically listed.

 Wol. V. —Sex Hygiene, physiology, motherhood, pregnancy, ma-ternity, baby care, disorders of men and women, beauty culture, mental culture.
Do not let the word "encyclopedia" give you the impression that it is dull or horesome. This is the only word which would describe the comprehen-siveness and completeness of the work. This is the very latest edition and is the crowning effort of Mr. Macfadden's life-time of experience. Its worth to you cannot he under-estimate the glori-ous daily health it will show you how to gain. to gain.

How to - -Possess exhibitrating health every day in the year know your own body eat for health diot for the cure of disease know the art of food proparation build a powerful physique ourrect physical imperfections become a physical director avoid unhappy marriages avoid disease fast as a curative measure cure by hydrotherapy (heal by the use of water) apply all methods of drugless healing apply all methods of dru healing give first aid in emergencies treatment for di apply home treatment for disease recognize diseases by manifesta-tions treat the common forms of disease understand the process of repro-duction benefit by laws of sex and marriage treat diseases of woman diagnose diseases have healthy and vigorous children treat formale disorders treat male disorders obtain virility and manhood care for the complexion manicure: care for the hair and feet cultivate the mind These are only a few of the mat-ters explained in the Encyclopodia.

## Here is OUR OFFER

Anter anter

Decide which volume of Maciadam's Emor-clopedia of Physical Culture you wisk to ex-amine. Then full out the soupon and mail it is ence. The volume you select will be sent to you presaid for five days free examination. Then if you decide that you want the Ency-clopedia send a deposit of \$2 and the other clopedia send a deposit of \$2 and the other our volumes will immediately be sent presid. Then fay only \$3 a month until the total cost of the Encyclopedia, \$35, is paid. If you care to pay cash, the price is only \$31,50. If you he other hand, after 5 days examined the total you do not wish the Encyclopedia roture the volume and the matter will be commission and purchase this Encyclopedia to your the ubscription to Physical Culture is included. No after could be faiter than this. Pick out the you may.

This offer is confined to persons residing in the United States or Canada.

PHYSICAL CULTURE
CORPORATION .** PHYSICAL
Dept. S-6 .* CULTURE
119 West 40th .** CORPORATION
Street, Dept. S-6
NewYork ************************************
* Send me for inspection
Volume of the Ency- clopedia of Physical Culture.
* I agree to return the volume in
"five days or pay \$31.50 cash for the entire Encyclopedia or \$35 on
" life casy terms mentioned in this offer
My acceptance of this offer includes a year's subscription to Physical Culture
Magazine, Name
Occupation
Residence
Business Address



NGILTON OLA PIETSIO

OLIGIN NGULON NOFA PHISIO OLIGINA

NUCLE OF HITS:



America's Leading Director of PHYSICAL EDUCATION ---- Expert Instruction in -----BOXING : WRESTLING : PHYSICAL DEVELOPMENT

Telephone 6714 Worth

305-309 BROADWAY Personal consultation by appointment only NEW YORK CITY



## An "Old Man" Comes Back



O athletes ever "come back?" Most of them don't, but some few of them do, and the reason why they do come back is even more interesting than the "comeback" itself.

In New York, a few weeks ago, Stanislaus Zbyszko, former Graeco-Roman wrestling champion, pitted his strength and skill against that of "Strangler" Lewis, world's catch-as-catch-can champion. Before the bout, there was absolutely no doubt as to the result. The sporting world had seen too many ex-champions try to come back, and predicted that Lewis would have no difficulty in pinning his opponent to the mat. Lewis, the champion, was the manipulator of the head lock and was a terror for strength and aggressiveness. Zbyszko was about forty-five years of age, and had been away from the mat game for a number of years. It was easy to pick the winner, for "they never come back."

But Zbyszko did come back. He came back so effectively that he is now catch-as-catch-can wrestling champion of the world, and is probably the only athlete who ever gained a world's championship at that age. His victory brings home to us the fact that of the three qualities of speed, stamina and strength, strength is the more lasting of the three, and stays with one over a greater period of years. It is another debt that we owe to athletics, professionals as well as amateurs.

## **Our Debt to Professional Athletics**

That we owe a debt to amateur athletics has never been questioned. Our debt to professional athletics, while perhaps not so apparent, is just as real, because they bring home to us little lessons that we might otherwise overlook. Have you ever tried to persuade a friend to attend a lecture on good health? You have to use some good arguments to get him to go along, and you may lose a friend.

But just offer to take him to a championship base ball game, boxing or wrestling match, and he will be your friend for life. It is amusement, recreation; yet the good health lesson is there just the same. This is perhaps even more true of professional athletics than amateur athletics.

An amateur athlete competes for the love of the sport. It is a hobby with him, and he keeps in good physical condition. But with the professional athlete, his physical condition is not a matter of choice—he *must* keep in condition to earn his living. And by studying the methods of the professional athletes, to whom good health is a business and not just a hobby, we can draw our own conclusions as to the best methods of keeping physically fit. For physical fitness is not only a question for the athlete, but for every man who wants to make a success of life. To do this he must keep in good physical condition.

And for keeping in good physical condition, we can learn something from the professional athletes. Those who stay longest in the limelight are the heavyweight athletes—those who train for strength. Strength is the one thing that you will retain over a number of years, and if you retain your strength, you will also retain your health.

### **Comfort in Summer**

When the first warm days of summer roll around, we begin to perspire and to think that perhaps we can do without exercise until cool weather. Some of us even try to persuade ourselves that exercise in summer is harmful.

It is only natural that we should try to keep as cool and comfortable as possible on sultry summer days, and to avoid all possible physical exertion because of the profuse perspiration it produces. Yet it is a well-known fact that exercise is of even more importance in summer than in winter, and is conducive to physical comfort in hot weather. Of course, it will make you perspire, but perspiration is a perfectly healthy function and helps to lower the temperature of the body. And if you perspire freely while exercising, you will perspire less after exercising. We even know of one fat man who has adopted the following slogan for hot weather: "Sweat and be saved!" It's a pretty good one.

2 GP So DEEP! 23 JUNI CPASCHALU 21 ..... - 'LONG ABOUT THIS, TIME O'YEAR."

## How to Swim

#### By L. E. EUBANKS



VERY swimmer becomes interested in diving, but comparatively few ever develop much grace and

skill. I think you should be a fair swimmer and well used to the water before you take up diving. Also, you should know that your heart is sound; diving requires you to hold your breath, and all such exercises are more or less dangerous, since suspension of respiration for very long puts a strain on the heart.

Begin carefully, use good sense, leave the long deep dives to the professional, and you will find diving a fine exercise and sport. Naturally, you will begin with the simplest dive; stand erect, facing the water, legs straight and close together, feet close together and tocs bent over the edge of the platform in such way as to prevent your feet from slipping backward. Never dive from a slippery surface; if necessary, stand on a rough towel. Bend the body forward at an angle of about forty-five degrees, and extend the arms so that your head is between the upper arms. The palms of hands should be downard, the thumbs locked together. Before the spring you should take several deep breaths. Be thorough on the exhalation as well as on the inhalation. As the last move in preparation, fill the lungs and hold that breath as you enter the water. In leaving the take-off the body should stiffen, and should enter the water at an angle of from forty-five to sixty degrees, according to the intended depth of the dive.

The beginner is inclined to double up, the most common fault in diving is the backward bending of the lower legs when the shoulders strike the water. In diving from great height it is best to arch the body as it strikes, one rises more quickly; but in contests this is poor form. "Keep straight till the feet are covered" is a fundamental rule for graceful diving.

From the very first, form the habit of opening your eyes as soon as your head is under water. The water, if ordinarily pure, will not hurt the eyes, and it is always safer to see where you are going. To rise to the surface quickly, raise the arms slightly upward on a slant, and you will shoot up. If you have dived as the start of a race, draw up your legs as your face emerges, so as to be ready to kick off immediately.

Having mastered the plain front dive standing, try it with a short run. Many fellows find that they learn more quickly to turn the body in air when they try the running dive. A good plan of practice is to stretch a rope about knee-high across your path so that in diving over it you will have to raise your feet.

Next, you may try the spring-board. Do not run clear to its end; hesitate a few steps back, then jump and land on the take-off. This gives you a fine shoot.

Now for the plain back dive. With your back to the water, stand with balls of feet on the take-off, heels in space. Raise the arms slowly and steadily above the head, curve the body backward, allowing it to fall, and as it passes the balance point (passes from your control), spring and attempt to bring up the feet. The body should enter the water at an angle of almost ninety degrees.

Though I did not intend to take up fancy diving in this article, it may be interesting to glance at a few stunts. Fancy diving is merely the addition of acrobatic antics to the two fundamental dives I have described.

The Dolphin Dive. Stand at end of springboard, toes gripping its edge, your hands at sides. Take the preliminary breaths, which you must never forget, throw your hands above your head, and spring into the air, twisting right over in your flight so as to enter the water in a position exactly opposite to your starting pose.

The Australian Splash. Stand as for the Dolphin dive. Spring out, doubling up in the air and clasping your knees. Thrust your head far forward, chin down, and try to roll yourself into a ball; but keep your feet down and your toes well pointed—to enter the water first.

The Neck Dive. Lie on your back, projecting your head slightly over the end of the springboard. Grip front edge of the board with the hands and lift your legs over the body, back-somersaulting into a straight position as you leave the board. When you enter the water perfectly straight, this is a beautiful dive. A little thought will enable you to devise many different dives, and it requires only patience and practice to perfect them.

Beginners at swimming too often regard floating as unimportant, as merely a fancy trick. Really it should be mastered as early as possible; to know that you can float gives you great confidence in the water, and this is the main thing in learning to swim. Floating affords a rest when, during a long swim, the muscles tire; and it makes swimming on the back particularly easy to master. Stand in water a little above your waist, and extend your arms at the sides, shoulder height. Take a few deep breaths then hold one, lean easily backward till your head is nearly on the water, then gently push off from the bottom. As the legs come up and you flatten out on the surface, try completely to relax every muscle. The position of head should be such that you can see your feet, the latter should be together, or very nearly so.

Try not to breathe till your position on the water is correct. Then take a deep breath rather quickly and hold it a while. Manage to keep the lungs inflated most of the time. Not all bodies balance alike in water; if it seems that your legs drag much they may be lifted by extending your arms back of your head. Floating is mostly a matter of being unafraid, relaxation, and a little practice.

Floating face downward, chest floating, as it is called, is easy when you get the body balance right. Unless you raise your hands your heels will sink, but the common mistake is to try to hold up the head also. Raise the hands well above the water but submerge the face slightly.

With these two fundamental positions learned, fancy floating becomes easy—only a matter of thinking out novel poses as you rest upon the surface. Extending arms and legs in the form of a St. Andrew's Cross is popular; also, holding the legs together, with arms at right angles to body. Arms folded on chest, and hands clasped under head are easy positions. Try drawing up your right foot and placing it against left thigh. It keeps your balance and adds to the stunt to throw out your left elbow by placing your left hand under your head. You can originate other such poses, with a little thought.

"Burling" (rolling like a log) is a neat trick of the floater. In the face up position, extend arms behind your head, locking thumbs. Now exert the muscles of one side, with as little apparent movement of arms and legs as possible, and turn on a contracted side. Shifting the contraction to the other side now brings it on over and down. After some practice you can literally roll like a log. The less one flounders about the more effective the trick. It is not hard,

Floating on the side is extremely difficult for most persons. It is easy on the back and on the chest, and turning is easy; but the "rub" comes in *stopping* on the side. In the face up position take a long deep breath, then turn as quietly as possible. The movement must be as gentle as you can make it, and your timing of the muscular contractions such as to leave the whole figure perfectly relaxed *just* as you reach the desired pose. It is the surplus effort, together with jerky breathing, that rolls the body too far or sinks it in the trial.

Treading water is sometimes a useful maneuver; it is the most favorable position for undressing when one has fallen from a boat or in hurrying to a rescue. My plan for learning to tread, assuming that the pupil can swim well, is to walk slowly to a depth over one's head. Just as you take the last step that would bring your head under, extend the arms to the sides on the water's surface, lift chin a little, and "pedal" with legs vigorously—just as you would on a bicycle. With a little practice you will be able to tread with hands under water, "stand" in one spot, etc.

Somersets are attractive water tricks, and you can easily master them after learning to tread. For the front turn, stand upright, treading water, with arms extended at right angles to body, palms of hands down. Bend the head well forward and with a vigorous pressure of arms resembling the breast stroke force the body over. Continue the curl of body, and your head comes up very naturally—just as it did when as a child you turned somersets on the carpet. Keeping the eyes open and using one's arms to control the body's sway are the main points. To turn over backward, you simply reverse the movements.

Now for the more serious phases of swimming. The United States coast guard saves something like 1500 lives a year. This would not be possible without careful training of the rescuers; and such success proves that (Continued on page 44)

10

P

merical. Conthe

CAN recall the time when it was believed that all the strong men came from Europe, and that

most of them hailed from Germany. There seemed to be a general idea that there was something about the German beer that gave unusual strength to the athletes of that country.

It is true that over a stretch of years almost all the professional strong men were Germans. Carl

Abs, Emil Voss, Eugene Sandow and Arthur Saxon (Otto Henning) were successively hailed as "The Strongest Man on Earth." Nor can we deny that formal lifting with heavy bar bells and dumbbells thrived in Europe more than in America, and that almost as many young men were lifting weights in Germany as were playing football in this country. Nevertheless, very few of the world's strength records are German. Some are held by Austrians, some by Russians, and many by Frenchmen. As a matter of fact, the weight lifting records held in Germany and Austria are all made under German rules.

The French records in similar lifts are quite as meritorious as the German records, when the difference in style is considered. And in most of the lifts, when the rules are identical, the French lifters have surpassed their German rivals.

No nation or people monopolize strength. It is true that men of some nations are bigger than those of other nations. The average Scotchman is taller than the average Spaniard, and the average Finn weighs probably twenty-five per cent more than the average Italian. But that does not prevent Spain and Italy from producing some enormously big and strong men.

In the nineteenth century, the English had a fixed belief that the French were a

the Home an Caliert.

race of small-sized, effeminate men, but in the same period the French can show hundreds of first class heavy weight athletes. In fact, Apollon, of France, was probably more powerful than any European athlete of whom we have record-barring possibly Youssuff the Turk. We are told by people who have visited Turkey that the Turkish laborers are giants in strength. Also various travelers inform us that the Russian Mujiks, or the Swedish

sailors, or the Balkan Mountaineers are the strongest race of men in the world. The Russians undoubtedly have a large percentage of Herculean athletes, yet several Russian authorities inform me that the Tartars are so powerful that Russians nearly always allude to them as "the strong men."

