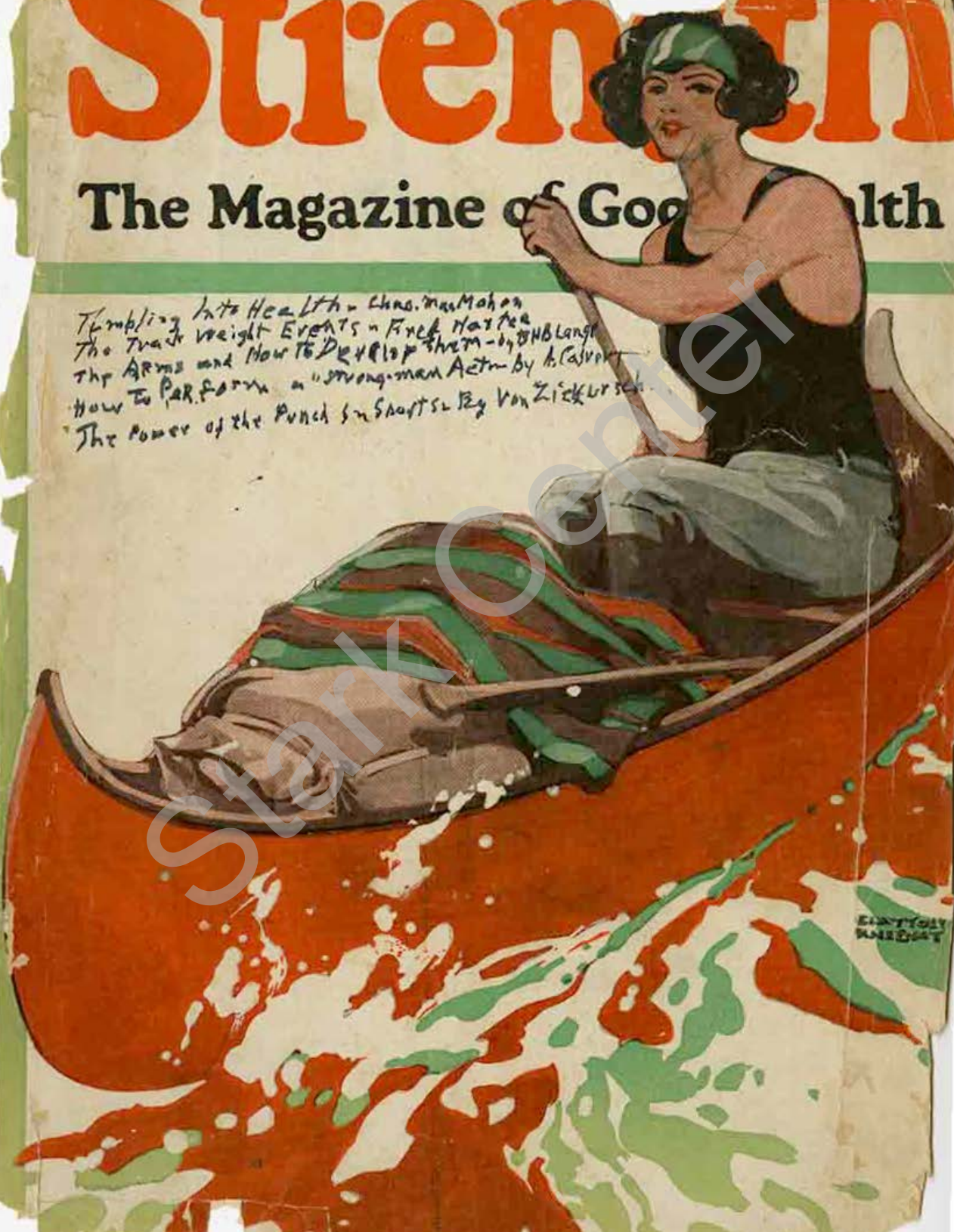


August 1st

Strength

The Magazine of Good Health

Templing Into Health - Chas. MacMahon
The Track Weight Events - Fred Harten
The Arms and How to Develop them - by H. Blang
How to Par. Form in "Strong-man Actn" - by A. Calvert
The Power of the Punch in Sports - by Von Zicklisch



EMERY
PUBLISHER

MILO METHODS MAKE CHAMPIONS

We invite your attention to the case of Mr. Roy L. Smith, of New York City, who by practicing bar-bell exercises has made himself so strong that he is now known as

THE KING OF THE AMATEUR "STRONG MEN"

In our last few advertisements we have been showing how bar-bell exercise changed some semi-invalids into strong healthy men.

Mr. Smith's case was not like that. He always had good health. He took up bar-bell work because he was very anxious to get a better physique. Like most of our other pupils he had to start with his bar-bell adjusted to light weights (about 20 to 45 pounds in the various developing exercises). Since then he has become so strong that he has "put up" a 235-pound bar-bell with one hand, and has raised 2250 pounds from the ground in the hip lift. This lift is a test of back and leg strength, and a proof of vitality.

His Case Dispels the "Bugaboos" of Lifting

Some critics say that only a short man can be a lifter. Mr. Smith is six feet tall.

They say that to become strong you have to start young. Mr. Smith is four times as strong at 40 years as he was at 30.

They say that bar-bell work creates short, lumpy muscles. Mr. Smith's muscles are as long and smooth as those of a swimmer.

They say that weight lifting makes you muscle-bound and slow. Mr. Smith is more supple than ninety-nine out of a hundred, and speedier than the average boxer.

In fact, you can repeat all the "they says" and Mr. Smith's case disproves every one of them.

Health Is Worth More than Championships

Bar-bell exercise is Mr. Smith's hobby, but while he is naturally proud of his records, he places a far higher value on the imposing physique and enduring health which are direct results of his training with bar-bells. His bearing and his every action indicate his immense physical vigor. He is of the tall, broad, upstanding type. As one authority said, "Wherever you find unusual strength combined with unusual agility, you are sure to find a remarkably well-built man."

We Are Body Builders

The recreation of record breaking weight lifters is not the most important of our activities. The service on which we pride ourselves is the upbuilding of puny bodies, the reduction of surplus flesh, and above all, the restoring of strength and health to the weak and sickly.

We Can Help You

What we have done for others we can do for you. The methods we used in developing the champions can be adapted to bring like results in your case.

We Are the Originators

of the Double-Progressive system of graded-weight exercises that is acknowledged to be the sanest, safest, surest and swiftest method of creating a powerful physique and superb strength.

We suggest that you send at once for our **Free Booklet**

"HEALTH, STRENGTH AND DEVELOPMENT" and How to Obtain Them

It contains a catalogue of our adjustable bar-bells, a complete exposition of our training methods, and a lot of pictures of our celebrated and wonderfully-developed pupils.

THE MILO BAR-BELL CO.

301 Diamond Street

DEPT. 41

Philadelphia, Pa.

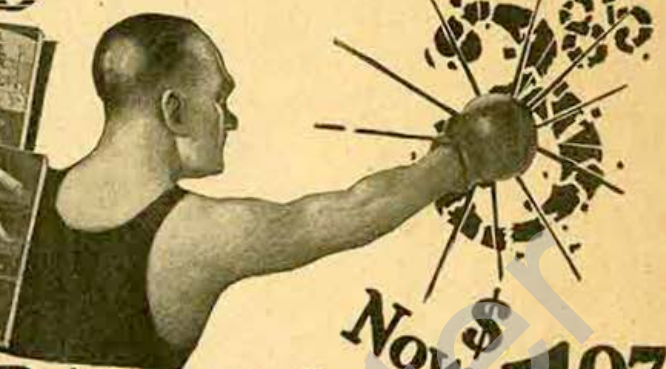


ROY L. SMITH

August, 1923

1

Smashing Reduction!



Down goes Price again - **Now \$1.97** BOXING, Jiu-Jitsu, Wrestling

Yes, it's true. You can secure the famous Marshall Stillman Boxing Course for only \$1.97. Mass production did it. 35,000 subscribers make this big reduction profitable. Send no money. When you get it, 97c plus postage handed to your postman, gives it to you for ten days' free trial. If you're not satisfied we return your deposit.

Wouldn't you like to be able to protect yourself and others? Wouldn't you be proud to be able to more than hold your own in friendly bouts?

The Marshall Stillman Course makes good boxers out of novices and perfects experienced boxers in ring science. It teaches you how to feint, duck and guard and strike like a professional boxer. It contains all the secrets of the ring, gathered by famous Prof. Mike Donovan from the great boxers of the last 40 years.