Apparently the older the country and the more primitive the conditions of labor, the more strong men the country produces. In Turkey and all Southeastern Europe all farm labor and practically all handling of heavy merchandise is done by man power. Therefore, a certain percentage of the men thus employed become immensely powerful, and also exceptionally skillful in applying their power.

A casual observer on the Turkish docks, for example, notices two powerful individuals carrying a heavy crate, is told that the crate weighs "about a ton," and then comes home and tells us that the Turkish stevedores are the strongest men in the world. Possibly the two big American or Irish laborers could have carried the weight just as easily.

In this country we are always creating and developing machinery to take the place of human muscles, and when heavy physical labor has to be done, the American workman shifts it off on the "Wops" and "Polacks." Notwithstanding the fact that the American city workman does little heavy work, I believe that I could go through the factories or any of our big cities and pick out just as many naturally strong men as there are in a European city of equal size.

Possibly the heaviest physical work performed in this country is by the lumbermen in our logging camps. Visitors to such camps exclaim over the enormous strength of the laborers. Writers in responsible magazines tell us that they have seen lumbermen striding along with a 1600 lb. log on one shoulder. Needless to say, I put no more belief in such stories than I do in the story of two Turkish porters carrying a 2000 lb. crate up a flight of steps.

Probably few would claim that the Irish are the strongest of all races, yet the fact remains that the Irish hold practically all the weight throwing records. We hear of privation and suffering in Ireland, but that country seems to be able to produce regularly a fair percentage of gigantic, wellnourished men who can pick up 16 lb. hammers and 56 lb. weights and throw them further than a man of any other nationality can manage. America has been winning Olympic weight throwing championships for years with such imported Irishmen as Flanagan, McGrath, Ryan and McDonald. Perhaps, as some people claim, the Irish have a natural genius for throwing things, but I believe that if these big Irishmen practiced lifting instead of throwing they could shortly produce champions who would make the Germans, Austrians and French sit up and take notice.

Because it all depends on what you are accustomed to doing. An American youth will gape with astonishment when he sees a German youth put up a 150 lb. dumbbell, or an Irish youth throw a 56 lb. weight, and will then pick up a baseball and throw it further, swifter, and more accurately than the Irish or German boy can.

Give Americans the incentive and opportunity to train with dumbbells and they will soon hold all lifting records. Why? Because we have just as good raw material as any other nation, and on top of that we have a knack of mastering any athletic sport and excelling in competition. The other nations



Apparently the older the country and the more primitive the conditions of labor, the more strong men the country produces.

claim we win the Olympics because we take our sports too seriously. Perfectly true.

When football was still a game of rushing tactics there was a premium on men who were at once big, heavy and active—in other words powerful men who could control and use their power. Every husky freshman was implored to try for the team, and most of them responded. The consequence was that after the coach had developed and sifted out one hundred strapping candidates he could put on the field eleven human tigers who were the last word in specialized combat.

Take fifty colleges with squads of one hundred men each. That would be five thousand men. Give any good weight lifting instructor that bunch of picked men, and I guarantee that in a year he could turn out a team of weight lifters that would win from any similar team of European amateurs.

To "put up" a 100 lb. dumbbell seems quite an accomplishment to the average man. Charles Eliot Flint states that he was one of a class of thirty who practiced weight lifting in a certain gymnasium, and that in a few weeks training every one of the class could "put up" 100 lbs. That shows the strength possibilities of the average sized man. The capabilities of football players would be much higher. Imagine the records we could have on our books if such giants as Hefflefinger, Woodruff, Cowan, Hart and Maxwell (who writes for Sirength) had spent as muck time with big dumbbells as they had with footballs.

That we have the raw material, I know from personal observation. I have seen hundreds of hundreds of men who could be developed into Samsons by a short period of scientific progressive training with weights. I have seen a short, thick set blacksmith grab a 125-lb. anvil by the horn, swing it to the shoulder and push it aloft with the right arm. And I doubt whether Sandow or Saxon could have done the same thing.

I have seen a tin-smith grasp with his right hand the middle of a 65 lb. iron bar, hold it out to the side, and then rotate it this way and that.

The world's record in a certain dead weight lift is said to be held by a Brooklyn carpenter. There is in Maryland a farm superintendent who is of such superhuman strength that he can lift 1500 lbs. dead weight with his hands alone, and who can grasp a quarter dollar by the edge and bend the quarter



Carroll would take a 250 pound dumb bell in each hand and exercise with them for several minutes at a time.

double by pressing the coin against a metal surface.

Irish weight throwers may hold most records, but don't forget that Ralph Rose, of California, has put a 16 lb. shot further than any other man. Also, I would back the fifteen best American college shot putters to win from the fifteen best Irish putters.

Mr. Edgren, of New York, has written most entertainingly of the strong men he has met in his long connections with athletics. In a certain article discussing the three greatest strong men, viz.: Cyr, Hackenschmidt and Carroll (of California), he makes the assertion that Carroll would take a 250 lb, dumbbell in each hand and exercise with them for several minutes at a time. I am afraid that Mr. Edgren never weighed the bells, because if Carroll could do what Edgren claims he would be at least 50 per cent stronger than either of the others. Neither Cyr or Hackenschmidt could take 200 lbs, in each hand and put it up once. Nor could have either of them have taken a 150 lb. dumbbell in each hand and exercised with it for as long as two minutes.

But unquestionably Carroll was a marvel. His hammer throwing records prove that, and I do not question for a moment Mr. Edgren's statement that Carroll was possessed of almost unbelievable strength.

#### STRENGTH

A generation ago Cowdin, of Maryland, and Queckberner, of New York, were stars at weight-throwing and under present day rules and conditions could have equalled the performances of the Irish giants. One could multiply instances indefinitely. On the farms, in the mills, the lumber camps, the Southern

plantations, the western ranges. we have as good raw material as exists anywhere. And on top of that the American heavyweight has a quick strength. and a sort of explosive energy that converts him into the greatest of competitive gladiators.

If you can interest one-tenth of our raw material in the sport of lifting we can make American strength just as famous as Yankee ingenuity.

Weight lifting is at present only a minor sport vet the American boy succeeded in annexing three world's records at the game.

The development of great lifting power is a matter of opportunity and train-

opportunity

ing-that is, the We have beaten the world in almost every competitive sport-Why not show the way in feats of strength?

working with big bells and the enthusiasm to train regularly.

o f

I have seen many a small, slenderly built man, increase his muscular power fully 100 per cent in three months' time-and such men starting below the average in size and strength are usually very anxious to improve themselves.

But where you have twenty small, slender men you have perhaps one natural physical

giant, and, what is worse, these giants are frequently well satisfied with Nature's endowment in the way of size and strength and are too complacent to make any effort to develop and educate their powers. Occasionally you find an exception. I have in mind one government clerk who stood 6 ft.

2 in, in height and weighed 260 lbs. After a comparatively short period of practice this man could take a 150 lb, bar bell in both hands and push it aloft, 25 times in succession. If he had had any incentive to train for competitive work he could have easily defeated any professional lifter exhibiting at that particular time.

Inquire among fifty baseball players and track athletes and you will find that not more than two or three out of the fifty can "put up" 100 lbs. with one hand. Among fifty football players and oarsmen the percentage would be much greater because they are larger and heavier men.

If you tell the average man or boy that he ought

to be able to "put up" that amount of weight with one hand he gasps and says that is the feat of a "strong man."

If you tell him that he ought to be able to "put up" a 200 lb. bar bell with 2 hands he thinks you are crazy-yet in Great Britain and the continent of Europe there are literally hundreds upon hundreds of athletes who think nothing of raising that weight (Continued on page 39)



14

**June**, 1921

## Homeric Heroes

#### By ROBERT W. MAXWELL



N the days of old when the cave man ruled supreme and was considered the one best bet in society,

it was the guy who could swing the stone axe that got the big play on the stoney pages of the daily newspapers. Later, when civilization discarded the crude weapon and substituted the battle axe, the gent with the brawny arm and the healthy swing attracted more attention than the high brow with all of his wisdom. In other words, it was the mighty wallop that made a big hit with the mob and when you come to think of it, conditions have not changed in this modern and hectic age.

The boxer who can knock an opponent for a round trip is more popular than the clever scientific bird who depends upon his skill to gain the decision. Jack Dempsey stepped into the limelight and won the heavyweight crown because he scored a bullseye on Fred Fulton's chin a few years ago and Fredward flopped like a loose bale of hay after eighteen seconds of strenuous fighting. Benny Leonard's knock out wallop gained him fame and fortune and so it goes ad infinitum.

All of which leads up to the modern

marvel, the colossus of clout, the sultan of swat, the homeric hero, busting Bambino, otherwise known as Babe Ruth. The Babe is the big noise at present and he has the entire baseball world in the hollow of his sunburned hand. Not because he is fast, because he isn't. Not because he is a brilliant, brainy outfielder, for he is one of the saddest looking outposts that ever was draped in left field. Clever, inside baseball is a closed book to him, but oh, boy! How that guy can CLOUT the apple!

Everybody knows what Ruth has done. Those fifty-four home runs last year, which established a record for all time and broke the mark he made the year previously by 25, have furnished conversation for the baseball bugs all winter and spring. This rare accomplishment cannot be concealed even in the smallest hick village in the grass belt. He is the superman of baseball because he can hit.

When the Yankees opened the season in New York against the Athletics the largest crowd that ever attended a baseball inaugural was packed in the vast stands in the Polo Grounds. Ninety

Babe Ruth and the brown derby he made famous

per cent of the spectators didn't care a hoot about the Yankees or the A's or who would win the game, but were out there for the sole purpose of having a look at Bambino Ruth. They didn't see him make a home run, but he connected with five safe hits, which proved to be perfectly satisfactory.

Damon Runyon, one of the greatest of sports writers, pushed his way through the crowd and after considerable difficulty, reached the press box. Then he looked around at the packed stands and said:

"This is a tribute to one man, a man who doesn't know what it is all about and doesn't care—Babe Ruth. He packed the Polo Grounds today and will continue to draw the mob all season. He is nothing short of a genius.

"Last year, when baseball was on trial, he started to make home runs and not only revived interest in the American and National Leagues, but in every league in the United States and Canada. Budding Babe Ruths cropped up all over the country and the folks went to the ball games to see how it was done. Ruth has made baseball all over again. Nobody ever has been his equal and it is doubtful if anyone ever will take his place. He stands alone."

And Mr. Runyon could have carried his thoughts further. This year, after the game had been rocked by the worst scandal in history and the confidence of the public was tottering, it was Babe Ruth who dragged it back into public esteem. The dirty mess caused by the pillow lifters was forgotten when the season opened because the colossus of clout was bigger than any scandal.

His deeds of prowess in the training camp were eagerly followed wherever newspapers were published and the moving picture men missed no opportunity to throw his burly figure on the screen. Everybody kept close tabs on his work and he was more important than all of the big league clubs put together.

But let's take a peep behind the curtain and have a look at Babe Ruth as he really is, and not as he appears in public in the ball games. I have followed Ruth for six years, have had a chance to study him at close range and collected some interesting data.

He used to be a hard man to handle from a manager's viewpoint because he disregarded all training rules, even when he broke into the league as a lowly busher. He couldn't see discipline and ran his managers ragged before the season was half over.

Three years ago I visited the camp of the Boston Red Sox in Tampa, Florida. Ed Barrow was manager and was having his troubles, although the season was but a week old.

"I have a big, unset diamond," he said, "too big and too valuable to throw away or to try to dispose of, but utterly unfit for my ball club. I mean Babe Ruth. I don't know what to do with him. He makes his own rules, trains as he sees fit and I can do nothing with him. I have as much authority as a substitute rubber."

That was Barrow's frank opinion of one of the greatest stars in baseball and it was sincere. Babe was just a big kid, who retired when nobody would stay up and talk to him and arose when he got good and ready.

The Babe is a trusting soul and was an easy victim for the practical jokers. In 1917 when he started to clout the ball and gained fame as a slugger, he was nicknamed "Tarzan." Now Ruth never had heard of the Simian and imagined Tarzan was the same as Hercules or Samson. He used to swell up with pride every time he heard the nickname, for he was proud of his strength and prowess.

Then somebody told him that Tarzan was a gigantic Ape-man who lived in the jungle and was the hero in a lot of stories. He threatened to lick any man who dared pin that nickname on him again and nobody did —when he was near. However, the boys thought of a better name and started to call him the Baboon. That made things worse.

One day, Ruth and Everett Scott, the Red Sox shortstop, were walking through a cocoanut grove in Florida. Babe was interested in the tall trees, with their slender, slippery trunks and the tufts of leaves on the top and so was Scott.

"Pretty tall trees, aren't they?" queried the little shortstop innocently.

"Yeah," grunted Ruth.

"Pretty hard to climb those trees," continued Scott reflectively. "Wonder how long it would take you to get up to the top and swing on the branches."

Ruth let out a yell and made a grab for

#### STRENGTH

#### June, 1921



On the organs of vision-the faultless eyes of Babe Ruth-depend the repetition of that wonderful base ball record piled up by the famous slugger last season,

Copyright by Underwood and Underwood.

his little teammate. Scott dodged him and ran through the grove yelling: "Quit your monkeying!"

Another time, Joe Bush came out on the field twirling a brass ring around his finger. "What's that for?" asked Ruth.

"I'm going to put that through your nose and lead you around this summer," replied Bush as he ran for the fence with the Babe in close pursuit.

That season Ruth got himself in good shape because he was the butt of all jokes and chased the jokers all over Florida.

Another thing which worries managers and trainers is the slugger's appetite. He is an enormous eater and a couple of steaks at a meal mean nothing. In addition to that, he has a lot of side dishes to be partaken of at odd moments.

At a double header in Philadelphia a couple of years ago, Babe left the field after the first game and during the intermission ate a dozen hot dog sandwiches. He got two home runs in the second game.

Another clever idea is his midnight lunch. No matter what time Bambino rolls into the hotel, he can't go to bed without one quart of chocolate ice cream and a half dozen ham sandwiches. Then he lights a big black cigar and goes to bed. When he falls asleep his roommate—he always has one—takes the cigar and saves him from being scorched.

Ruth is very democratic. No matter how much he is extolled, no matter how much of a hero the public makes of him, nobody can accuse him of having a swelled head. An ordinary person would have been spoiled long ago, but not Ruth. He can be found most of the time talking to a flock of admiring teamsters or chauffeurs, and when on the train, the train crew are his companions. Once when going from Detroit to Cleveland by boat, Ruth was discovered in the early hours of the morning down in the engine room surrounded by the stokers, listening to his tales of prowess in the squared circle. Babe believes he is a great heavyweight puglist, which is a great belief, so long as he doesn't try to prove it.

\* \* \* \*

Do you remember how the arrival of the circus used to cause great excitement in town and all of the small boys would stay up all night to see the train pull in? Well, that is how Babe Ruth is received in the South during the exhibition tour.

As soon as the train stops, a crowd immediately surrounds the sleeper and there are cries of: "Where's Ruth?" The Babe always obliges by coming out on the platform and waving his hand to the cheers. On a trip from Lake Charles to New Orleans, a crowd gathered at every station to get a glimpse of the famous player, even when the train did not pull through until 2 A. M. No President or visiting potentate ever received such a welcome.

And yet, the big boy has not been spoiled. He always is willing to please and that makes him popular.

In the exhibition games in the South, Babe often is abused by the crowd. That is because everybody who has read of his mighty swatting, comes out to see him do it for their special benefit. They do not stop and think that it is early in the season and the star has not rounded into form, but insist that he knock the ball out of the lot every time he steps up to the plate.

Babe tries hard in these early games and as a result, strikes out most of the time. He wants to please the crowd, throws science to the winds and when a pitcher fools him with a curve or a change of pace, he is handed the rollicking rawsberry and scolded like a burglar.

A couple of years ago when the Yanks were training in Jacksonville, a big crowd came out to the first game to see Ruth perform. The Babe had been purchased from Boston for \$137,500, the highest price ever paid for a ball player. He had been advertised far and wide and billed like a circus.

Babe struck out the first time up and there were groans from the crowd. The next time he hit a pop fly and more groans followed. The third time he whiffed again and the abuse started. One man in the left field bleachers was especially abusive and demanded to know, in a loud voice where that big bum ever got his reputation. The spectator kept this up throughout the game and Babe could stand it no longer.

He-jumped into the bleachers and started up for the loud mouthed spectator. This individual saw him coming, but never moved. He took a big knife out of his pocket, carelessly brandished the blade but despite this, Ruth wanted to mix with him. It took the combined efforts of Charley O'Leary and Ping Bodie to drag him back on the field.

That's what Ruth is up against down South, just because he is anxious to please the public. He easily could take a shorter cut at the ball and drive out singles, but the spectators want to see home runs and Babe does the best he can. It's the same in the championship season. Every time he strikes out—and it is quite often—Babe is razzed by the crowd. He is cheered when he makes a homer and jeered when he fans.

\* \* \* 4

But it is all in a day's work with the Babe. He is in the spotlight and loves it. When he arrived in Shreveport this spring, he was met by the mayor of the town, handed the keys to the city and made a guest of honor. School children presented him with a bat made of flowers, bearing the inscription, "Welcome, Babe Ruth." An automobile concern placed a new car at his disposal and instead of a license, the city gave permission to wear a sign on front and back, "Babe Ruth's car."

Ruth is a motorist. He loves to tour around the country in his new Twin Six, which was purchased for \$12,000. He has one of the best made cars in America, with plenty of speed, endurance, and beautiful to gaze upon.

However, the star of the diamond has had many narrow escapes. He insists on going fast and last year escaped death by a miracle when his car overturned near Media, Pa., while going at 60 miles an hour. The big car turned over twice but not one of the occupants were injured.

His special car in Shreveport landed in the river, but Babe jumped just in time.

In Connecticut last fall, he was speeding around a turn—a sort of a blind curve and he skidded into the ditch to avoid hitting another car coming from the opposite direction.

He loves speed, will take all sorts of chances and this is about the only thing which might interfere with a long career in baseball.

\* \* \* \*

Ruth is well paid for his services. In 1918 he demanded a salary of \$10,000 from Frazce and got it. When he joined the Yankees, he signed a two year contract for \$20,000 a year, but the owners, Colonels Houston and Ruppert, have increased this amount voluntarily. He was given \$10,000 extra last year and this year his contract is said to call for \$40,000. Pretty good pay for six months' pleasure in the open air.

The Babe pays the expenses of the New York ball club, makes money not only for his owners, but every other owner in the American League. Every club showed a profit last year, the Athletics making more with a tail end club than when Connie Mack's great machine was winning pennants and world's series. He was purchased for \$137,500 and already has paid a couple of thousand per cent on the investment.

#### \* \* 4

But you can't hand it to the Babe for his business ability. He hasn't any. He spends his money like water and if he has anything saved, it is because he made more than he could spend.

After the season last year, he went into

18

the movies and was the hero in a five reeler. According to a story, Ruth was given a big check which he proudly showed to all of his friends for a week or so and then, when he deposited it in the bank, he learned to his dismay that there were no funds to cover it. Result: a total loss. I don't know whether this is true or not and am telling this as a rumor.

However, Bambino visited Cuba this winter and received a nice lesson on playing the ponies. He was given lots of information, to say nothing of tips and dropped something like \$40,0%0. Now he is off horse racing for life.

#### \* \* \* \*

What gives Ruth all of his power to hit the ball such long distances? Take a look sometime. Ruth has a style all his own. He uses an extraordinary long bat, and when he swings, winds it around his neck like a golfer. He takes a real golf swing, with the follow through and everything. When he hits the ball he hits it solidly, which accounts for the distance.

In addition to this, Ruth has an unusually keen eye. He can follow the ball better than any other batter and that takes in Cobb, Speaker, Sisler, et. al., and detect a curve, or change of pace. What makes his hitting all the more remarkable is the fact that he seldom gets a good ball to hit at. Most of his homers are made off wild pitches which are not even close to the plate.

Yom can study the dope, look back in the musty old files and not one man can be found who even compares with Ruth. He busted the records made by Frank Schulte of the Cubs, Gavvy Cravath and Perry Werden. Perry made 45 home runs some years ago in the old Western League and nobody ever thought the mark would be broken.

Pitchers have a hard time pegging the ball to Ruth. He hits everything, high, low, inside and out.

Down in Shreveport, a rookie pitcher was on the mound. Ruth came up and the twirler shook in his boots. George Moriarity was umpiring and stood behind the pitcher.

"What shall I throw him?" nervously asked the pitcher of the ump. "You saw him in the League and know his weakness. What shall it be?"

> "Throw him one straight over the plate," replied Moriarity, "and we'll both duck."





STRENGTH

June, 1921

## The Development of the Calves

By O. R. COULTER



HE training of the calves is more essential than many muscle culturists seem to realize. All leg work causes vigorous heart and

lung action, and for this very reason has a more beneficial effect on the general constitution than exercises involving smaller muscles like the more popular movements for the upper arms. Some physiologists assert than an unbalanced physique interferes with proper circulation. I do not know if this theory is correct, but I do know that extreme bodily vigor is more often associated with a symmetrical musculature, and that all around training which promotes rounded outlines and a balanced development is more conducive to all-around strength and vitality than specialization on any one set of muscles or training for efficiency in any special use of them.

To develop the arms at the expense of the legs is a big mistake, as it renders a weak spot in the human mechanism, for man was born to be symmetrical. No one unless perhaps the living skeleton in, the side show was ever proud of poorly developed legs, and a real competent judge of the human form, as a painter of nudes, a sculptor, or a physical instructor with the sound judgment that distinguishes true values, would prefer a large calf and moderately developed upper arm to a tremendous upper arm accompanied by a poorly developed calf. A balanced development is selected by the painter and sculptor, and they are strongly opposed to any tendency towards a "top heavy" development. At various times, the writer has posed for some quite noted artists; and has almost invariably found them more interested in the legs than in the arms or torso. Their criticisms are seldom about the proportion between the upper arm and forearm. They have not often spoken about the deltoids or mentioned the good or bad points of the torso muscies, but usually have commented on the thighs and calves. Their main criticisms have been: "Your thighs are very wide but your calves are too small" or "you have magnificent thighs, the curve on the outside is beautiful, but why don't you develop your calves more?" This tends to show that competent judges of the human physique attach considerable importance to general leg development as a prime factor in all-around appearance and realize the part that calf development plays in making up this general development of the legs.

That the majority of calves are not nearly what they should be is readily seen if one is observing. How many really good lower legs have you seen at the sea-shore? You have no doubt noticed that the majority of the men's lower legs appeared straight up and down or else were a fleshy misshapen mass. You have, no doubt, also observed that the fair sex had more pleasing call development than the males. This is probably more apparent than real. Woman's smaller feet and greater bulk of flesh in proportion to bone gives her an advantage in appearance here over mere man. But even the most pleasing calves you may have noted among the female sex at the bathing beach would prove lacking in the amount of muscular development and contour of outline if compared with the average ballet dancer of her sex. Anyone studying the photographs of athletes with an eye for what appeals to connoisseurs of physical beauty, a finely built calf, will find that the average athlete with a large well-proportioned lower leg, is by no means common. Even when you find your man with a big calf, he may not be able to tell you how he got it.

This lack of calf development may be the result of one or more causes. One of these is the anatomical construction of the foot. another is a low potentiality for muscle development and last but not least is improper exercise. The anatomical construction of the foot, ankle and lower leg is partly responsible for the variation in size and shape of the leg muscles of different persons. The foot, in raising one on his toes or in walking, acts like a lever of the second order. This class of lever has the weight between the power and the fulcrum. The ball of the foot is the fulcrum, the ankle joint is the weight and the action of the Achilles tendon at the heel is the power exerted on the lever. It can be seen from this that a decrease in length from the ball of the foot to the ankle and an increase from here to the insertion of the tendon would increase the leverage

so that it would not require as much power exerted on the tendon as before, or in other words, a man with a long heel and short ball of the foot would not need as much muscular development in the calf to raise the body on the toes as one with less leverage and the man with the poorer leverage facility would have more need for muscular development in the calf, and if all other conditions were equal, would have a larger measurement here. He also would have a larger radius of movement and with the same rate and intensity of muscular contraction, would have an advantage in stride in walking and running, but the law of compensation is always more or less in effect. and the man with the short ball of the foot and long heel, as he requires less intensity, usually has more speed of muscular contraction. When you examine a man with poor leverage facilities, who has considerable agility, you will usually notice him in possession of large, well-developed calves. If you observe large, heavy boned men, who are exceedingly active in their movements as well as enormously strong, such as Donald Dinnie, Duncan Ross, and Alex Cameron for example, you will find them possessed not only of strong and well-developed hips and thighs, but invariably accompanied by magnificent calves.

The potentiality of development is an individual matter. The natural limitation in muscular development as well as in other qualities varies with each individual and no matter what your aspirations may be you cannot exceed the limitations that Nature has given you. Fortunately for the highly ambitious, it may be said that few ever attain to any where near the limit of their individual possibilities and I believe this applies more directly in calf development than in the development of any other part of the body. Long legs have long muscles and the "gray-hound" type of man cannot have the same appearance as a man naturally of the "bull-dog" type. The first may be as strong as the latter, although he is not so likely to be, but on the other hand, he is more often possessed of speed and all around ability. However, disregarding natural differences in physique, I believe that any able-bodied man, by a judicious application of proper exercise, can at least approximate the physique that is considered ideal for a man of his natural build.

The main reason that physical culturists as a class fail to attain a really magnificent development of the calf is due to the work done for this purpose. Many use wrong methods and others may use the correct methods but incorrectly apply them, and some may make no direct effort to increase the development of the calves. Enthusiasts about arm development are apt to forget about their lower legs. Many are really desirous of developing superb calves, yet in spite of their efforts never attain the results that they would if they did the proper exercise in the right way. Some say that though they exercise morning, noon and night, they cannot develop a calf worth looking at. They perform all the fatest movements and are



O. R. COULTER

willing to put anyone's suggestion to the test! For years it has been apparent that many Physical Culture "Systems"—and their name is legion—have developed or at least attempted to develop the upper part of the body at the expense of the legs and when the man, who really desired to develop his calves, endeavored to obtain first class information on calf development he has found a surprising scarcity of the same.

Ordinary methods leave the calves and forearms almost untouched, and when one considers that the calves are believed by the most of the physical culture exponents to be the most difficult part of the body to influence, it can be seen that there is all the more need for proper methods and proper application if one is to attain really good results. The calf is used in everyday life, perhaps more than any other part and this constant use seasons or toughens it, thereby rendering it, relative to other parts, difficult



O. R. COULTER

to influence. What I mean is this: Suppose a clerk and a navvy were to attend a gymnasium and the navyy were to do the same work as allotted to the clerk, what would be the effect on the navvy? Practically nil, and the result of ordinary exercises for the calf as commonly practiced is the same. The exercise most frequently used to develop the calves is standing with the heels together. and rising on the toes a prescribed number of times. After the first two weeks or so. this loses its capacity for developing muscle, although maintaining that already developed. By increasing the number of repetitions one may increase the calf slightly more, and making a complete movement by rising each time as high as possible will further the results, and if one stands with the toes on the edge of a thick book or similar object he can get a fuller contraction and obtain better results than if he merely rises on the floor, but it is only a matter of time until the calves reach the limit of development possible from this,

At this stage you may increase the number of movements till you cannot do any more. You will have increased your endurance, but your calves will not increase any further in size or strength and if this method is followed too long, you may wear them down. At any rate, if you continue long enough you will develop the ability to perform the movements so many times that it will become too monotonous and this is a bad thing for development. A convict doing time on a treadmill does not develop enormous calves, proving that mere drudgery in exercise does not get the best results. It would be better long before such a condition takes place, to start performing the exercise using but one foot at a time, but even this would also eventually become a mere matter of endurance and would reach its limit for developmental purposes, then it would become necessary to further increase the resistance. But remember, no matter how well you may practice this exercise for rising on your toes, that you cannot even develop the muscles involved to their limit as the work of the calf muscles is to propel the body forward as well as to raise the heel.