Experts Use It

You would be astounded could you see the testimonials we receive from expert boxers. One athlete who studied seven months at a Philadelphia Boxing School and who has won two medals writes: "It cannot be improved upon."

Another veteran boxer says: "Every one can learn more. I think the course a good thing."

A pugilist writes us: "I think your course is a most valuable assistant to anyone who wishes to become either a real prizefighter or amateur boxer."

Another lightweight pugilist says: "I have been successful in outboxing four boys, one of whom weighs 165 lbs. and one who had whipped me, not long ago."

Another states he has won three different bouts since taking the course.

BETTER THAN PRIVATE LESSONS

Professor Mike Donovan, on whose teachings the Marshall

Stillman Course is based, was acknowledged to be the greatest boxing teacher in America. Middleweight champion in his day, he assisted in developing the cleverest heavy weight boxer who ever drew on a glove—Jim Corbett. For many years he taught at the New York Athletic Club—America's foremost Athletic Organization.

You can learn much more from Mike Donovan's teaching, put in simple language and illustrated by numerous pictures, than you would from a second-class boxer or even a first-class one, who lacks the years of experience in teaching that Professor Donovan had.

WRESTLING and JIU JITSU

The instructions in wrestling and jiu jitsu have been praised by professional wrestlers who have taken the course. Added to the boxing course, they give you a complete system of self-defense. When you have mastered the entire course, you will be a match for several unskilled opponents.

HEALTH and SELF RELIANCE

As a builder of health and morale, the results of the Marshall Stillman Course are remarkable. Subscribers state it is a most pleasurable method of health culture. It builds self-confidence. Several subscribers attribute raises in salary to the course.

EASY TO LEARN

All that is needed to master the Marshall Stillman Course is persistence and patience. Every movement is described so clearly that you have no difficulty in remembering it—the only thing necessary is sufficient practice to learn them by heart. You are led gradually from fundamentals to expert blows such as: Corbett's Left Hook, Fitzsimmons' Shift, the McCoy Corkscrew, the Dempsey Triple, etc.

SEND NO MONEY

Simply fill in and mail coupon. When you receive the course, hand 97c plus postage to the postman and send us the final payment, \$1.00, in ten days. If you are not satisfied, return the course at the end of 10 days and we will return your deposit.

Send no Money

10-DAY TRIAL

Marshall Stillman Association,

Dept. 1723-H, 42nd St. and Madison Ave., New York.

You may send me on approval the Marshall Stillman Course. I will deposit 97 cents (plus actual postage) with the postman, with the understanding that if, after 10 days, I wish to return the course, I may do so and my money will be instantly refunded. If I keep the course I am simply to send you \$1 in final payment.

Name

Address

Canadian and foreign orders must be accompanied by cash (\$1.97 U. S. funds) subject to money back guarantee if not entirely satisfactory.

STRENGTH

Vol. 7

AUGUST, 1923

No. 12

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Table of Contents

	Page
Cover Design	<i>By Clayton Knight</i>
Jack Merchant—The Weight Athlete Supreme.	
<i>By Fred Harter</i>	15
Tumbling Into Health.....	<i>By Charles MacMahon</i> 23
Lengthening Our Lifetime.....	<i>By Bertha Hasbrook</i> 30
More About Sculpture.....	<i>By Ralph Hale</i> 35
You and Your Bathing Suit.....	<i>By David Wayne</i> 39
The Upper Arms and How to Develop Them.	
<i>By B. H. B. Lange</i>	46
How to Perform a "Strong Man" Act....	<i>By Alan Calvert</i> 53
The Power of the Punch.....	<i>By T. Von Ziekursch</i> 61
Boxing.....	<i>By Wm. J. Herrmann</i> 66
The Million Dollar Legs.....	<i>By Oswald E. Colonna</i> 72
The Mat.....	<i>Conducted by Alan Calvert</i> 76

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Indian Agent, B. P. Madon, "Health Home," Vera Cruz, Bombay, India.

What Would You Give to Become A Really Good Dancer?

How much would it be worth to you to make yourself so popular through your ability to dance all of the very latest steps, that everyone would be anxious to have you attend their social affairs?

ARTHUR MURRAY has perfected a method by which you can learn, in the privacy of your own home, to dance any of the latest dances in a few minutes—and all of them in a short time. Instructions are so simple that even a child can quickly learn. In one evening you can master the steps of any single dance. Partner or music are not necessary. After learning you can dance with the best dancer in your town and not make a single misstep.

Learn Without Partner or Music

Arthur Murray's remarkable method is so clearly explained and lucidly written that you don't need anyone to explain the instructions. The diagrams show every movement—just how to make each step of every dance, and the written instructions are concise and easily remembered. After you have quickly learned the steps by yourself in your own room, you can dance perfectly with anyone. It will also be quite easy for you to dance in correct time on any floor to any orchestra or phonograph music.

Arthur Murray is recognized as America's foremost authority on social dancing. Such people as the Vanderbilts, Ex-Governor Locke Craig of North Carolina and scores of other socially prominent people chose Mr. Murray as their dancing instructor. Dancing teachers the world over take lessons from him—and it is a fact that more than 90,000 people have learned to become popular dancers through his learn-at-home methods.

Private instruction in Mr. Murray's studio would cost you \$10 per lesson. But through his new method of teaching dancing at home, you get the same high class instruction at a ridiculously low price. And if you aren't delighted, the instruction doesn't cost you one cent.

Send No Money— Not One Cent

Satisfy yourself that the new course can quickly teach you all of the new dances and latest steps. See for yourself how easily you can master all of the newest dances and be able to enjoy yourself at the very next affair to which you are invited. Just fill in and mail the coupon—or a postcard or letter will

do—and the special course will be promptly sent to you. When your own postman hands it to you, simply deposit with him only \$1.00, plus the few cents' postage, and the course is yours without any further payments of any kind. Keep the



Arthur Murray, Dancing Instructor, has taught more than 90,000 people how to dance through his unique easy learn-at-home methods.



course for five full days. Practice all the steps—learn everything the lessons teach, because that is the only way you can prove to your full satisfaction that Arthur Murray's method is the quickest, easiest, and most

delightful way to learn how to dance correctly and expertly. Then, within five days, if you desire to do so, you may return the course and your deposit will be promptly refunded without any question.

You have always wanted to learn to dance—you have always promised yourself that some day you would learn. Here is your best opportunity. And remember, you now receive the 16-lesson course for only \$1.00. **ARTHUR MURRAY, Studio 812, 290 Broadway, New York.**

**Arthur Murray, Studio 812
290 Broadway, New York**

To prove that you can teach me to dance in one evening at home you may send the sixteen-lesson course in plain cover and when the postman hands it to me I will deposit with him \$1.00, plus a few cents postage, in full payment. If, within five days, I decide to return the course, I may do so and you will refund my money promptly and without question.

Name

Address

City..... State.....

Would you like to teach dancing?.....
* Residents of England write to 150 Southampton Row, London.*

Here's What a Few Say

Let me say that your chart system explains many things to me which other teachers could not make clear.

WM. S. MEYERFIELD,
Ann Arbor, Mich.

I practiced yesterday and learned the Fox Trot through the night. Tonight I danced a number of times with a good dancer to the music of a phonograph and had no trouble in leading or balance.

J. M. MEALY,
Flatwood, W. Va.

I am getting along very nicely with the instructions. I have so many pupils I have to have a larger place.

ALBERT J. DELANEY,
Bay City, Mich.

New Stomachs for Old In 48 Hours

By R. S. Edwards

THOUSANDS of people who suffered for years with all sorts of stomach trouble are walking around today with entirely remade stomachs—stomachs which have been remade in from 48 to 72 hours! They enjoy their meals and never have a thought of indigestion, constipation, or any of the serious illnesses with which they formerly suffered and which are directly traceable to the stomach.

And these surprising results have been produced not by drugs or medicines of any kind, not by foregoing substantial foods, not by eating specially prepared or patented foods of any kind, but by eating the plainest, simplest foods *correctly combined!*

These facts were forcibly brought to my mind by Eugene Christian, the eminent Food Scientist, who is said to have successfully treated more than 23,000 people with foods alone.

"Man Is What He Eats"

As Christian says, "what we take into our stomachs today, we are tomorrow." Food is the source of all power; yet not one person in a hundred knows the chemistry of foods as related to the chemistry of the body. The result is we are a nation of "stomach sufferers."

Christian has proved that to eat good, simple, nourishing food is not necessarily to eat correctly. In the first place, many of the foods which we have come to regard as good are in reality about the worst things we can eat, while others that we regard as harmful have the most food value.