Rather than the ordinary method of rising on the toes, it would be preferable to stand some little distance from the wall and lean forwards and perform the movement with the hands resting on the wall. The

exercise of rising on the toes will make a calf wide from side to side but will not make it thick from front to back. If you perform the exercise properly as I have delineated, you will attain considerable development of the main calf muscles, but you cannot reach the limit of their development in this way, because it will only develop them in their individual use. To develop a muscle to its limit it must be developed to the limit of all its uses. The muscles at the back of the calf of the leg are a part of the muscles of progression and must be developed in conjunction with the muscles of the thighs and buttocks, so to attain the maximum development of these muscles one should also practice exercises involving the thighs and hips such as running, jumping, deep knee bending, etc.

To develop the calf to its limit, one must develop all the muscles of the lower leg to their limit. So the muscle on the front of the leg covering the shin must also be properly exercised. This muscle often feels fatigue in rapid heel and toe walking, though its action has nothing to do with propulsion. The most common exercise advocated for developing it is to perform a semi deep knee bend, moving the knees directly forward, keeping the heels on the floor and endeavoring to place the hands on the floor as far to the front as possible. In my opinion, this stretches this muscle rather than contracting it and is not a very good exercise for developing it. In fact, I do not know of anyone who attained any remarkable development of the shin muscle from the practice of this movement.

No matter how well you may practice these exercises regards full contraction and variety of positions, you will not develop them to their limit without additional means because it takes more resistance than afforded by the weight of the body in any movement similar to the slow deep-knee bend or rising on the toes to give great calf development. Notwithstanding this, many men attend gymnasiums and go through calisthenics that specialize on arm movements that would not tax a six-year-old school girl, and some even expect to get leg development from this calisthenic class work. Oftentimes the only work for the legs given is the ordinary deep-knee bend and rising on the toes a few times. Many of these otherwise intelligent men, on their way to their gym classes will see little children performing the vigorous exercise of skipping the rope, but nevertheless, they expect to increase their calf development by rising on their toes a few times, keeping time to the physical director's counting, each man performing the same number of movements regardless of strength or general bodily condition. The writer realizes that comparatively light exercises properly performed will enable one to attain a fair development, but light exercises as taught in the majority of gymnasiums has about as much to do with attaining real muscle development as taking shower baths has to do with swimming.

Although I have shown the inefficiency of ordinary methods of exercise for developing the calf and have stated that athletes as a class do not possess a large well-proportioned development of these parts, yet I feel sure that by proper training, the calves can be developed the same as the forearms, I have noticed that paintings and statues depicting male physique are quite as notable for fine calves as for well-developed forearms. Perhaps some of the readers may have viewed pictures of "Group de Cariatides." "Achilles" by Wandschneider, "Rollon" at Berlin, "Vae Victis" by Clarke, "Hercules and Omphale" by Bolanger, "Cain and Abel" by Hegedus, "Last Judgment" by Angelo or some other works of art showing fine physiques and noticed what wonderful calves the models must have possessed. In fact, one would almost doubt if such a development in reality were possible, were it not for some such examples we have in real life as Clarence Weber, William Bankier, George Stangelmeir and others,

None of these men were developed by light resistance work. In fact such a calf development as they possess could not possibly be developed by the accepted methods of light exercise. Light exercise has had far more followers than progressive exercise, vet it cannot show one example of calf development equal to the men I have mentioned, although there are many other quite as noteworthy examples of lower leg development as these among the followers of the various forms of the progressive training. This should prove quite conclusively that the accepted methods of light exercise are inadequate for attaining a maximum calf development.

To be continued next month with an analysis of various progressive methods that get worthwhile results in calf development.



J. E. WOODROW, on December 15, 1919.



Three months of regular exercise made a big difference in him.



#### THE EVOLUTION O

VES of great men all remind us"-the dapplicable to the world of physical culture. The man who begins life with a mobstacles is held up to us as an example of what begins with a weak, undeveloped body and who is equally worthy of attention. All of which J. E. Woodrow, of Peoria, III., "before and after tak

The first picture shows Mr. Woodrow on Dece brag of in the way of physical development. The 26, 1921, looking and feeling like a real man. Wh Are you next?



And six months later his friends would not have recognized him.



#### A MAN

w of school days is just as to the greater things of life. itap and who overcomes all n can do. And the man who clops himself into a real n an us up to the pictures of

15, 1919, with not much to icture shows him on April in has done, man can do.



row on April 26, 1921. Looking like a real man.



Atlantic City, N. J. Champion Jack Dempsey begins training for his bout with Carpentier in Jersey City, on July 2.



Bob Le Gendre, of Georgetown University, throwing his javelin in field games of Penn relay carnival on Franklin Field. Le Gendre won both the broad jump and javelin throw in the Penthalon. Copyright by Underwood and Underwood.



W. D. LEE, Evensten, Ill.



H. F. BAILY, Buffalo, N, Y.



RAY SPERY, of Peoria, Ill., who is training partner of J. E. Woodrow and who, no doubt, played a part in his friends physical development.

STRENGTH

June, 1921

## What is Exercise?

By JOSEPH V. PRADA

A Physiological Exposition of Bodily Exercise



WOULD describe exercise as healthful recreation for the body. There are many kinds of exercises, but they all tend to perfect one's

self from the standpoint of health, strength or skill. Scientifically speaking, there is no difference between the exercise performed by the manual labor and the more fortunate man, who is able to devote regular hours for the recuperation or upkeep of his health. or, as said before, in acquiring strength or skill by training his muscular system. The laborer who digs a ditch and the gentleman who takes up some form of exercise, both to a certain extent, do muscular action, but in the one case it is apt to prove anything but beneficial, as the laborer sometimes not only works too much, but feeds badly and sleeps not enough. His more fortunate fellow man usually reaps desirable results, as he keeps regular hours and the rules of hygiene and rest are followed. Thus, work rather wears out the one, while exercise strengthens and builds up the other. However, the beneficial results obtained by the more fortunate of the two must be acquired by following a sensible and methodical regimen, otherwise the results experienced by the common laborer, providing he is subjected to the unfavorable conditions mentioned, are very likely to prove the same if the exerciser, through his uncontrolled ardor and enthusiasm, goes beyond the cry of moderation. Immoderate exercise of the strenuous kind will wear him out as completely as too much work in the case of the laborer.

Reverting to severe forms of exercise I wish to mention marathon running as a form that is to be eschewed from those that are constructive. Exponents of this strenuous form of athletics never last long. In their ultimate and supreme effort to wrest the laurels at the Olympic Games every four years, having previously subjected themselves to a severe and gruelling course of preparation, they invariably burn up their energy to such a degree that, at least, insofar as this athletic achievement is concerned, they merge themselves into shadows of the night. Just recall Longboat, Shrubb, Hayes, Dorando and others, and keep an eye on Kohlemainen, the recent Olympic winner, they all have sunk into oblivion and he will too.

Boxing, to my mind, comes next under the roll of strenuous sports and exercises, while wrestling, also a very strenuous sport and exercise for the muscular system, is only second to weight lifting in its constructive properties towards health and strength. It is one of the few athletic activities in which the exponents of the game are able to stand the "gaff" for a long period of years. Wrestlers, unlike marathon runners, do not sink into oblivion, but quite frequently retire with exuberant health and a large bankroll. Weight lifting, however, of the progressive kind and intelligently applied, eclipses all other forms of exercises for the human body, in the production of the very best results to be obtained in the shortest time possible, and consistent with common sense methods. The enviable results acquired may be looked upon from the acquisition of health, strength, development or skill. Young and old, everybody can participate in this splendid form of exercising the human frame, expecting to be greatly benefited by methodical and diligent training.

Exercise necessitates "muscular contraction." Muscular contraction is the inherent of the muscles property themselves. which tends to shorten and thicken them by a stimulus of the will or from some other external agent or motive. In exercising they undergo a contraction, which is only measured by the strength of the muscles themselves and by the intensity of the effort to be performed. Methodical exercise usually results in benefiting the bodily functions by strengthening the organic system. The weight of the body is also materially increased, for the muscles form, by weight, more than half of the human frame. We can easily understand that indulging in muscular exercise, this will necessarily take place and hence, in modifying nutrition, muscular exercise is a principal factor and one of the first to be considered.

The muscles are bundles of reddish fibers which, in elongated forms at their extremi-

ties, usually end in a tendon attached to the bone, and their fundamental element is the muscular fiber itself. These masses are also formed by the fasciculi, or the second element, which being made up of the primitive element, they constitute de sarcolemma, or membraneous sheath, containing the muscular juice or plasma. This muscular juice or plasma when it has undergone a transformation in its chemical components, as it is being heated by overtaxing, is the principal factor in bringing about the exhaustion of the muscles. The muscles possess, as has already been explained, the power of contraction. They easily perform all their natural functions and movements by flexing, extending, turning, etc., and in the case of especially trained men, such as contortionists, equilibrists and others along the same lines of action, this inherent property of the muscles, in its various applications, having undergone judicious training and education. is the reason for the seemingly impossible feats with which we are sometimes entertained by attending the circuses and theatres. .

#### Will Power.

We have often read and heard the expressions: "He is a veritable human dynamo; his energy gives him the power of achievement; he radiates happiness and sunshine," in connection with or as an explanation of the accomplishments of successful men. Such expressions give us a clear idea as to the type of persons we are dealing with. The picture of unbounded will power and energy is at once apparent, for the happy possessors of these truly enviable qualities are indeed veritable human dynamos of well doing. Their will power is immense, their intelligence quite uncommon and their energy has been well applied. By their tremendous will power they have successfully materialized their dreams, guiding them into the channel of fame, wealth and prosperity. If the will plays a very important part in the achievement of success in the intellectual plane, it is no less important in the performance of muscular feats, as we shall see from the following:

In muscular action and accomplishments, particularly so far as these have a voluntary stimulus in exercise and athletics, the will is transcendental; in fact, it is the motor that generates the energy which is transmitted to the muscular system. By tremendous will power, surprising muscular feats have been done.

The following illustrations are quite well known to those who are familiar with weight lifting records. As weight lifting is a safe and sure way of testing our strength and will power they serve the purpose well. In England, where weight lifting is more generally practiced as an exercise and a sport. three worthy exponents of the game while weighing less than 125 lbs, themselves, have accomplished over 200 lbs, in what is known as the "bent press" lift. This is a manner of raising a bell with one arm from the shoulder which requires great strength as well as great skill. Truly a remarkable performance when we consider the weight of the athletes. They are Holliday, Carquest and Neal. George Lettle, a German athlete, while weighing 135 lbs. stripped, has done in the "hands and knee' lift the stupendous poundage of 1763 avoirdupois against the record of the late and gigantic Louis Cyr, the great Canadian strong man, and which is credited as being 1897 lbs. Lettle's feat is simply astounding, as he is a mere pigmy alongside the prodigious bulk of the late Cyr, who tipped the scales in the neighborhood of 300 lbs. These athletes, apart from being trained to the minute, undoubtedly possessed supreme will power, as otherwise their admirable strength cannot be satisfactorily explained. As a further solution of the tremendous powers exhibited by these men, let me say that their will power is not only able to send down to the muscles a tremendous stimulus by means of its motor nerves, thus communicating its psychic properties, but as the stimulus courses through the nerves down to the muscles it is greatly amplified. It is only safe to remark, therefore, that exercise undoubtedly has the power of increasing and adding to the nervous stimulus, as it is only in this manner that we are able to explain the uncommon strength of trained men, and which cannot be properly accounted for by an increase of muscular tissue. These are concrete examples in substantitation of the theory just advanced, but there are many illustrations which would be just as good examples, applicable both to the intellectual field and in the performance of muscular feats. We can infer that the will, or rather will power, is of paramount importance in the effort of intellectual accom-

plishments, or in the execution of powerful muscular feats.

Again referring to the muscles, it is well to add that they possess the inherent property of contracting without depending on their motor nerves. This explains the great vital energy of this component of the human body, that is, the muscles may be detached and their motor nerves severed, and still by means of other agents be made to respond to life-like movements and actions. In cases of fatigue it should be considered that we may more properly understand that the muscles may not be fagged out yet and that the will in all probabilities has failed to respond to the performance of this or that athletic achievement.

We may compare motor nerves to the wires which conduct electricity from an electro motor to a receiving apparatus. They convey to the muscles the stimuli which emanate from the brain and they also convey all stimuli which come from outside agents. A pinch, an electric shock, the contact of an acid, can throw the muscle into action by mediation of the nerves. If a nerve be electrified the effect produced on the muscle to which this nerve is distributed will be the same as that which would be produced by electrifying the muscle directly. The will needs the help of the nerves to transmit to the muscles the orders to act. In the most vigorous man it is sufficient to cut one of these little filaments to see the muscles supplied by it become inert. It also necessitates a very complicated mechanism to bring about its functions. This complicated mechanism is formed by the intermediate organs-the nerves, the spinal column and the brain.

We have already seen what the function of the nerves is and that they may be compared to the wires connected to an electric motor, running to a receiving apparatus. For an explanation of their structure we can liken them to hollow fibers or tubes in which is seen, with the aid of a microscope, a kind of filament called the axis cylinder. At the point where the motor nerve is distributed to a muscle the axis cylinder ends in a disc-shaped expansion called the motor end plate, which is intimately connected to the enveloping sheath of the ultimate muscle fibers. The motor end plate is the junction which unites nerve and muscle. By its means a communication is established between the

motor organ and the conductor which conveys to it the orders of the will.

#### The Spinal Column.

The human spine or column seems to be formed by the union of all the nerves of the trunk and limbs. It has the shape of a thick white cord, in connection which are both the motor and the sensory nerves, and which is continuous with the brain, of which it is in a certain sense a prolongation. It is made up of two kinds of tissue: One is white like the tissue of the nerves and the other has a gray color. The white matter forms the external layers of the column. Having the same elementary structure as the nerves, it possesses the same conducting properties, but being formed of sensory as well as or motor fibers, it has mixed functions: the posterior region conducts sensory impressions whilst the anterior region transmits motor stimuli. So far as the white matter is concerned the spinal column does not . differ at all from the nerves. If we make a transverse section the voluntary movements of all the muscles which receive their nerves from the column below the section are done away with. If, however, we pinch strongly, or electrify the anterior tracts, we produce



JOSEPH V. PRADA

involuntary contractions in the muscles inervated by the points to which the stimulus is applied. The gray matter makes the spine a nerve center, that is to say, an organ capable of not only conducting a motor stimulus, but also of spontaneously bringing about a movement in the muscular system. The special power of the spinal column is shown by the faculty which it has of calling forth motor stimuli in the muscles without the help of the brain and without the order of the will. Decapitated animals can make spontaneous movements, provided that their spinal column has been left untouched. A duck whose head has just been cut off flaps its wings and can even walk a few steps. All these movements have the appearance of voluntary actions: however, they are unconscious and involuntary, like all those executed without the concurrence of the brain. All these contractions or movements are reflex actions in which the will takes no part. It is a sensation which runs up all the length of a sensory nerve to a given point of the spinal column, from which a motor nerve starts. The end of the sensory nerve and the beginning of the motor nerve join in the same cell of the spine, from which is given off a third nervous filament in the direction of the brain. Now when this sensory impression, in place of traveling towards the head by this third filament stops in the spinal column, the latter sending it transformed into movement by the motor nerve, produces the reflex action.

It is not necessary that the brain should be destroyed for the production of reflex movements or actions. Phenomena of this nature may be observed during sleep. Walking, having become quite automatic, as it was learned in childhood under laborious effort, finally does not need the concurrence of the brain or will. Other phenomena may also be observed in cases of preoccupation, or in other words, absent-mindedness.

#### The Brain.

There are certain regions in the brain which are susceptible to the production of simultaneous movements, and these are called "motor centers," for it has been proven that the application of an electric stimulus on certain cerebral convulsions will produce movements in the eyes, the tongue or the neck of the animal under experiment. These are not limited to the irrational creatures, for the brain of man, under the same subjection, likewise has "motor centers" capable of controlling particular regions of the body. The property of these motor centers is responsible for the difficulty in controlling certain muscles of the human frame in independent action by isolating one set and then the other. Thus, for instance, the contraction of the abdominal muscles is always brought about by bringing the effect of irritability of the muscles on both sides, and it is only in cases of especially trained men and athletes that one and then the other side is contracted and isolated from the other. The pectoral muscles are also subjected to this special control. As I have said this muscle control is sometimes possessed to a great degree by athletes and strong men, who make a specialty of posing under the glare of limelight to show the effect on the muscular system .. It is needless to say that some have the rare ability of controlling almost all the muscles of the body, but as hinted and would be expected, it is only in cases where diligent training, in what is called "muscle control exercises," has been undergone. A great effort of the will and constant practice are necessary to learn to dissociate two movments which are ordinarily in combination.

We have already considered the organs of movement: the nerves, the spinal column and the brain, which are interposed between the will and the muscles. It is a matter of conjecture, for no definite understanding has been reached as to how the psychic communication between the will and the gray matter of the brain is established. It is a problem yet to be solved and we only know that the act of "volition" or "willing" produces a molecular disturbance, which passes along to the nerve fibers and from there to the muscle fibers themselves. The muscles possessing a motor force need an outside agent to produce a movement or contraction. Excluding all other external agents the will is the exciting cause of muscular contraction and movement; the power of the contraction depending on the degree of excitability of the will, and just as a very moderate electric current applied as a stimulus to a muscle will produce a slight contraction, a feeble effort of the will has like results. When the will is paralyzed by a depressing emotion, such as fear, we see that even the most

(Continued on page 47)

STRENGTH



## Scissor Holds

by

WILLIAM J. HERRMANN of Herrmann's Physical Training Institute Boxing, Fencing and Wrestling Academy

Philadelphia, Pa.

"The most instructive article on Scissor Holds in print" "Scissors" Joe Stecher

"SCISSORS" JOE STECHER Exponent of Scissors Hold. The man who made the scissors famous. EDITOR'S NOTE-Tos Holds, Head Locks, Scissors and Other Torture Holds. This is the third of a series of articles on these punishing holds and completes the Scissor Holds, the most complete description of them ever printed. Head Locks will begin in the next issue.

Leg Hold and Leg Scissors Combination. Counter Against a Standing Leg Hold.

Another very powerful and effective combination scissors hold. An unusual combination rarely seen except amongst the best of professionals. This hold is really a counter against a standing leg hold. This combination is developed in the following manner: Both wrestlers are up and moving about on their feet. Opponent, by means of a quick and successful leap, secured with both of his hands a good hold on your left leg. In taking and holding your leg, opponent, naturally, is likely to hold, more or less, his



head down low. Take advantage of this position on the part of your opponent by reaching over and grasping his left leg with both hands. Pull his leg into you tight and sit back. Scissor his right leg as you sit back. This succession of moves will enable you to easily hold him down by the full development of this powerful leg scissors and leg hold combination.

Fig. 49 illustrates a fall scored by this

clever, unusual yet exceptionally powerful leg scissors and leg hold combination.

#### DOUBLE SCISSORS

A term used when both wrestlers hold scissors holds on each other,



Fig. 46

"Double head scissors" is a good illustration of a double scissors hold, also "scissoring a scissors," or, in other words, scissoring in return opponent's body scissors, scissoring the leg or legs holding body scissors on you, as illustrated in Fig. 51.



Although to beginners a double scissors, or, in other words, a scissors on a scissors, seems difficult to effectively secure, it nevertheless can be easily obtained with a little study and practice. If the scissors hold is held pretty high, turn slightly to your left by raising your right shoulder while you swing your right leg back as far as you

31

can and then with a quick swing of your right leg forward you will be able to throw your leg across his toes, and follow up by scissoring his one foot or both of his feet as combat conditions may warrant.



#### HEAD SCISSORS

Practically the most powerful and punishing scissor hold in wrestling. This crippling hold in the majority of instances is the direct cause of the cauliflower ears met with in catch-ascatch-can wrestling.

The following effective Head Scissors Combinations are described on the supposition that you are the attacker working on your opponent who is "in position" on his hands and knees, on "all fours" at your right side.

Practice all of these effective combinations, not only when working on your opponent while he is on your right, but also when he is on your left side as well.

After preliminary feinting with your right hand as though you were playing for a Further Nelson, suddenly place your left hand



across your opponent's face and put your right knee on his left fore-arm as illustrated in Fig. 37. Shift quickly to the front and pull his head in between both your legs and follow this up by instantly snapping on a "Head Scissors." At the same time try to secure his right arm and keep your weight to the left. You can either secure a direct fall from this held or punish your man in order to force him to concede the fall.

#### Head Scissors and Outside Far Arm Hold.

Another method of securing a Combination Head Scissors and Arm Hold is as follows: Secure an Out-Side Far Arm Hold on your opponent as illustrated in Fig. 38. An Out-Side Far Arm Hold is secured on your opponent's far arm by reaching in front of his face instead of under his body as in the regulation Far Arm Hold. This Out-Side Far Arm Hold is sometimes termed the Cross Face Far Arm Hold, as this name is more descriptive of the precise manner in which this particular Far Arm Hold is secured.

As soon as the Out-Side Far Arm Hold is secured, place your right knee close to your opponent's head and besides be sure to also block his left arm with it, as in Fig. 39. Then bring your left leg back of your opponent's head, as in Fig. 40. Pull opponent towards you, to roll him in between your two knees into a Head Scissors, This sequence of moves.



if properly performed, secures for you the effective Combination Head Scissors and Far Arm Hold. A combination hold in which opponent's arm and head are both locked in a Single Scissors Hold.

Although it is rather difficult to secure a direct fall from this principal combination hold, nevertheless your opponent, as a rule, will usually concede the fall to avoid further pain and punishment.

#### Head Scissors by Means of a Leg Nelson.

Still another effective method of securing a Head Scissor Combination is by means of a Leg Nelson, a favorite method of the late Frank Gotch. It can be applied both with or without the preliminary assistance of a Near Side Half Nelson. Fig. 41 illustrates applying a Near Side Half Nelson with your Left Leg without first securing a Near Side Half Nelson on his neck with your left arm. In the other and usually the more effective method you first apply a Near Side Half Nelson on your opponent's neck with your left arm so you can turn your man to the right to pave

the way for your Leg Nelson. In other words, apply on his neck a Near-Side Half Nelson with your left leg, in addition to the Near Side Half Nelson you are holding on his neck with your left arm, as illustrated in Fig. 42. With this powerful Arm and Leg Nelson Combination it should be comparatively an easy matter to turn your opponent and snap on a Head Scissors. Grasp his right arm at the



Fig. 51

wrist, pin it down to the mat, give pressure with your Scissors and score a fall in your favor.

#### Head Scissors and Arm Hold.

Make a quick shift, completely reversing your original position so that your head will be facing directly to the rear. Putting your weight on your opponent's back, while circling your legs around his head and crossing your legs at your ankles will enable you to lock your opponent's head in this effective Head Scissors Hold. Reach over and grasp his right ankle with your left hand. You now hold the Head Scissors and Right Ankle Hold, as illustrated in Fig. 36. From this position fall backward on your right hip and pull his right leg with you as you sit back. You are now laying sideways and in position to get ready



to force your opponent's shoulders to the mat. Let go of his right ankle. Reach over and seize his right arm with both of your hands and force it to the mat. Keep his right arm extended to better enable you to pin his right shoulder to the mat. This sequence of moves secures for you the Famous Combination Head Scissors and Arm Hold as illustrated in Fig. 43, an exceptionally difficult hold to escape from if properly held and applied.

#### DEFENSE

#### Escape from Head Scissors and Ankle Hold.

To escape a Combination Head Scissors and Ankle Hold is not impossible providing "you know how" to go about it correctly and before your opponent's hold is fully developed.

Bear in mind that all your struggling, twisting, wriggling, squirming, pulling and pushing will be of no avail and but a waste of energy unless an effective defensive measure be properly and timely applied.

One of the best ways to escape from this powerful punishing hold is as follows: The moment your opponent clamps the Head Scissors on you, put your hand on his knees and bring your left foot close up under you. Sit back and lift your head up, while at the same time you push against his knees with your



Fig. 53

hands to free your head of his Scissors. Your opponent's feet are now high up above your head, while his hands are down on the mat and his head towards it. This sequence of moves properly followed up will place your opponent in a more or less helpless position with his Head Scissors of no practical use to him. These moves, if successfully performed, will put your opponent on the defensive. In consequence he will be obliged to release his Head Scissors in order to save himself from getting into an even more precarious position.

#### CLAMP SCISSORS

Another variation of the many holds in the Scissors family. Clamp Scissors are distinguished by the characteristic way in which they are locked. In a Clamp Scissors, the instep and toes of the under leg are locked on top of and across the other leg's calf muscles. All other members of the Scissor Family lock legs by crossing the ankles. Clamp Scissors enable you to apply even greater pressure. For this reason they are used chiefly as punishing holds. They can be used on an opponent's head as well as his body. When so applied they are termed Clamp Head Scissors, a form of Leg Head Lock.

#### Clamp Scissors and Arm Hold.

This hold is described on the supposition that your opponent is flat on the mat, face downward, holding his elbows close to his sides in order to block your efforts to secure a Nelson.



Keep on your left knee. Throw your right leg over opponent's body so that your right foot is on the mat with your right knee bent. Grasp opponent's shoulder. Lift and turn him towards you to the left. Slip your left leg under his back. Drop on your right knee and sit upright. Snap on a Clamp Scissors by locking your left toes and instep on top of and across the calf muscles of your right leg. This enables you to clamp tight your scissors hold and apply-severe pressure by using the leverage of your right leg. Hold his right wrist to the mat with your left arm and with your right hand put weight on his right shoulder to block your opponent's efforts to roll as illustrated in Fig. 52.

#### Clamping for Punishment.

A method of using the Clamp Scissors exclusively as a punishing hold. In such a case your object is not to throw your opponent or pin his shoulders fair and square on the mat, but to rely entirely on punishment to weaken and subdue your man in order to force him to concede the fall. To use a Clamp Scissors on your opponent exclusively as a punishing hold when your opponent is on the mat in position on both hands and knees, throw your right leg over his back, at the same time slipping your left leg under his body. Snap a Clamp Body Scissors on your opponent's body by locking the toes and instep of your left leg on top of and across the calf muscles of your right leg. Clamp tight your Scissors and squeeze to punish your opponent until he concedes the fall. Fig. 53 illustrates a Clamp Scissor in combination with a Double Wrist Hold.

#### Clamp Head Scissors.

Another variation of Clamp Scissors applied on opponent's head instead of his body. This hold is really a form of Leg Head Lock. In consequence this hold is more fully described under "Head Locks" in the article that follows. Fig. 50 illustrates a leg head lock, or, as it is ofttimes termed, a clamp head scissors. Fig. 50 also illustrates this powerful and effective leg hold in combination with both a toe hold and a wrist hold. An exceptionally powerful triple combination hold from which it is practically impossible to escape if properly held and applied.

#### DOUBLE HEAD SCISSORS

A term applied in case opponent's both have a Head Lock clamped on each other's head. A more or less unusual position occurring at times in catch-as-catch-can contests.

#### LEG SCISSORS

As the name implies, Leg Scissors are applied with your legs on the legs of attacking opponent. As a rule Leg Scissors are used as a counter against opponent's Body Scissors. Refer under heading "Defensive Measures Against Body Scissors" for fuller description of how to use and apply Leg Scissors Holds.



Don't underestimate the value of these holds. Be sure and practice them faithfully. Master them thoroughly. Study them in every detail. All attention given to developing and perfecting these holds will be time well spent. Besides the wrestler who can use his legs has a decided advantage. The surprising manner in which clever professionals use their legs is a revelation to those who have not given leg work the attention it deserves. Use your mind as well as your muscles, your wits as well as your strength, your head as well as your body, and your legs as well as your arms.
# If Metamorphosis Means Change, Then This Was It

#### By HARRY IRVING SHUMWAY



NCE there was a mere shell who fancied that the only real sustenance was something put up in bottles which had on the outside a

picture of a man with whiskers. Food was poison, but any patent medicine that could be gargled, swallowed or inhaled found a warm welcome in his little esophagus. He even ignored the line drawn between correctives for man and beast.

He never felt right. Some beautiful spring morning he would have everything set to go above par and then a twinge of something would plunge the world in aching darkness. Not an hour ever passed without his discovering a pain or twitch in some brand new place.

It might have discouraged many a poor soul, but this hardy perennial never gave up hope while the local drug store had anything left on the shelf. He hadn't walked for lo, these five years. He really didn't have to walk while his wife was able to make the trip to the drug store.

Wayfarers who passed his house usually stopped to find out who was being murdered and why. Nothing less than attempted murder could have inspired the groans which emanated from behind his doors.

This faded lilac had two pleasures in life, the initiation of a new blood tonic and telling the sad tale to any friend unable to get out of ear shot. It was a toss up which was the more fascinating.

The wife of our antiseptic specimen had put up with him for twenty years, two lusty decades which might have been devoted to pleasure. She had protested in vain against the staggering outlay of money for tinctures during the early years of her incarceration. But there was no denying him his patent hasheesh.