But perhaps the greatest harm which comes from eating blindly is the fact that very often two perfectly good foods when eaten at the same meal form a chemical reaction in the stomach and literally explode, liberating dangerous poisons which are absorbed by the blood and circulate throughout the system, forming the root of all or nearly all sickness, the first indications of which are acidity, fermentation, gas, constipation, and many other sympathetic ills leading to most serious consequences.

And yet just as wrong food selections and combinations will destroy our health

and efficiency, so will the right foods quickly create and maintain bodily vigor and mental energy. In my talk with Eugene Christian, he told me of some of his experiences in the treatment of disease through food—just a few instances out of the more than 23,000 cases he has on record.

Correct Eating for Success

One case which interested me greatly was that of a young business man whose efficiency had been practically wrecked through stomach acidity, fermentation and constipation, resulting in physical sluggishness which was naturally reflected in his ability to use his mind. He was twenty pounds underweight when he first went to see Christian and was so nervous he couldn't sleep. Stomach and intestinal gases were so severe that they caused irregular heart action and often fits of great mental depression. As Christian describes it, he was not 50 per cent efficient either mentally or physically. Yet in 24 hours, by following Christian's suggestions as to food, his constipation was relieved, although he had formerly been in the habit of taking large daily doses of a strong cathartic. In five weeks every abnormal symptom had disappeared—his weight having increased 6 lbs. In addition to this, he acquired a store of physical and mental energy so great in comparison with his former self as to almost belie the fact that it was the same man.

Another instance of what proper food combinations can do almost overnight was that of a man one hundred pounds overweight whose only other discomfort was rheumatism. This man's greatest pleasure in life was eating. Though convinced of the necessity, he hesitated for months to go under treatment, believing he would be deprived of the pleasures of the table. He finally decided, however, to try it out. Not only did he begin losing weight within a few days, regaining his normal figure in a matter of weeks, but all signs of rheumatism disappeared, and he found the new diet far more delicious to the taste, and affording a much keener quality of enjoyment than his old method of eating, and wrote Christian a letter to that effect.

A Remade Man at 70

But perhaps the most interesting case that Christian told me was that of a multi-millionaire—a man of 70 years of age, who had been traveling with his doctor for several years in search of health. He was extremely emaciated, had chronic constipation, lumbago, and rheumatism. For more than twenty years had suffered with stomach and intestinal trouble which in reality was superaciduous secretions in the stomach. The first menus given him were designed to remove the causes of acidity, which was accomplished almost overnight. And after this was done he seemed to undergo a complete rejuvenation. His eyesight, hearing, taste and all of his mental faculties became keener and more alert. He had had no organic trouble—but he was starving to death from malnutrition and decomposition—all caused by the wrong selection and combination of foods. Almost immediately after following Christian's advice this man could see results, and after six months he was as well and strong as he ever had been in his life.

Christian's Discovery Now Available for All

These instances of the efficacy of right eating I have simply chosen at random from perhaps a dozen Eugene Christian told me of, every one of which was fully as interesting, and they applied to as many different ailments. Surely this man Christian is doing a great work.

I know of several instances where rich men and women have been so pleased with what he has done for them that they have sent him a check for \$500 or \$1,000 in addition to the amount of the bill when paying him.

There have been so many inquiries from all parts of the United States from people seeking the benefit of Eugene Christian's advice and whose cases he is unable to handle personally that he has written a little course of lessons which tells you exactly what to eat for health, strength and efficiency. This course is published by The Corrective Eating Society of New York.

How You Can Try This Method Without Risking a Penny

Much could be written about the cause and the remedy for stomach disorders, and Eugene Christian's methods. But that is unnecessary, for you can now test them out in the privacy of your home without risking a penny. These methods are not new and untried theories, for more than 200,000 people in all walks of life bought this course at \$3.50, and are using it and indorse it in the most enthusiastic terms.

The publishers have left on hand only a limited edition of Eugene Christian's Course, which they wish to dispose of before the New Edition comes off the press. The price at which nearly two hundred thousand of these sets have been sold is \$3.50. But these few remaining sets are being offered at only \$1.97 (plus postage) for as long as they last, so if you act quickly you can get these wonderful secrets at a big saving.

Send No Money

Simply put your name and address on the coupon below and mail it NOW. Give the postman only \$1.97 (plus postage) in complete payment, when the course arrives.

Look the course over carefully. Put it to the test. Judge by results. If you don't notice a great improvement within ten days after starting, send it back and your money will be refunded. You can clearly see that an offer like this could not be made unless the publishers were confident that Eugene Christian's methods will produce remarkable results for you, as they have for thousands of others who gladly paid \$3.50 for the Course.

But immediate action is necessary. There is no need for you to suffer from stomach disorders any longer—and remember, this special price can be held only as long as the few sets last.

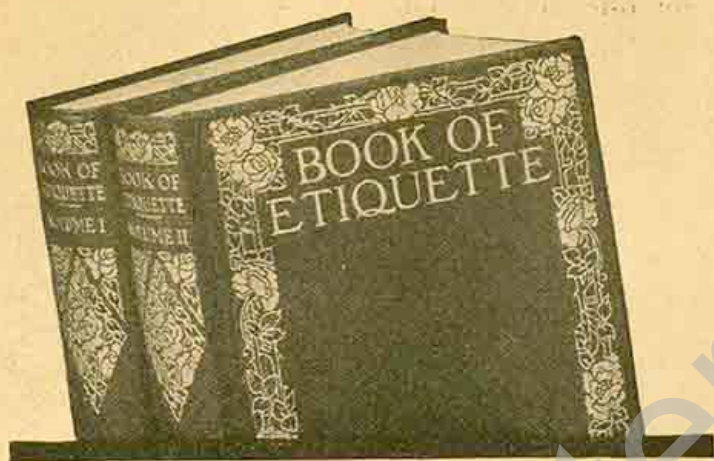
Cut the coupon now and send it at once so as to be sure to avoid disappointment. You will surely agree that health, happiness and comfort are worth the trial. Write today. Corrective Eating Society, Dept. 858, 47 West 16th Street, New York City.

CORRECTIVE EATING SOCIETY,
Dept. 858, 47 West 16th St., New York City.

You may send me Eugene Christian's Course in Corrective Eating in 24 lessons. I will pay the postman only \$1.97 (plus postage) on arrival. If I am not satisfied with it, I have the privilege of returning it to you after a 10 day trial. It is, of course, understood that you are to refund my money if I return the course.

Name..... Street.....
City..... State.....

Price, outside United States: \$2.15, cash with order.



Special Bargain!

The Famous Book of Etiquette

Nearly Half a Million Sold at \$3⁵⁰

YOU have always wanted this famous two-volume set that solves every social difficulty, that tells you exactly what to do, say, write and wear on every occasion. You have always wanted to own the two remarkable books that give poise ease, dignity—self-confidence.

Here is your opportunity to secure the complete, original, authentic BOOK OF ETIQUETTE at almost *half* the usual publisher's price! Almost 500,000 people have purchased the Book of Etiquette at the regular price of \$3.50. If you act NOW, you can receive the same

NOW \$1⁹⁸
ONLY For a Very Limited Time

authoritative and fascinating volumes for only \$1.98.

At this time of the year there is always a lull in the publishing business. To keep the presses running, and the pressmen from being idle, Nelson Doubleday, Inc., makes this amazing offer. The demand for the Book of Etiquette at this great reduction will probably be so large that the company must reserve the right

to withdraw this offer at any time. You are urged to send for your set at once.

Solves Every Social Problem

The Book of Etiquette is admittedly one of the most complete and authoritative works of its kind ever published. It covers every phase of wedding etiquette, street etiquette, dinner etiquette, dance etiquette—it contains paragraphs for the self-conscious and timid; for the bachelor; for the business woman; for the country hostess. Nothing is forgotten, nothing omitted. The Book of Etiquette will tell you everything you want to know. It will protect you from sudden embarrassments, give you a wonderful new ease and poise of manner.

Wherever possible, in the Book of Etiquette, the origin of customs has been traced to its source. For instance, you will find out why rice is thrown after the bride, why a veil is worn, why the engaged girl is given a teacup. You will enjoy the Book of Etiquette. And you will find it more useful than you ever dreamed a work of this kind could be.



What's Wrong in This Picture?

It is so easy to make embarrassing mistakes in public—so easy to commit blunders—that make people misjudge you. Can you find the mistake or mistakes that are made in this picture?



"Goodbye, I'm Very Glad to Have Met You"

But he ISN'T glad. He is smiling to hide his confusion. He would have given anything to avoid the embarrassment, the discomfort he has just experienced. Every day people who are not accustomed to good society make the mistake that he is making. Do you know what it is? Can you point it out?

Send No Money

Here's your chance—take it! Let us send you the famous two-volume Book of Etiquette at the *special offer* price.

No money is necessary. Just clip and mail the coupon below to us at once. We will send you the complete, two-volume set of the Book of Etiquette, and when it arrives you have the privilege of giving the postman only \$1.98 (plus a few cents postage) for the regular \$3.50 set!

Surely you are not going to let this offer slip by. Clip and mail this coupon NOW while you are thinking about it. Nelson Doubleday, Inc., Dept. 1357, Garden City, New York.

Use This Special Coupon

Nelson Doubleday, Inc.
Dept. 1357, Garden City, N. Y.

I accept your special offer. You may send me the complete, two-volume set of the Book of Etiquette. When it arrives I will give the postman only \$1.98 (plus few cents postage) instead of \$3.50, the regular price. I retain the privilege of returning the books any time within 5 days of their receipt, and my money will be refunded at once if I demand it.

Name

Address

How Ten Minutes' Fun Every Day Keeps Me Fit

By Walter Camp

Famous Yale Coach's "Daily Dozen" Exercises
Now on Phonograph Records

ONE night during the war I was sitting in the smoking compartment of a Pullman sleeping-car when a man came in and said, "Mr. Camp?" I told him I was, and he continued, "Well, there is a man in the car here who is in very bad shape, and we wondered if you could not do something for him."

"What is the matter?" I asked.

"This fellow is running up and down the aisle in his pajamas," the man said, "trying to get them to stop the train to let him get some dope, because he hasn't slept for four nights."

I went back in the car and found a man about 38 years old, white as a sheet, with a pulse of 110, and twitching all over. I learned that he had been managing a munitions plant and had broken down under the work, because he had transgressed all the laws of nature and given up all exercise, and had been working day and night.

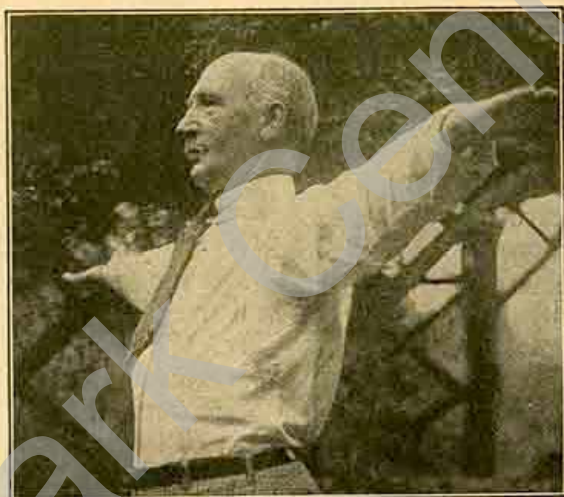
"For God's sake," he said to me, "can't you put me to sleep? If somebody can only put me to sleep." He was standing all bent over.

"Don't stand that way; stand this way!" I said, and I straightened him up and started putting him through a few exercises to stretch his body muscles. Pretty soon the color gradually began to come back into his face, and the twitching stopped. Then I said to him, "I am going to put you through the whole set of 'Daily Dozen' exercises once. Then I am going to send you back to your berth."

So I did that and didn't hear any more from him; but the next morning he came to me in the

dining-car and said:

"You don't leave this train until you've taught me those exercises. I slept last night for the first time in five nights."



WALTER CAMP

Originator of the Famous "Daily Dozen" System

I taught him the "Daily Dozen," and two months later I got a letter from him saying:

"My dear good Samaritan, I am back on the job all right again, and I am teaching everybody those exercises."

The "Daily Dozen" was originally devised as a setting-up drill for picked young men—the boys who were in training during the war. But its greatest value is for those men and women who are hemmed in between four walls most of the time and are beginning to realize that

their bodies aren't as fit as their minds.

I applied it to middle-aged men, and men past middle age, too, during the war, including members of the Cabinet in Washington, who simply had to do much more work than they were used to doing without breaking down. In the "Daily Dozen" I soon found I had something that would actually increase their reserve power. They grew progressively more fit as we went along.

People think that they can take an orgy of exercise and make up for a long period of neglect when they do not take any exercise at all. You cannot do that. Do not go to a gymnasium. That tires you to death. That is old-fashioned. We do not have to do that any more. A man or woman can keep himself or herself fit with six or seven minutes a day. There is no reason why a man at 50 or 60 or 70 should not be supple; and if he is supple, then he grows old very slowly

—but the place where he must look after himself is in his body muscles.—Walter Camp.

Mr. Camp is famous as a great Yale football coach and athletic authority, but few people know that he is also a successful business man. Although sixty years old, he is stronger and more supple than most younger men, and he uses his own "Daily Dozen" exercises regularly in order to remain so.

Since the war, the "Daily Dozen" has been making busy men and women fit and keeping them so—and the exercises are now proving more efficient than ever—due to a great improvement in the system. This is it:

With Mr. Camp's special permission, all the twelve exercises have been set to music—on phonograph records that can be played on any disc machine.

In addition, a book is included, showing by actual photographs the exact movements to make for every one of the "commands"—which are given by a voice speaking on the record. So now you can make your phonograph keep you fit.

With these records and the book a man or woman can keep himself or herself fit with only a few minutes' exercise a day—and it is so much fun that some of the "Daily Dozen" fans go through the whole twelve exercises to the spirited music twice every morning—just as a matter of sheer enjoyment.

Mr. Camp says that the place where we must look after ourselves is in the body or the trunk muscles.

This is so because we are all in reality "caged animals." When a man stops hunting and fishing for his food and earns it sitting at a desk he becomes a captive animal—just as much as a lion or a tiger in the Zoo—and his trunk muscles deteriorate because they cease to be used. Then comes constipation and other troubles which savage men never have.

The remedy is to imitate the "exercises" of caged animals. They know how to keep themselves fit—and they do it, too.

How? Simply by constantly stretching and turning and twisting the trunk or body muscles! When Mr. Camp discovered that men and women can imitate the caged animal with enormous profit to their health, he devised the "Daily Dozen"—to provide this indispensable exercise—the only exercise people really need to keep in proper condition.

Many people have written to the Health Builders telling them of the benefits they have received. Here is part of one letter:

"We wish to express our satisfaction and delight with our set of records and exercises. Our entire family of eight, including the maid, are taking them. The children are fascinated with them and bring the neighbors' children to do them."
—MRS. CHARLES C. HICKISCH, 828 Vine St., La Crosse, Wis."

The Health Builders' improved system now includes the entire "Daily Dozen" exercises, set to specially selected music, on large 10-inch double-disc phonograph records; a handsome book, printed in two colors, containing over sixty actual photographs illustrating each movement of each

exercise; and a foreword by Walter Camp explaining the new principles of his famous system.

Any man or woman who exercises with this system regularly, even if it is only six or seven minutes a day, will feel better and have more endurance and "pep" than they have had since they were in their teens—and they will find those few minutes the best fun of their day.

Try the Complete System Free—For Five Days

You cannot fully appreciate the real joy of doing the "Daily Dozen" to music until you try it. So we want to send you, absolutely free for five days, the "Daily Dozen" on phonograph records and the book which illustrates the movements. These full-size, ten-inch, double-disc records, playable on any disc machine, contain the complete Daily Dozen Exercises, and the 60 actual photographs in the book show clearly every movement that will put renewed vigor and glowing health into your body—with only ten minutes' fun a day. A beautiful record-album comes free with the set.

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Strength Means More Than Just Muscle

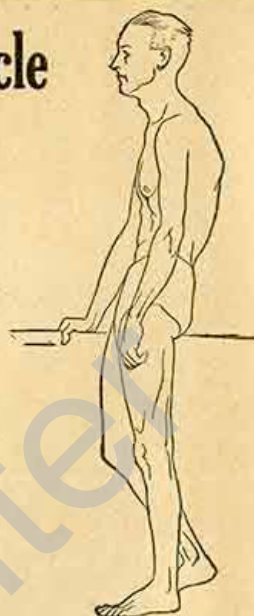
There is another kind of strength—vital strength—which comes from within, and is the product of perfectly-acting organs. The outwards signs of vital strength are an erect carriage of the body, a rounded neck, a deep chest, broad shoulders, muscular loins and shapely legs. Vital strength does not come from “exercising” a few minutes a day—but from your muscular habits.

A man like the one shown in the pictures on this page can never become really strong or really well built by practicing exercises for fifteen or thirty minutes a day, unless he changes his habits of posture and breathing, and learns to carry his weight by his muscles instead of letting it sag on his bones.