It is to be regretted that the wife must be alluded to as a worm, but the apology for so doing is set down in the same sentence. She turned.

"Lorenzo," she said to him one day, "how do you feel?" Lorenzo wheezed the beginning of a protest but stopped and grabbed a new ache which robbed him of speech.

"There, there, Lorenzo, be brave. Forget your pain."

"Forget, woman!" he snarled. "How can I forget the many pains that make life a torture? I'm sick. I don't know what's going to become of me."

She let him rest a second.

"You don't want to die, do you, Lorenzo?" "Die?" he exclaimed, frightened. "I should say not. Sally, get me my medicine. It is the fifth bottle on the right of the clock."

"Lorenzo, is your life insurance paid?" she asked, ignoring the call for stimulant.

"Certainly."

"That is well. Don't ever let it lapse, will you, dear?" she sighed.

"Say, what are you driving at? D'you think I am going to die?" he faltered.

"Well, you must realize my position. I simply want to make sure. Everybody seems to be passing off. Your friend, Barstowe, died last Tuesday."

"What with?" he asked eagerly, fearfully.



With a choke and a sob Lorenzo interrupted her.

"Stop, don't say any more. I can't stand it."

"Sorry, dear. But cheer up. I have a surprise for you."

"You've surprised me enough," he whispered weakly.

"I've bought you a new tonic. In fact, it's more than a tonic; it's a life restorer. It is the greatest discovery since the telephone. It came high, but I just had to have it for you. Do you care to read the circular?"

"I've lost my glasses. Can't find 'em anywhere. Ouch, my back. You-you'll have to read it for me, I guess," he murmured.

She smiled enigmatically.

"Very well. It is called 'The Magic Restorer.' Isn't that pretty? Hum. I'll read what it says."

"The greatest boon given to man in the century is undoubtedly the Magic Restorer. It will positively restore youth, make the lame walk, banish pain, and build up wasted cells and tissues. But the patient must help. It is a mistaken idea that rest is beneficial. Indeed, too much rest is harmful. One to be well must exercise, must throw off waste through activity. Even fancied invalids can use some limb or muscle for a start. Did



you ever hear of anybody who died standing up?' Well, now, Lorenzo, did you?"

"No-o, I guess not."

"Of course not. Where do people die? Why, in bed. If they didn't go to bed they wouldn't die. That's simple."

"Where the devil are my glasses," rasped Lorenzo. "I want to look at the pictures on the bottle."

"That's another thing it says. You must not use up energy for anything that might detract from the more important muscle reserve. And a man in your position shouldn't swear."

She had him scared and pawing the air for a life saver. Whatever it was that he had to do to keep away from the minor music and massed flowers, he would do or bust. The effort must be made.

The wife determined on heroic measures. She started in the next day at mess call.

"Come to breakfast, Lorenzo," she called briskly.

Now the dining room was a good hour's journey from the chair with the soothing wings. Heretofore, in the palmy past, the steaming foods had been wafted into his receptive presence by the faithful one. Lorenzo had never missed a meal in 45 years.

"Remember what the circular says, dear," was all the help he got.

He did his first marathon in five years and bumped into the slip at the dining table gasping but still extant. He punished the waiting treasure lustily, though.

The day he made the gate out front was a great effort, but the frantic thought of going into a new land where there might not be wing chairs and willing helpers spurred him on. He should not pass—at least out.

It was a gradual work-out. The wife never allowed him to read the booklet which had come coiled around the Magic Restorer. But the Restorer itself was taken four times a day. She harped on activity until Lorenzo began to have an idea that she was patterning him after a perpetual motion machine.

In six weeks he had made the cracker box ring at the village store and was willing to talk about it.

It was but a short two months when it came to the wife's ears that the one time invalid had challenged the local barber to wrassle, catch as catch can, toe hold not (Continued on page 41)

# Secrets of Weight Lifting

#### By CHARLES MCMAHON



HAVE called this article "Secrets," not because they are not known by real lifters and authorities, but because I feel that others not so

familiar (from years of lifting) with the little things that count may not have run into them as yet. Therefore, I thought that an article of this kind might save a beginner some valuable time and put him ahead of his fellow beginners who have not had the good fortune of being told these little secrets and who must plug along until eventually they discover these things for themselves.

So, to begin, there is one habit (like all others), that is easy to get into and hard to get rid of. It sounds like a very small thing, but it will ruin the best of beginners. Good lifters overcome it, if not entirely, sufficiently that it has little effect on their lifting. It is what I believe to be a matter of over-anxiousness (or, in other words, nervousness) to complete a certain lift that you have doubts about your ability to perform.

It is the fault of making false attempts when about to make a doubtful lift that I am alluding to. When about to try a lift that you're not sure you can make, you should first step up to the bell, grasp the center of the bar and lift it a few inches off the floor. This should be done with no thought of going any farther on that attempt. Then after putting the bell down you should straighten up an instant. Then in that instant set your mind on making the lift this time and don't change it and make a half-hearted effort after you have the bell in your hands. Then if you fail, take a rest and try again in the same manner, never letting a lift get your nerve. You will fail many times even in the right way, but in the wrong way you fail before you even try. To fail after trying is discouraging enough, but to fail before trying will simply ruin any lifter's enthusiasm and determination. It is, of course, impossible to develop into a good lifter without these two qualities. Besides the nervousness caused by the fear of failure will at the time take the strength right out of you.

Another little thing (in connection with

the preceding paragraph) that I think is more important than it sounds, is the necessity of putting plenty of strength into the trial lift. Just because I say you should "grasp the bar at the center and lift it a few inches off the floor with no thought of going further on that attempt" doesn't mean to make a half-hearted attempt out of it. I have found that if you step up to the bell with a snap and put a goodly amount of strength into it the weight ieels light to you, so to speak. Whereas on the other hand you say to yourself "gec, that feels heavy; I'll never get that up," and feeling that way, of course, you won't. Then again be careful of this: If you have been putting snap and strength into your trials and have been lifting for quite awhile you will find that the weight begins to feel heavy no matter how much you try to use snap and strength, then I say is the time to stop, at least the lift that it occurs on.

One of the best ways to gain in the amount of weight lifted is to try more weight than you can actually lift in a certain lift. I mean by this that if, for instance, you were able to do say, a 150 pounds in the bent press, take about ten or fifteen pounds over that weight and lift it to the starting place (at the shoulder) of that lift. If you hold it there a few minutes and just try to raise it an inch or so you will soon become accustomed to that weight and the sooner you'll be able to press it. As you gain in the lift proper add more weight; in other words, as far ahead of your lifts as possible and advisable. Don't overdo it. I remember some years ago when I was a novice at the game, I was the possessor of a 150 pound bar bell, that was the limit of its weight, and I could jerk at that time and had been for some weeks, 145 pounds with two hands. But to save my life I couldn't do the other five pounds. After some time, which I tried and tried, to no avail, it occurred to me that I needed a heavier bell. Before I had the idea that I must finish, so to speak, my present bell before getting a new one. So I got a heavier bell and was delighted with the way I went ahead, leaving the 150 pounds that I couldn't do far behind.

After getting the larger bell I made the discovery about using heavier weights than you can lift (as I explained in the chapter before this one) and proceeded to put it into practice. Then having found out the real worth of it I naturally started to overdo it. I was doing about 150 in the bent press and my aim of course was 200. So one day, being very impatient to reach my goal, I thought I would try 200 to see how heavy it really felt. Well, I up-ended the bell and rocked it over to my shoulder, but I couldn't go any farther with it. I couldn't get up with it nor could I leave it down. As I was lifting in my room I couldn't drop it either, so I hung on and let one end of the bar rest on the floor and slowly let myself down on the floor with the other end. I had learned a lesson and never again tried to overdo a lift.

There is one lift, though, where there is little danger and where it should be used consistently. That is in making a two-hand lift from the floor. As much as can be lifted should be tried every time you practice. Because so much more can be lifted in this manner than in any other of the dumb bell lifts, it should be done the first thing when you start to practice. Then the lighter weights that you lift above your head will have a feel of being lighter than they really are.

Take the two-hand jerk, for instance, supposing at this time you are doing 200 pounds when you start in (after doing a little light work) instead of starting with 150, then 175 and then the 200, take 250 or 275 and lift it as high as possible, that is, try to straighten up or as near so as possible. Then take, say, 220, and snatch it to the shoulders ready to jerk, then put it down and change to your 200 pounds. As I said before the 200 will feel lighter than usual. This sounds like working backwards, but you will find that it will help you along considerably.

I have always believed that aspiring weight lifters who lift at home with a bar bell, while they may exercise their legs regular and sufficiently as they think, they do not give their legs enough work in regards to weight used. The weight used for the arms or even the back is not enough for the legs. The proof is this, if you can lift, say, 400 from the floor to waist, which is mostly a back lift, you could easily do 1200 in a harness, using the legs alone. So you see by that, that the legs must be at least twice as strong as the back or arms, which is well on the safe side.

Now the general run of lifters never see a dead weight machine, and those that have of course haven't opportunity to practice very often with one. That is why a lifter takes 150 or 175 pounds and puts it across his shoulders and does knee bending and up and down on the toes exercises until his legs get tired and then can't get the bell back over his head again. He should have been using 250 pounds at the least, but, of course, he can't get it on his shoulders nor can he hold it in his hands long enough to give his legs near enough work. The only way to get away from that and exercise the muscles you want to exercise directly, is to make a strong sling, about 2 inches

CHARLES McMAHON



wide and about twice your height, and join the ends together, then put your bell on two chairs and straddle the center of the bar, then loop the sling in front and back and you will find that there are two loops left for shoulders. Now straighten the legs and the bell should be clear of the chair, if it isn't then the sling is too long. If right, step aside from the chairs and do your leg work, and you'll find a feeling in your legs when you put it down that will assure you that you have been exercising directly. Tieing weights to the feet is also a good way, but of course, not 250 pounds.

### America, the Home of the Strong Man

#### (Continued from page 14)

aloft. In a competition for 140 lb. lifters abroad practically every member of that class (and often dozens compete) are able to make a 2 arm jerk of 200 lbs.

Now if the English, the French, Indians, Germans, Austrians, Russians and Swedes can do this, why can't we Americans?

These other folks may be as good physically as we are, but surely they are no better. Isn't it a fact that all these foreigners exclaimed at the size and build of the million odd young soldiers we sent abroad in 1918?

We have beaten the world in almost every competitive sport requiring athletic ability, why not show the way in feats of strength? All we need do is to enlist some of our big chaps in the army of lifters. That is what they did abroad. If a trainer saw a powerful young athlete, he would say, "Come, I'll make a star lifter out of you," just as our football coaches used to grab a husky 200 lb. freshman and say, "Come out with the squad -I can make a guard or fullback out of you,"

For it is a great advantage to start with an exceptional physique. Most lads start lifting with a 35 or 40 lb. kettle bell, but Arthur Saxon started with one hundred pounds. No wonder he eventually put up 336 lbs. with one arm where the average lifter is lucky to ever reach 175 lbs.

Bonnet, one time French Champion and a giant in physique, started 2 hand lifting with 200 lbs.; a point which a small lifter might reach after a year's training.

Most Americans hesitate to take up lifting because they fear it will make them slow. At the worst they can become no slower than a weight thrower. You can become a lifter by working in your own home or yard, but you have to go out in the country or to an athletic field to practice hammer throwing.

But the odd thing is that training for strength does not make you slow, but quite the reverse. Adolph Nordquest, an American lifter, could put up a 250 lb. dumbbell with one hand and a few minutes later sprint 100 yards in 10 seconds.

And surely the tremendous muscular power that enables Babe Ruth to make home runs almost at will, must be the same flexible muscles that enabled him to be the most effective pitcher on the records.

If Ruth was weak, he could not drive the ball out of the lot, if he was stiff or awkward he could neither connect with fast pitching or make the marvelous showing he does when he is put in the pitcher's box.

In 1910 you would have been laughed to scorn if you had predicted the sensational feats that Ruth has performed. I believe that we have in this country many potential "strong men" and I venture to predict that if weight lifting becomes a major sport, we will soon thereafter develop some champion who will smash all the existing European records.

Let's get a few big fellows to set the example. Louis Cyr lived a hundred miles or so over the Canadian line—his example was such an inspiration to the French Canadian athletes that in the neighborhood of Montreal, three disciples of Cyr, namely, Barre, Decarie, and Cabanas, have come close to equalling the records of the man who was called the "World's Strongest."

Are the men who live along the St. Lawrence just north of the border any better than the men who live in New England just south of the border?

Personally, I think not.

# Records and Weight Lifting Department

#### TO THE EDITOR:

We would like to report something interesting. There was a contest pulled off here in Chi, that you do not see every day; in fact, I don't remember any, only Dad says he recollects a contest we had in Chi some 18 or 20 years ago, between the Daddy of them all, Louis Cyr and Aug. Johnson at the Old Central Music Hall. The Samson Athletic Club of Roseland on the far So. Side of Chicago (Director F. Norkos), gave a heavy weight lifting contest at Strinnil's Hall last Saturday, April 23rd.

Being composed entirely of foreigners it was difficult to obtain correct data of feats performed. After being provided with an interpreter we attended and we sure got our money's worth. It was interesting.

The Club has some 8 or 10 active members. There were two classes, a 150 lb. class and a 170 lb. class, but there was not a manover 185 lbs. except the director.

They had a plate loading bar bell with a 1 in, steel bar about 7 ft. long and 10 lb. plates. The 150 lb, class came first with a one arm jerk. They increased the weight till all but the winner dropped out. Next came the two arm press, followed by the two arm jerk, which gradually developed into the continental 3 movement style and finally the wrestler's bridge position. There was no snatch or swing or bent press. After considerable arguing and wrangling we managed to get some of the weights lifted. They seemed to kind of mistrust us (the Director especially). We were practically the only natives there. They evidently thought it strange that we were so interested because there are so few Americans who take up weight lifting.

Also there were four Medals awarded, two gold and two silver.

Now for some of the lifts:

#### 150 Lb. Class

J. At	igunas.	One	Arm	Jerk,	120	1b.
		Two	Arm	Press,	130	1b.
Gold	Medal.	Two	o Arr	n Jerk,	155	lb.
		Wre	estlers	Brid	ze, I	00 lb.