No amount of “rising on the toes” will make any noticeable difference in the size, or shape, of the calves of his legs, until he learns how to use his feet properly when walking. No amount of squatting or other special exercises will give him a pair of big, well rounded thighs, until he learns to walk from the *hips* and not (as he and most other people do), from the *knees*. He can practice bending exercises every day, and yet they will not cure his round shoulders, raise his flat chest, or give him any vitality, until he learns to always hold his body in the proper “balanced” position.

Such a man as this one can, by slaving at exercises, add an inch or so to the size of his arms, and possibly two or three inches to the size of his chest, but the extra chest girth will come only from thickening the muscles which lie outside the ribs. He may add a trifle to the size of his thighs. But all these small gains for which he has worked so hard will disappear—*fade away*—just as soon as he stops his daily grind of exercise.

If your case in any way resembles this one, you had better read Checkley's Book, for it will teach you how to grow strong and shapely without the necessity of dieting, or of doing any monotonous and exhausting exercises. If you can learn from this book how to acquire certain muscular habits, you can grow into a superman. If you give your body a chance, it will develop itself, and gain for *you* health, strength and a wonderful figure—all at the same time—for no one of them is worth much without the other two.



Offie Cushing



Offie Cushing

The man shown in the pictures on this page does not have to exercise, because the same muscular habits which developed his magnificent body will keep him healthy, shapely and strong without any special effort on his part. Almost every one who reads this advertisement has among his friends a man like this one; a chap who never exercises, who laughs at gymnasiums, and yet has a magnificent figure, perfect health, and the strength of two or three ordinary men. Such fortunate individuals are the best proof of the up building value of certain muscular habits. That their physical powers are due to their habits is proven by the fact that they retain their beauty of figure and their muscular and vital power into advanced age:

Do you know (if you happen to be a fat man), that you can never get thin by "exercising" as long as you hold your hips in a way that tilts the weight of all the digestive organs against the front wall of the abdomen? *Do you know* that there is a certain "balanced position"—a certain angle at which to carry the hips—which not only prevents anyone from becoming fat, but which actually abolishes abdominal fat in a stout person? If you can learn this balanced position, you will not only rid yourself of your fat, but you will automatically develop abdominal muscles like Sandow's or Checkley's. This same balanced position will give you a back of splendid outlines and tremendous strength.

If you are a thin man, *do you know* that there is a method of walking that will automatically add inches to the size of your calves and thighs, and which will give you a pair of legs with outlines like the limbs of a fancy dancer or a Swiss mountaineer? You can get this development even if you walk only a mile or two a day.

Do you know that there is a method of breathing—breathing with the upper part of the lungs—which will automatically increase the size of your chest and broaden your shoulders. This method is not the so-called "forced deep breathing." You cannot develop your lungs by taking deep breaths a few times a day. The only way to get great lung power is to breathe correctly *all the time*. Lung power is the keystone of vital and muscular strength.



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It certainly is not merely the acquisition of bulky, protruding muscles, although they are apparently accepted as an indisputable evidence of strength.

On the contrary the really strong man is the man whose body is symmetrically developed and who has not developed one part at the neglect, and in all probability, at the expense of his body as a whole.

THE BEST METHOD OF DEVELOPING PERFECT PROPORTIONS

is to set, for yourself, an ideal.

Do not decide that you want to have a sixteen-inch biceps! Do not decide that you want a fifty-inch chest! Do not decide that you want great pectoral muscles!

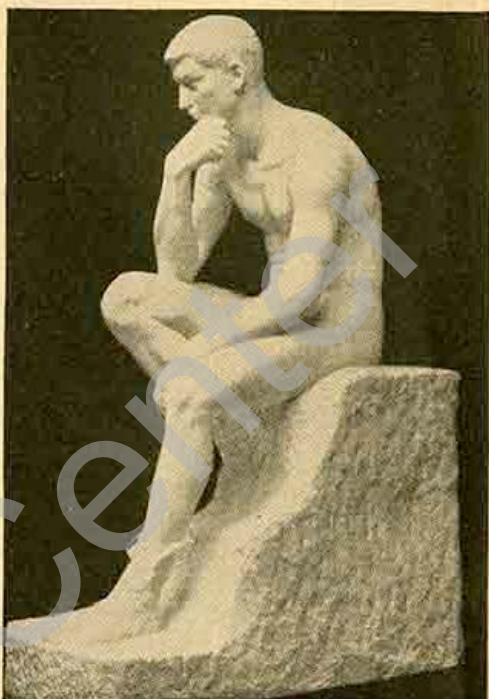
Make up your mind that you will have a well-developed body. Decide to acquire a good build!

ABOVE EVERYTHING "LEARN TO POSE"

And when we say learn to pose we mean learn to pose with discrimination. Use your knowledge to assist you in developing your body to the physical perfection that you desire.

We all know any number of men who would be a laughing stock if they attempted to pose after any of the old Greek statues, and yet we all know that the figures on these old statues come very near to being physically perfect. We all know that a man who is well developed and has a slight knowledge of posing should be able to approximate these works, at least.

"How To Pose," by Monte Saldo, contains thirty-six illustrations of classical examples, actual poses and explanatory diagrams. Anyone who hopes to develop himself symmetrically should not be without this book.



It is a practical text-book on posing and is the foundation on which you must build if you care to really make the most of yourself physically.

No one has developed a good body unless they can see for themselves that it compares favorably with the generally accepted standards of physical perfection.

No one can tell how well they compare unless they know something about posing their bodies. It is not easy to take and hold any pose unless you really know how.

To denote action in posing you must have not only the necessary physique, but also the ability to use it and the knowledge of how to use it.

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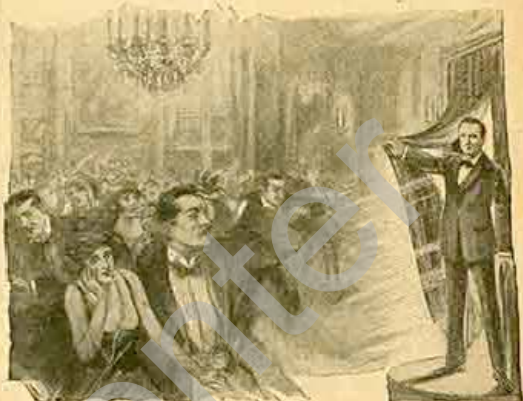
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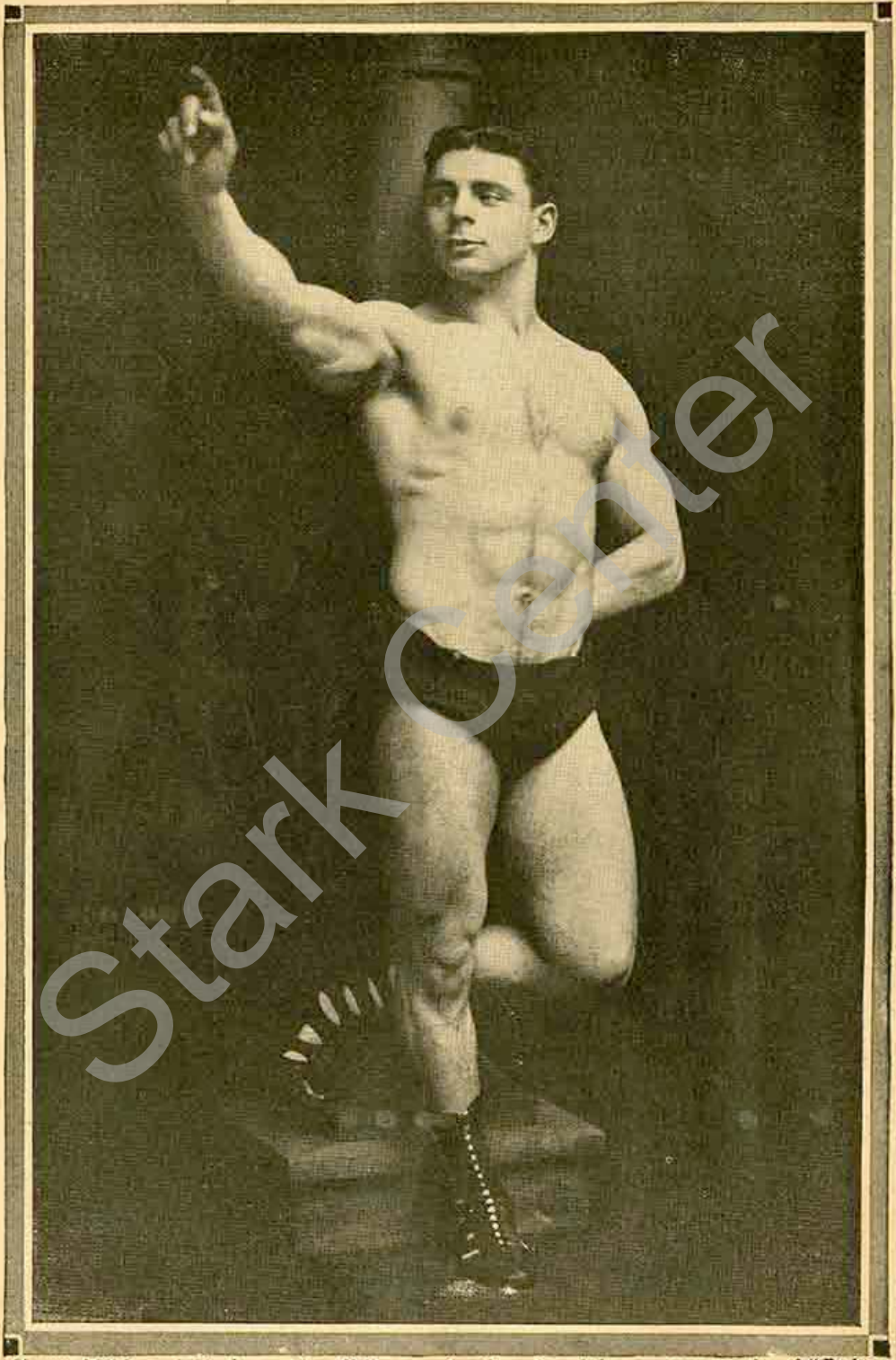
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Sigmund Klein, probably the most beautifully proportioned member of the younger generation of "Perfect Men." Other pictures of Klein illustrate the articles starting on pages 46 and 53.