Peter Frait.	One Arm Jerk, 120 lb.
	Two Arm Press, 130 lb.
Silver Medal.	Two Arm Jerk, 145 lb.
	Wrestlers' Bridge, 100 lb.

#### 170 Lb. Class

Charles Podis.	One Arm Jerk, 140 lb.
	Two Arm Press, 180 lb.
Gold Medal.	Two Arm Jerk, 225 lb.
	Wrestlers' Bridge, 180 lb.

A. Damauskis.	One Arm Jerk, 140 lb.	
	Two Arm Press, 170 lb.	Ę
Silver Medal.	Two Arm Jerk, 215 lb.	

Wrestlers' Bridge, 170 lb.

Of course these lifts are not any way near the lifts reported in the Strength Magazine for February, 1921, held in Germany last August.

Hoping to see an account of the contest in our magazine soon, I am

Yours respectfully,

CHARLES ROGERS, 1446 N. Wood St., Chicago, Ill.

## The Question Box

A. C. L.—Hernia: It is well known that coughing throws more strain on a hernia than will weight lifting. However, it is well to avoid all exercises of a dangerous nature. These are: Abdominal exercise, in which you raise to a sitting position from the floor use no weights in this exercise. The two arm curl—do not use more than 75 lbs. in this. Lifting a bar bell from floor with straight arms—do not use more than 50 lbs. P. A. S.—Massimo's measurements are: Height 5 ft. 8 in., neck 17, upper arm 15½, forearm 15, wrist 8, chest, normal 42, expanded 47, waist 30, thigh 22, calf 16½, ankle 10.

A. S.—To Correct Round Shoulders: One of the best exercises is to raise a bar bell to arm's length overhead and then to lower it behind the neck and shoulders as far as possible. Begin with five repetitions at a moderate weight, increasing one repetition every other day. At ten repetitions increase weight 5 or 10 pounds and drop back to 5 repetitions.

M. F.-To develop the chest: A very interesting article on chest development will be published in the July issue. Meanwhile, try the two arm pull over.

M. Fontana.—To develop the neck: Use the wrestlers' bridge, also two arm bar bell lifts. A special exercise is as follows: Suspend a towel from the forehead and attach weights to the other end. Raise the head up and down while lying on a bench with the head projecting over the edge. Also practice this with weights suspended from side of neck. Pay special attention to development of trapezius muscle. The bar bell handle of your 100 lb. plate loading bell weighs 5 lbs., and the dumbbell handle 2 lbs.

W. A. M.—In the wrestlers' bridge the lift is completed as soon as you have the bell in a fixed position at arm's length overhead. Dumbbell curl records not available. Deep knee bend—lift bell from floor, raise it above head and lower it until it rests on nape of neck. Stand with heels close together and toes pointed outward. Bend the legs at the knees, and as you lower your body the heels will rise from the floor. The body should be lowered until you are almost sitting on the heels.

C. B.—You will not obtain the best results by exercising the upper part of the body one day and the lower part the next day. Better results can be obtained by doing all the exercises on one day and allowing a whole day for recuperation.

C. I. B.—Try the advanced abdominal exercise in the advanced course of instructions for reducing weight. By replacing fatty tissue with muscle you will not lose any of your strength, but will be able to make better lifts than ever.

J. K.—Arthur Saxon holds the world's record in the bent press, having raised 33634 lbs. with the right arm in 1905. The record for the left arm bent press is 2771/4 lbs., made by Joseph Nordquest in 1916. More weight can be raised overhead with one hand by the bent press method than by any other.

### If Metamorphosis Means Change, Then This Was It

#### (Continued from page 36)

barred, and furthermore had tied the barber into as true a lovers' knot as man had ever assumed.

At a later suggestion from her that the garden be plowed for coming vegetables, Lorenzo scorned the plow.

"Dear heart, I will pull the stumps and boulders from their slothful beds with my bare hands. All I want is a man's size spade. No horse can tear up the ground any more fluently than I. What I need is action and plenty of it. I forgot to tell you that I have been elected captain of the tug-of-war team representing the town for the coming Fourth of July celebration. The Committee on Rough House says with me as leader they can't lose. By the way, what was the name of that stuff you gave me? I have felt so strong lately that I have forgotten to take it."

"You can search me, my own cave man. Had I not thoughtfully broken your eyeglasses I really should have been compelled to get a bluff of some sort. You may have been taking blueing for all I know."

"Do you realize I could break you in two?" roared Lorenzo. "You deceiver."

"Save your strength, dear. I want the house moved back a few feet from the street."

"I'll do it this minute," cried the new husband with a glad yell. "If there is anything I love to do it's to move a house."

All the mind asks is a standing start with a chance at the pole. STRENGTH

June, 1921

# Listen to the Voice of BE A PRIDE TO YOUR

### Practice Matysek's Muscle Control Course which sells for only \$2.00 Be the Man you Should Be!

42

ADMIRATION always follows the robust, graceful and alert man. Pity trails behind the weakling because his failing strength is not sufficient to carry him over the obstacles that obstruct every man's path to progress. Do you belong to the REAL MAN set—the dominant class of successful people; or are you among the sickly, flat-chested, weak-legged and nervous-the insignificant class, that, instead of living, just merely exist and manage to breathe?

This course shows the scientific system of control of all the physical functions. You can cure yourself of any functional disorder. You will be independent of all medicines and drugs which you know cannot bring health and are always debilitating. When physicians fail in getting results they suggest Matysek— the Maker of 100% Men.

fail in getting results they suggest Matysek— the Maker of 100% Men. Matysek's Muscle Control Course Consists of Two handsomely finished charts containing twenty-one large and beautifully produced pile-tives of myself, showing every detail as to how to perform the movements with absolute cor-and "straight from the shoulder," such as only an expert who went through the mill himself could ever possibly produce. Some subjects of the course are: How to quickly make respond the inactive fin no time expel the bothering gas out of the stomach, promptly chase away the staleness of the body, strengthen the nerves and internal make them rol like the waves; store up energy or feats of strength. Mso complete relaxation and contraction— Effective breathing—The best way to arouse origens; control every muscle of your body-make them rol like the waves; store up energy to reats of strength. The store of the new to shoulders, who arouse origens and the nerves and internal provide and the shoulders. How to thicken the shoulders suppled the back—Depression of the abdominal muscles and wall—Control of the Pectoralis (chest mus-toles), the biceps, triceps, thighs, calf and al regions to be immune from rupture—How to the back—Depression of the abdominal muscles and wall—Control of the pectoralis (chest mus-toles), the biceps, triceps, thighs, calf and al regions to be immune from rupture—How to the back—Depression of the abdominal muscles and wall—Control of the pectoralis (chest mus-toles), the biceps, triceps, thighs, calf and al regions to be immune from rupture—How to frequence—How to things that go with it, and regions to be immune from rupture—How to for insomnia—How to pose for good pictures-Advantages of perfect co-ordination of muscles and mind thru concentration which brings suc-ress and all the good things that go with it, and to numerous to mention. The exercises in this course cause no strain on the heart and do not ports. force.



Antone Matysek, the man who is best pre-pared to make a real man of you. My own record is a proof of my ability to carry out this assertion.

STRENGTH

# Experience

#### Let My Muscle Control Exercises Mold Muscle on You Quickly and Solidly!

Only ten minutes a day, in the privacy of your own room, solves any case. From my own ex-perience, as well as the very large number of pupils that I have successfully aided, I know that in less than five days your muscles must respond, and bulge out to a most surprising extent. If you are already training on some good "system" these muscle control exercises will force your progress to be 100% faster! If, however, you do not exercise, then for your own sake and happiness, start building yourself up into a real man. Do not merely drag on-make your life worth living.

#### It is My Sincere Wish to Assist Every Reader

#### of "Strength" to Get Really Strong

of "Strength" to Get Keally Strong For this reason, this Muscle Control Course is being offered you now at such a trifling price that YOU CAN WIELL AFFORD IT. Costs but \$2.00. I GUARANTEE QUICK RESULTS AND ABSOLUTE SATISFACTION OR MONEY BACK. MY HONEST REPUTATION PROVES THAT I AM NO QUACK. COME THEM. MY FRIEND. WHEN I AM REACHING OUT TO HELP YOU! I will place you on the real road; I will show you the main secret that helped me to get what I longed for, and now certainly pos-sess. In addition to this Muscle Control Course, you have the privilege to ask any questions per-taining to your physical training; to these I will gladly reply, giving you personal attention. This favor alone is worth the \$2.00 I ask. Matysek's Muscle Control will do wonders for you. You will be the envy of your friends. Learn how to get the most out of yourself. It is ensy, GET STARTED RIGHT-RIGHT NOW! Simply (Canadian and foreign orders, \$2.20), and leave the rest to me. the rest to me.

#### Prof. Matysek

Dept. 208, 523 North Charles Street

Baltimore, Maryland

Detach and mail NOW while it is on your mind

#### PROF. MATYSEK

#### **MUSCLE CONTROL DEPT. 208**

523 North Charles St., Baltimore, Md.

I want bulging muscles and yet I want them to have fine outlines. I desire to increase my strength, my internal activity, my energy. I want to be more than I am now and I want to achieve my "chief aim" in a short and efficient manner. For these reasons send me your won-derful Muscle Control Course, illustrated with 21 high-grade pictures of yourself. If I am not completely satisfied my money will be promptly refunded, if course is returned within 48 hours.

Write name and address plainly ..... 

City ......State .....Strength, June, '21

### Matysek **Physique** Exercise IS THE Way to Strength

Because he is the creator of the most beneficial Physical Culture course in existence, Prof. Matysek will train you with the most effective and yet harmless exerciser-the FIVEPLEXthat makes real men. Rounded shoulders, flat chest, weak legs, indigestion, nervous disorders, poor circulation, lack of concentration, insomnia and bodily ailments FLY AWAY under his expert eye. No wonder! He gives PERSONAL ATTENTION. That is why he will REJUVEN-ATE you and

#### **Double Your Strength**

in half the time than the many "experts" who do not fully acquaint you with the inefficient exercising device they would have you use. Matysek will show you the SHORTEST, SUR-EST and SAFEST PATH to HEALTH. STRENGTH and DEVELOPMENT.

#### **Guarantees** Increases

4 in. to chest, 2 in. to thighs, 2 in. to arms, but most pupils exceed this scale. To the normal man I produce such a high degree of development that satisfies his highest aims! No matter what you are now, your progress will be so generous that you will boost my methods.

#### "Road to Success" Booklet Free

Get my large, exhaustively produced 48-page booklet, containing 26 artistic pletures of myself, many full page size, which will give you the foundation of my extremely successful method and start you on the True Course that will work wonders in your mind, body and affairs. Right NOW-write for it. To be up-to-date you must read the book. It's free,

This course is entirely different and has abso-lutely no connection with the Muscle Control Course.

#### PROF. MATYSEK

523 North Charles St., Baltimore, Md.

TEAR OFF

ANTONE MATYSEK.

523 N. Charles St., Baltimore, Md.

Without any obligation on my part whatever, send me a copy of your wonderful book. 10c enclosed to help cover postage and wrapping.

Name .....

Street .....

City ..... State ..... STRENGTH. JUNE, 23

### How to Swim

(Continued from page 10)

life-saving is a learnable art, just as particular modes of swimming and water tricks are learnable. I say this because I do not believe in a would-be rescuer taking reckless chances; merely to be able to swim is not sufficient, one must know what to do when he takes hold of a drowning person. Otherwise, it is strongly probable that two will perish instead of one.

The first requisite is ability to save one's own life. Admitting that prevention is better than cure, and granting the wisdom of taking every precaution against the possibility of accident—still even the best swimmers, the most careful of watermen, sometimes meet nerve and muscle-trying emergencies. Every swimmer should deem it a duty to learn all he can about life-saving.

Among swimmers perhaps the two main causes for drowning are exhaustion when far from help, and cramp. The first is inexcusable; no one should go very far from possible aid; long tests should never be undertaken without an accompanying boat.

Cramps are often the result of thoughtlessness; we all should know better than to enter the water right after eating. At least two hours should intervene. Also, do not rush into cold water when hot or perspiring. Extreme fatigue and the low vitality following severe illness are other causes.

Cramps are often fatal, but it is the fear and confusion they cause that do the harm. If the swimmer remains cool and is reasonably near shore he has little to fear. Cramps would have to paralyze all four limbs to drown me—or anyone else who swims fairly well and keeps his head. Even with upper and lower limbs helpless, a person would be safe for a while, if he could get into floating position and control his breathing properly. Here is where floating is highly useful—as well as for resting when the swimmer is tired.

I think it best to turn on the back at the first hint of cramp. There is not much to learn about back swimming; you simply use the back stroke with the arms passing above you instead of below you. Back swimming is remarkably easy, you can last longer in this than any other position. Even with the upper arms at the sides and the feet practically motionless, you can paddle along with the hands. If the cramp is in your arms, you can swim well and rapidly enough with legs alone. No form of swimming is more useful to the man in distress than the back stroke.

With ability and coolness to handle one's own body in the water under adverse conditions, the swimmer should study modes of rescue. A good way to combine sport and useful training is for one person to assume the part of a drowning person, while his companion does the rescuing, then reverse the thing. If swimming along with others let them understand your actions, so no one will be alarmed.

As you doubtless know, most drowning persons lose their head and fasten on to the would-be helper with a clutch that makes assistance difficult, often impossible. To prevent this some swimmers advise knocking them senseless. I disapprove such brutality, and think it unnecessary. Circle your "victim" till you can approach from his rear. Usually it is well to dive and come up near him so suddenly that you can secure a grip before he does. Many and novel ways are suggested for breaking the drowning person's holds. The two most useful hints I can give are these: Press him from you by getting your hand under his chin and pushing his head back. No neck but that of a trained strong man or wrestler can stand this, and he will give way. Secondly, the legs are so much stronger than the arms that by drawing up your knees between the two of you and getting one foot against him you can easily push him away.

If the unfortunate is very much the stronger and particularly determined to fasten on a death-grip, you had better wait at safe distance till he tires himself out. This sounds cruel, but always remember that the intention is to save one life, not sacrifice two. First, get your man on his back. Working from behind, pass your arm over his shoulder, across his chest and get your hand firmly in his arm-pit. Now pull his shoulders back, at the same time pressing with your knee against his lower back. In this position, with his face up, you can tow him to shore, swimming with your free arm and legs.

Another good way is to place your hands

under his arms (from behind), pull him over almost on to you, and swim on your back, using legs only. If the person is sufficiently manageable, placing one of your hands on each of his cheeks will leave more room between your bodies and make action for the legs easier.