Jack Merchant — The Weight Athlete Supreme

By Fred Harter

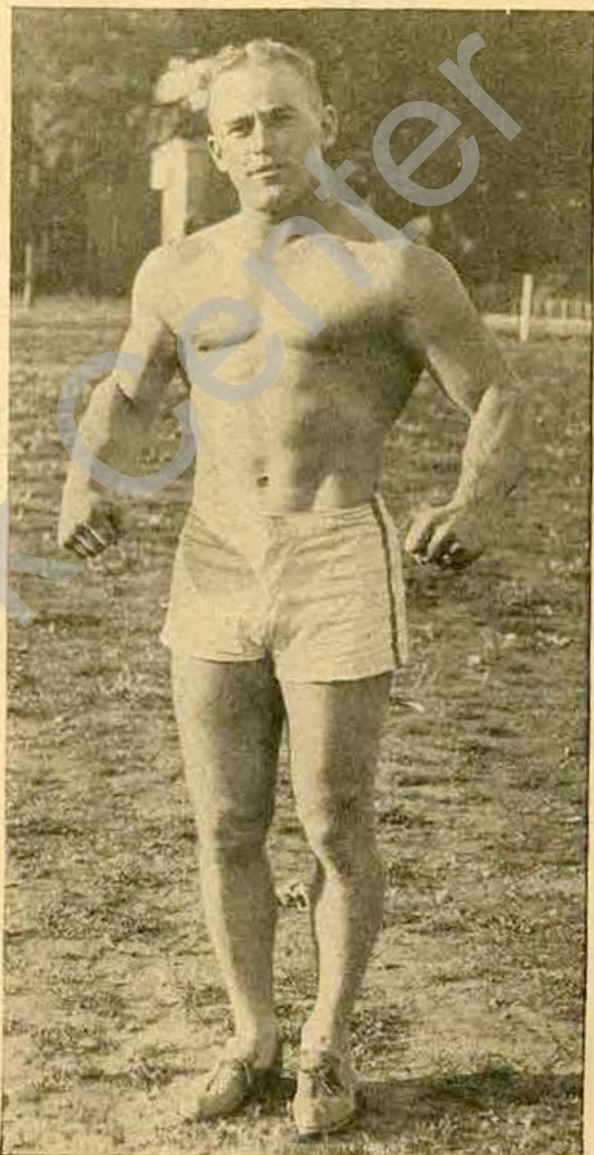
The author of this article says, "Give me my choice of Charlie Paddock's speed, Hans Kolemäinen's endurance, or Jack Merchant's strength, and I would not hesitate in taking Merchant's strength, for then I'd be the real goods, I'd feel it, and look it, and everyone would know it."

AS far back as records go, athletes have struggled and contested for supremacy and honors on the athletic field. Praise has always gone to the victor.

This stimulus together with the natural love for body freedom and physical power has carried on these noble sports, until today they reach the highest point of development. Now, athletes are bettering the marks of their predecessors of a few years back. The present day victor will be unheard of a few years hence, save for those few who leave an indelible impression upon the minds of all by their marked ability.

One of these few is Jack Merchant, of California. A man, who for all-round ability had, and still has, few to equal him. Merchant is not merely a weight man, but is agile and quick to the nth degree. He has competed in the hammer-throw, shot put, and discus-throw of the weight events, besides the javelin throw, which is classed as a field event, also the broad jump and 100 yard dash. There are few indeed who can equal any one of his records, and I daresay there are scarcely any who can equal all of them.

I will set forth the latest methods of performing the

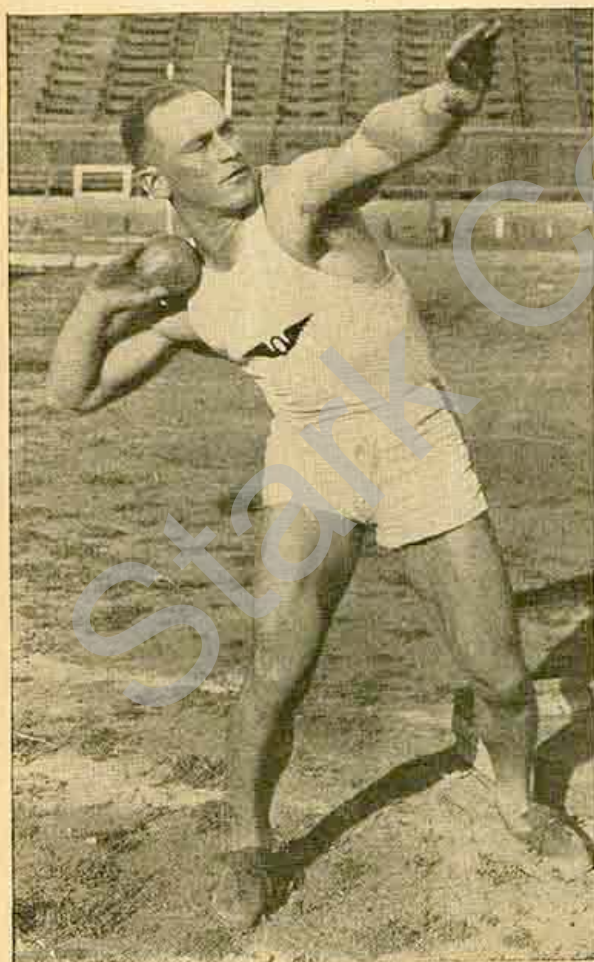


Merchant with chest expanded showing the utmost breadth of his shoulders. The man who said that a strong man was a "muscle merchant" must have been thinking of this athlete.

three field events, namely, the hammer-throw, the shot-put, and the discus-throw, in the order of their developmental influence upon the body.

THE HAMMER THROW

This event originated in Ireland, and for this reason it is probably not remarkable that the holder of the present world's record is an Irishman, Pat Ryan. With a throw of 189 ft. 6.5 ins. (3 turns), he barely nosed out the throw of Matt McGrath, of 187 ft. (2 turns). Varying weights and lengths of hammers have been used, finally



The body should be twisted as far around as possible at the beginning of the final drive.

being regulated at 16 lbs. and 4 ft. over all, respectively. In 1888, the 7 ft. circle was adopted, from which the throw was made, in preference to the unlimited take-off.

The hammer-throw is not very popular in colleges due to the fact that it is difficult to master, even though it affords perhaps, more pleasure to the athlete than any other event. It takes a man four years at college to learn the event, and even then he may not amaze people by his performances. However, the real truth of the matter is, that there are very few men in the world capable of teaching it; and only one or two in the United States are competent coaches of the hammer-throw.

Skill, muscle, and quickness on the feet, go to make up a good hammer-thrower. Proficiency comes with long and regular practice. Men are champions at this game after other athletes have given up their track-shoes and running-gear for the pipe and easy chair beside the fireplace. Matt McGrath, Pat McDonald, and Pat Ryan, are still champions at an age that finds their sprinting contemporaries hobbling about on canes, content with memories.

To perform this event, the thrower steps into the rear half of the ring, standing with his back facing the throwing direction, left foot slightly drawn back. While in this position, he whirls the hammer two times around the head, keeping the center of the circle described by the hammer-head near the right shoulder, never allowing the hands to go directly above the head; and extending the arms to full length in front.

Now you are ready to turn.

Keep the hammer well *behind* the body, with feet moving and body whirling faster than the weight. If you move slower than the weight, you will be thrown instead of the weight. You pivot on the left foot while turning. The right foot is whirled around and placed about a distance of one foot



behind its first position. Then the left foot is moved back an equal distance also. Care should be taken to avoid *jumping* around. The rotating movement is a spin, and strength and increased momentum are only possible



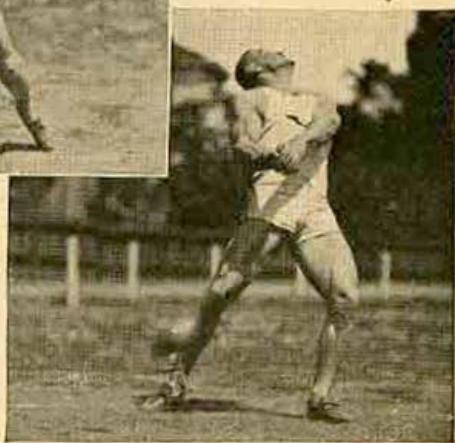
when the one or both feet are on the ground. The greatest mistake most weight athletes make in their events, is to shift their feet, thus putting them both in the air, at the same time they heave the weight. This is wrong because a great deal of momentum is lost. They should wait until the weight has left their control, before leaving the ground. (You can't perform a lift with a bar-bell, by first jumping into the air with it, and then trying to complete the lift. So why do it when putting the shot or throwing the hammer?) After two or three complete turns, the weight is let fly

over the left shoulder. The right leg does the throwing. The number of turns depends upon your proficiency, three being recognized as best.

The hammer should describe a turn with 45° elevation so that when released, it will fly forward with good height. Although you should put all your force into the throw, the movement should be free and easy and devoid of jerks, or the momentum will be lessened.

Since the throw is restricted to the limits of a 7 foot circle, the event becomes very scientific and thus bars the heavy man with very poor form who might be able to throw the hammer a greater distance, if he were allowed to wander about the field and throw from any mark he chose; but it takes a very good man to keep in the restricted area and still throw a long distance.

However, in all



exercises, and especially in the hammer-throw, you should introduce the progressive element. Practice twirling the weight around the head for a while without throwing it. Then practice throwing without turning. Later use the turns.

"But," said Mr. Merchant, "when I

spoke of the progressive element, the readers will get the wrong impression, and after using one turn for a week, will take up the two turns, and soon after, the three. You want to impress them with the idea of mastering the turns, and it usually takes a year before the thrower should attempt the second turn, another year before attempting the third, and usually two more years until the third turn is perfected. When I am forty years old, I expect to throw the hammer much farther than I can now." (Last year, Tootell of Bowdoin threw 144 ft. with two turns, and now he is throwing 181 ft. with three.)

"My method of throwing the ham-

mer is somewhat different from the accepted method," Mr. Merchant continued. "Being a rather small man as hammer throwers go, I try to gain as much speed as possible from the beginning of the very first turn. The three advances across the circle should be about equal in distance. If the first is too far in proportion, I am bound to foul, by stepping out of the circle. On the other hand if the first turn is very short, the thrower coming almost back to the original position, he may cut loose on the next two turns and hardly ever foul. On several occasions being slightly off form, I have fouled twice and then resorted to a two turn throw to qualify me for the finals

where I would have three more chances with my three turn throw. But the best thing, is to take the first throw easy to qualify, making sure not to foul, and then trying hard in your second and third attempts.

"The handle of the hammer rests on the first joint of the fingers of my left hand with just enough of the right hand to hold it. Other performers rest the handle on the second or third joint, and have difficulty in extricating their fingers when the hammer is released; sometimes tearing the skin off their fingers. I swing the hammer around my head two times to put me on my first turn. It is best to have a definite number of swings, because if you hesitate or have your mind taken off the hammer for an instant, there is decreased efficiency. The



The position at the beginning of the hammer throw. The right hand is placed over the left as illustrated.

mind must be concentrated. Three swings are too many, and one is not enough, for me to get utmost strength from the muscles. Throwing the hammer must be made as automatic as possible so that speed and pull at the last will be predominant in the mind.

"At the end of my third turn, I put every ounce of pull into the final whipping movement before the hammer is released. If the wire connecting the hammer and handle breaks, it usually breaks on this last turn. I keep my feet rather close together (about $1\frac{3}{4}$ ft. apart), because I can get greater speed that way; and speed means greater distance.

"It is most important of all to get speed in the turns, for the hammer is thrown mostly by centrifugal force, and therefore, it is very essential to have good control of the feet, in order to revolve rapidly to produce the maximum force. I have competed against

large men who could not move fast in the turns, and I have been able to overcome the handicap of size, by turning faster than they did. This proves that the event is not for large men only.

"The hammer throw is fascinating, and one of its pleasurable features is that it brings into play the fundamental muscles. That is, it uses those muscles which apply the energy directly. For example, I mean that

when a man throws the hammer he can put all his strength into the heave and know that all his power is going into the throw; whereas if a man picks up a javelin, for the first time, no matter how hard he tries, he cannot put all his power into throwing it, because here the fundamental muscles are not easily brought into play.

"Sprinting is fun, distance running is drudgery, broad jumping is work, pole vaulting is great, but hammer throwing is real pleasure and will develop a man quicker than any other event."

Walter Christie, one of the greatest track coaches in the world, and producer of the I. C. A. A. A. championship team the last three years, says of the weight events: "The hammer throw is the best field or weight event that the athletic program offers. The athlete gets more genuine fun of practicing out of it than all the other weight events combined.

"A coach doesn't have to tell a hammer-thrower to work, he gets out and does so on his own initiative. He simply loves it. In many cases working two or three hours a day.

"In working out, he does not have to beat another man's mark. He has his own to beat. That is his incentive. This also applies to other weight-events and the athlete gets to love his event almost as much as the hammer-man does.



Illustrating that the feet must be on the ground while making the dive and that the body must follow them after the shot.

"The weight-events are for big men as a rule, and light men are handicapped. In school the younger athletes have lighter weights, and I find that the school boy loves the weights as does his older and bigger brothers. The weight-events mean strength, and strength appeals to all humans. Humans like power and strength."

The benefits of hammer throwing are widely known. The late Mike Murphy said that it was an ideal exercise for big men, because no matter how long they worked at it, they could not injure themselves; and any very strong young man or mature athlete may throw the 16 lb. hammer without danger. The longer the athlete clings to it and practices with intelligence, the more proficient he becomes. It is good for all large men because it makes them active and quick on their feet, besides being a splendid body developer.

THE SHOT PUT

Although the shot put is a sort of complementary event to the hammer throw, yet, proficiency in one is gained at the risk of proficiency in the other. The hammer throw develops the pulling muscles of the back and arms, while the shot develops the pushing muscles.

The shot is thrown from within a 7 ft. circle. A toe board 4 in. high is placed on 4 feet of the circumference, over which

the put is made. The feet of the athlete may not touch the top of the board, but may rest against the inner surface.

Merchant, commenting further on the shot put, said: "The best shot for me is a brass-shelled lead center, as it is smaller than the pure brass shot, giving me a better chance to hold it well up in my fingers. This is essential to give the shot the flip or drive with the wrist, at the end of the put. Stand sideways to the direction of putting with the right foot at the rear of the circle. Pick up the shot with the left hand, secure a grip on it with right, the shot resting on the thumb and little finger, three main fingers of the hand behind it.

"Place the shot in the hollow of the neck above the collar bone, the hand turned toward the body so as to raise the elbow to the putting direction.

The left arm is extended. Swing the left leg back and as it comes forward hop to the putting position, the left foot at the toe board and the right at about the center of the circle. The right knee is bent and the body from the hips up is twisted well back. The drive is then made with the right leg, body, and arm, simultaneously. The right foot shifts to the position of the left a fraction of a moment later. Very essential points are first, to hold the muscles relaxed until the



The body is kept well ahead of the hammer.

final drive; second, not to hop too fast across the circle but to put all the speed and push possible into the drive; third, not to shift too quickly. The feet must be on terra firma while making the drive. The shift follows a fraction of a moment later in order to keep the body from going over the board; fourth, to follow through so that the weight is on the right foot at the toe board; and most important of all, the body should be twisted as far around as possible at the beginning of the final drive. So far, that you are practically

facing in the direction opposite the putting direction. I have found that several deep breaths help just before putting and that I have more strength with full lungs."