Of course, not all people lose their heads when distressed in water. If the victim comprehends what you say to him, everything is easy-another proof of the value of a cool head. Just swim up close, using the breast stroke, and have him put a hand on each of your shoulders. He can kick a little with his legs, and "ride" this way as long as you can swim.

The hardest case of rescue comes when the body sinks before you can reach it. Get to the point of disappearance as quickly as possible, disrobing as you go if you have not already done so. Watch for the bubbles, and dive immediately you see them. Grab the body by the hair, or any place near the head, and push off from the bottom. With your free arm and legs, reach the surface with all possible speed, get your charge on his back as before described, so his mouth is free to the air, and make for the shore on your back. Fortunately, it does not require much to support a human body in water, so do not grip tighter than necessary. Sometimes excitement causes the rescuer to inflict needless discomfort, and the person being towed may renew his struggles because of this. The main thing, however you are towing, is to keep his mouth above water and his throat free from constriction.

If you go in a boat to a drowning person's relief, be careful not to let him catch the canoe's side. Back the stern to him. For some reason, drowning persons will not "fight" an inanimate object as they usually do a person. If the water is fairly warm and the distance to safety not great, let him stay in the water and cling to the boat as you row shoreward. There is always more or less risk of capsizing when you attempt to draw him over, if your craft is frail. But if the water is very cold, or he is in a fainting condition, lift him in. Remain calm, and ask him to be careful and deliberate.

If the person being rescued is unable to help himself, and very heavy, it is well to stop near shore in water about chest deep. It is easier to get him on your shoulder here than to lift him from the ground or boat-

don't 3011 know how to box, you have to take a beat-

## Who wants to be a Clever Boxer?

ing.

Would you like to put the gloves on with the best boxer in your club or gym, and more than hold your own? You've got the strength, you've got the grit, you've got the brains-and we'll furnish the "know-how," the professional training that will make you a clever boxer in a very short while.

You'll know the blows and guards used by the best professionals-the Benny Leonard Triple, the Jack Dempsey Triple, the Fitzsimmons Shift, the Stanley Ketchel one-two blow, etc. You'll know how to land these blows, when to land them, and where to land them; and it will take a mighty elever boxer to get his blows past your guardi

In addition we'll teach you 15 Hu-Htsu holds, enabling you to disarm an opponent, to throw him if he grabs you from behind, to break his strangle hold on your throat, etc., and 14 of the best holds in wrestling,

We'll give you three lively rounds of shadow boxing for daily practice. And to build you up physically, we'll give you a complete sot of muscle-building exercises, and a lesson in Synthetic Breathing (for lung development) and the Colon Excreise (good for constipation). Complete instructions on training will tell you what to est, how to develop wind, how to put on or take off weight, etc.

History of Bexers: With the course we include free a history of 69 great prize fighters, with their pictures. Gives accounts of their principal fights, their favorite blows, and "insido" stories seldom heard outside professional circles.

This course contains 246 illustrations,

#### Send No Money

We send the entire course on free approval. You have ten days to examine the books. If you buy them, you have till the 15th of next month to pay-only \$5 (Canada \$6; other countries \$7). Otherwise you return them in 10 days, and that ends the matter. Don't wait another minute, but mail the coupon now to Marshall Stillman Association, Suite J-206, 461 Fourth Avenue, New York.

..... COUPON ......

MARSHALL STILLMAN ASSOCIATION,

Suite J-206, 461 Fourth Avenue, New York.

You may send me for free examination the complete Marshall Stillman Course in Poxing and Solf-Defense includ-ing extra instruction described above. I give you my plodue that I will either return the course in 10 days or pay for it on the 15th of the following month—price \$5 (Ganada \$6; other countries \$7).

Name .....

Address .....

Strength for July

CHEST DEVELOPMENT: By Fr. B. H. B. Lange, C. S. C., Director of Physical Education, University of Notre Dame. Saxon, Sandow, Nordquest and Hackenschmidt—these names are synonymous for strength in the physical culture world. Yet the chest measurement of the author of this article exceeds that of all but the last mentioned above. A full description of the complete two-arm pullover, the most effective exercise for chest development ever devised.

Illustrated with photographs of the author, and these pictures are the best we have seen for some time, from the viewpoint of strength and symmetrical development. A tremendously interesting article. Don't miss it.

- THE DEMPSEY CARPENTIER FIGHT. Robert W. Maxwell, the famous sporting writer, whose interesting story on Babe Ruth appears in this issue, has visited the training camps of both Dempsey and Carpentier and has written in a most entertaining manner on the training methods of the two fighters and their respective chances of winning.
- ZBYSZKO COMES BACK: By Alan Calvert. Zbyszko, the old man of the wrestling game, has come back. The only man who ever gained a championship at the age of 45. Mr. Calvert tells us how he did it in the July issue.
- WHAT EXERCISE FOR THE BUSY BUSINESS MAN: By Norman Price. Gives the best methods for the busy business man to keep in good condition.

Wm. J. Herrmann will continue his articles on wrestling, beginning Head Locks in the July issue. O. R. Coulter will give the best methods for developing the calves. It is by far the very best issue of Strength we have ever published and that's going some.

Send in your subscription TODAY.

THE MILO BAR BELL COMPANY 301 Diamond St. PHILADELPHIA, PA. this assuming that he must be carried some yards after you reach shore.

As soon as possible deposit him on a comfortable spot, and begin life-renewing measures. If a third person is on the scene he should be started on the jump for a doctor. Never hesitate to enlist anyone's aid, and call for help in plenty of time.

Air is the prime essential of life, first, last and always; the first move is to get the unfortunate to breathing—start artificial respiration. Let me here impress upon you not to begin rubbing, patting and such measures to renew blood circulation until you get the respiration started. For physiological reasons, this endangers the very life you have worked so hard to save.

There are a number of methods of artificial respiration. I recommend the Shafer system, as follows: Lay the unconscious person face down, head a little lower than feet, bent arm used as a pillow. If there is any breeze turn the face toward it. Open and clean out the mouth, then kneel across hips, place both hands on the small of his back, fingers spread and over the lower ribs on each side. Now slowly put your weight into the pressure, and hold it for three or four seconds. The object is to force the vitiated air from the lungs. Now let up quickly, so that the sudden out-spring of the ribs will dilate the lungs and make them suck in air. Wait a second then repeat the processthree or four seconds each time. Continue persistently; sometimes success requires two or three hours' hard work.

Once the breathing is well under headway, begin a gentle massage, rubbing toward the heart, and making it more vigorous as conditions warrant. A little later tuck the patient warmly in bed, and apply hot water bottles or heated bricks (well wrapped) to restore normal bodily heat.

#### DENBY, NEW NAVAL SECRETARY, WAS MICHIGAN FOOTBALL STAR

Edwin Denby, new Secretary of the Navy, in his day was a crack football player at the University of Michigan. When he first blew into Ann Arbor, the students rushed him at once into the presence of Hurry-up Yost, for he weighed 281 and was heavy enough to carry such a poundage. He made centre on the Michigan 'Varsity and was one of the best pivot men that ever wore the Maize and Blue.

#### (Continued from page 30)

vigorous man is helpless; anger on the contrary increases muscular power, owing to the great excitability which stimulates the will. Reverting to the properties of a great will power this stimulation accounts for the difference displayed by two equally muscular persons, but one possessing the greater "will power." Between the moment when the will orders a contraction and the moment when the muscle contracts, there elapses an appreciable interval of time. This time is occupied by various physiological actions and in the first place by the transmission of the nervous vibration. The disturbance of the cerebral cells does not instantaneously reach the muscles. It has first to traverse the spinal column and then the whole length of the nervous filament which passes to the muscular fiber. The length of this course may be estimated in feet, it being known that the nervous vibration is propagated at a velocity of about 110 feet per second. The period during which the already stimulated muscle has not yet begun to contract is known as the latent period of contraction. Many circumstances tend to make this latent period vary, depending as it does, on the intensity of the shock produced by the will and its intermediate agents, the gray and white matter. It is an established physiological law that the length of the latent period is in inverse proportion to the intensity of the stimulus received by the muscle, that is, when the will orders a muscle to contract the latter obeys the "more" promptly, the more violent the nervous disturbance which transmits the order.

In considering the therapeutic value of exercise, we should bear in mind that those forms of exercise which tend to automatic movements, are preferable to those which necessitate great nervous expenditure, such as frequent repetitions with too light a weight.



127 West 42d Street, New York City

### **IF YOU** HAVE DECIDED TO BECOME A DRUGLESS PHYSICIAN OR A

Chiropractor, Osteopath, Psychologist, Mechano-Therapist, or Electrical Therapist, etc., send to-day for our new catalog which is just out.

Our forty-eight page book has saved many students from a life time struggle.

New Class now forming

Write NOW

Address Executive Secretary

BLUMER COLLEGE OF NATUREOPATHY 97 Ann St., Dept. T, Hartford, Conn. STRENGTH

June, 1921



LIONEL STRONGFORT Dr. Sargent, of Harvard, declared that "Strongfort is unquestionably the finest specimen of physical development ever seen."



# Stop Drifting !

70U know that "rolling stones gather no moss." Still you keep drifting aimlessly from one job to another. You stay just long enough for your employer to discover that you are below par, physically and mentally-that you cannot measure up to your job. Then you go drifting again looking for another job with the other tail-end failures that are always out of work and out of luck. Think-your best days are fleeting.

### YOUR HEALTH MEANS YOUR JOB

How can you be mentally efficient and able to hold down a real job when you are suffering from Catarrh, Constipation, Dyspepsia, Torpid Liver, Weak Heart, Weak Lungs, Impotency, Vital Depletion, Nervous-ness, Youthful Errors and the numerous other results of neglecting your health and abusing your body? Face the facts squarely. You must build up your body and brain if you want to be healthy, happy and successful and fit yourself for the joys of life. You need

# STRONGFORTISM

#### The Modern Science of Health and Success Promotion

These wonderful, effective principles will rebuild and rehabilitate you in every part. Every organ and function will be reached. Your flagging powers and Manhood will be restored and you will experience an inflow of vital energy that will surprise and please you. I guarantee it irrespective of your age, FREE CONSULTATION COUPON

sex, occupation or surroundings.

### Send For My FREE Book

"Promotion and Conservation of Health, Strength and Mental Energy." It will tell you the truth about your physical and mental condition. It's a man-builder —a success-maker and a life-saver. It's Free. Just cut out the free consultation coupon marking the subjects on which you want special information and send it with a ten-cent piece (one dime) to help pay postage. You get your copy at once and with it information that will stop your drifting habit and anchor you to real success and happiness. Send for it RIGHT NOW.





AdvancedCourse

	*******************	
AgeOccupation		
Street	*****************	

# "Mizpah" Jock Supporter No. 44 Note the Patented Flap Note the Perfect Feature "A" Pouch "B" We invite your attention to a few points of advantage in the "Mizpah" Jock Strap over all others, which are:-The narrow understrap; lst 2dThe small amount of material between the thighs; 3d The extra heavy webbing thruout: 4th The welt edges, making the webbing stronger; 5th Self-adjusting and perfect anatomical fit;

- No buttons, buckles, hooks, snap fasteners or metal of 6th any kind to corrode or hurt the flesh:
- Can be boiled to cleanse without injury to the rubber: 7th Summing up, the very best jock that can be produced. Ask for the "Mizpah" Jock Strap and take no other.

If you are unable to procure the No. 44 "Mizpah" of your dealer, send us \$1.00 with your waist measurement, and we will supply you with the same direct.

Small, to fit a person with a waist measure	Ξ.	22 to 28 in.
Medium, to fit a person with a waist measure	-	28 to 34 in.
Large, to fit a person with a waist measure	-	34 to 40 in.

Note the Perfect Conformity and Comfortable Fit

### THE WALTER F. WARE CO.

Dept. J.

**1036 Spring Street** 

Philadelphia, Pa.

### For the Woman

Fresh, youthful, glowing complexion and the perfect skin; the soft lustrous, glorious hair; the eyes that sparkle with health.



### For the Man

Steady "bomb-proof" nerves; the perfectly functioning body: bounding health. energy and vitality.

## BE A CREDIT TO YOUR SEX

To tell all the benefits that electrical massage gives to man, woman or child, whether invalid or in perfect health, would take volumes. But every reader of Strength can learn these things for himself or herself, not by printed descriptions, but by enjoyable experience. And this actual demonstration of the delightful and beneficial effects of the real electrical massage will not cost you one cent.

The Gal-Far treatment is not merely a surface massage. The Gal-Far battery does not provide the ordinary electric current, but a combination of galvanic and faradic currents, both of which have a recognized medical value in the treatment of all diseases of the skin, nerves and blood, and which can be found only in the Gal-Far battery. Its mild electrical current penetrates to every nerve of the body, soothing the tired nerves and stimulating the sluggish ones. It quickens the circulation of the blood, eliminating body poisons, clearing up bad skins and keeping good skins good and making them better. A Gal-Far massage is far more beautifying than the most expensive beauty creams and rouges you can buy and a far more lasting stimulant than the kickiest cocktail. For headaches, rheumatism, "nerves"-and ills arising from a nervous condition-Gal-Far can not prove anything but bene-Thousands of doctors use and recomficial. mend this wonderful battery.



#### GAL-FAR BATTERY

Complete with single massage and cord massage attach-ments and electrical bair brush.

#### Remarkable FREE Offer

We do not believe you can try the Gal-Far battery without wanting to buy it. And in order that every reader of Strength may have an opportunity to try it, we are making this remarkable free offer.

#### SEND NO MONEY!

SEND NO MONEY! Just write us, asking us to send you a Gal-Far battery at our risk. Use it for 5 days. At the end of that time, if you decide to keen the battery, send us Ten Dollars. If you don't want the Gal-Far, simply return it to us by registered mail, and it has not cost you anything. You are to be the judge, and your decision will not be mestioned. The Gal-Far costs only a fraction of the price charged for an ordinary battery or vibrator. It supplies its own current and can be used in bomes that pro not wheel for electricity. The attempth of the current is always under instant control.

Write us NOW to send you a Gal-Far at our risk.

### THE MILO BAR BELL CO.

### Gal-Far Battery Dept.

301 Diamond St., Philadelphia

W. T. Edgar & Co., I.td., 51 and 52 Chancery Lane, London, W. C. **Exclusive British Agents**