I have seen Merchant breathing deeply before tossing the shot, and it is then that one can see the size and depth of his chest. This breathing before throwing has its purpose.

THE DISCUS THROW

There are two methods of throwing the discus, the Greek style, and the Free style. The Greek method is to throw from a small, sloping, wooden platform; while the Free style is to throw from a ring similar to that used in the hammer throw. The Free style is the only method in use today.



Merchant with muscles flexed showing his wonderful arms.

"I do not care much for the discus throw," said Merchant, "for it takes the tall and lanky boys to get the distance. But the best plan is to stand at the rear of a circle sideways to the direction of throwing, feet spread about a distance of two feet. Swing the discus once or twice to loosen the muscles and then pivot on the left foot and make a half turn; then pivot on the right for another half turn; throw and follow with the reverse of both feet as in the shot. There should be a gradual increase of speed in turning. Too much speed

in the turn does not allow the thrower to set himself for a big heave at the finish.

"It must always be borne in mind that the final effort is what gets the distance in not only the discus, but also the shot and javelin as well. It is essential that the discus be kept well back of the body in turning so as to allow a full swing at the last, just as in the hammer throw, the body must always be ahead to allow for a big swing at the finish, and in the shot put, the body must be well ahead, as far as possible, at the beginning of the final effort."

Merchant undoubtedly has one of the finest physiques in the world, and one would have very little difficulty in

picking him out of a whole field of athletes.

MERCHANT—THE IDEAL ATHLETE

When I first saw Merchant, it was down on Berkeley Field a while back. Athletes lightly clad in track suits were practicing at different events. I was with a friend of mine, and desiring to see the much touted athlete, I asked my companion to point him out.

"Do you see the husky guy in that bunch over there?" queried my friend. "That's Merchant."

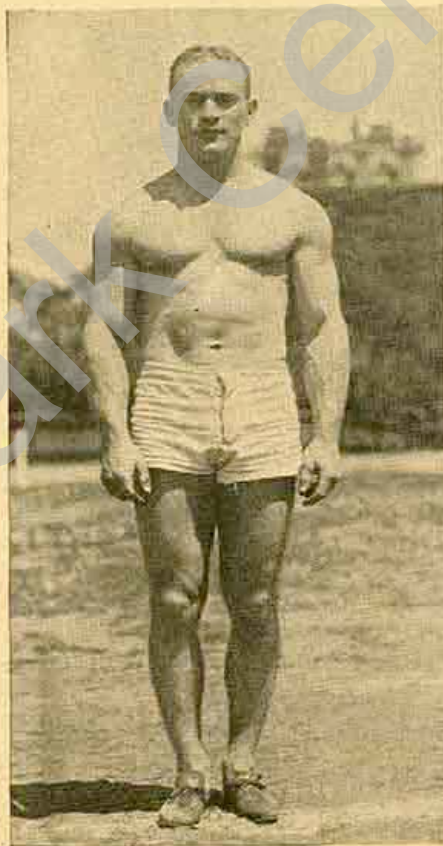
Although I looked where I was directed, and saw many men in a group, some of whom were the best athletes in the country, yet they all seemed diminutive beside the "husky guy" pointed out to me. The term husky here is not significant, and the word I like to use in describing Merchant is "magnificent."

I truly have never seen a more beautiful body than that possessed by Jack Merchant; and I have seen countless athletes, many of them strong, but none possessing the symmetry and beauty of this sculptor's dream brought to life. Here is a young man, 24 years of age, whose body may be compared with any of the recognized statues of Grecian gods, and nothing found wanting. In fact he surpasses many of these gods, if measurements are

any basis for comparison. If symmetry is any basis for comparison, then judge for yourself, by comparing his photos with those of any Greek statue.

His skin is of satiny texture, the muscles smooth and flexible. Some athletes carry excess avoirdupois. Not so with Merchant. In fact you are oblivious to everything save that you are gazing upon a wonderful masterpiece. You don't ask yourself, "What's wrong with this picture?" No part of the body is over prominent, but each part is moulded perfectly, to make the perfect unit.

To give you some idea of his physique, here are some of his measurements which I took the latter part of



Some athletes have to tense their muscles to show much development, but Merchant looks tremendously muscular even when standing at ease.

May this year: weight, 174 pounds, stripped; height, 5 feet $7\frac{1}{2}$ inches; neck, $16\frac{1}{2}$ inches; wrist, $7\frac{1}{2}$ inches; ankle, 9 inches; waist, 33 inches; chest, small, 40, normal, $41\frac{1}{2}$, expanded, $45\frac{1}{2}$ inches; thigh, $24\frac{1}{2}$ inches; calf, 15 inches; biceps, straight, $13\frac{3}{4}$ inches, and flexed, $16\frac{1}{2}$ inches; forearm, straight, $12\frac{3}{4}$, and flexed, $13\frac{1}{2}$ inches. You could almost tell from these measurements that Merchant is perfectly proportioned. If you care to look in Spalding's Track Manual for this year, you may see a cut of this all-around champion

(Continued on page 88)

Tumbling Into Health

Advanced Tumbling

This is the third and last of a series of articles by Charles MacMahon, the first appearing in the June issue.

The pictures illustrating the difficult feats were literally "caught in the air." In almost every one you will see many of the muscles in a state of high tension; which is the best possible proof of the author's claim that the practice of tumbling exercises develops every muscle from neck to heels.

By Charles MacMahon

ALTHOUGH the sub-title of this article is "Advanced Tumbling," you will find a number of stunts herein that are easy enough for beginners. So whether you have gotten to the advanced stage or not, you will find something you need if you read this article through.

To start with—the "half flip" makes a very neat stunt. It is really a combination of both tumbling and hand-balancing. This one is done by performing the first half of the flip, and then when your hands hit the floor, you try to hold a hand-stand. You will have to execute the flip slower than in the usual manner so the feet will not have so much speed. When your hands land on the floor, let your arms bend slightly at the elbow. This bend of the arms will help you hold the stand and prevent you from finishing the flip.

The "back somersault" is not as difficult as it appears and anyone who has learned the flip should have no trouble with it. Figure No. 1 shows a back somersault in which the feet are three-quarters of the way over. The hands (while they look as though they were

permanently kept in position on the thighs) are in reality only slapped on and are off again in an instant. I judge they are on the thighs about half the turn, for they go on after you make the leap and leave just before the feet hit the mat. And taking into consideration that the whole somersault only takes a second, you will see that the hands have not long to remain.

The "back somersault" can be done with the hands on the shins. But it is harder to grasp the shins than the thighs, because you must double up considerably and reach out farther. When you grasp the shins you *do* turn faster, as you are



Fig. 1.

doubled up more, but a speedier turn is not necessary for an ordinary somersault. The back somersault can also be performed with the hands entirely free from the body.

The "front somersault" is much more arduous to perform from a standing position than the back somersault. The easiest way to learn it is to take a hard, short run before "taking-off." When you have run your distance come down on both feet at once then spring up as high as you can, at the same time duck the head under the body and clasp your hands on your shins. Do not slacken your speed in "taking off."

Do not try the front the first time on anything but a very soft place. Two or three "gym" mats piled one on top of the other are not sufficient to absorb the shock should you fail to get all the way around on your feet again. And you certainly *will fail* on the first attempt unless you are extremely clever in acquiring the knack of tumbling.

In this "front somersault" the danger of a severe jar lies in the fact that the hands and feet are not in as good a position to save your back, as they are to save your face and stomach in the back somersault.

Right here I would like to impress upon you the control the head has over the body in tumbling. I don't mean control over the body as we generally know it; i. e. nervous system from brain to muscles. But the faculty the head has for leading the body and the willingness of the body to follow the head.

For instance, I dare say you could never accomplish the "front somersault" if you did not duck the head forward at the beginning. This ducking starts the body revolving in the air, which is necessary for a complete turn.

In Figure No. 1 which shows the "back somersault," you will note how the head is thrown back. This has a tendency to hold up the shoulders until the feet are over. You will be able to feel this buoy-



Fig. 2.

ancy when you learn to perform the "back somersault."

The Baroni, or "Brownie" as it is commonly called, is a very difficult feat and is seldom seen outside the show business. The simplest way to describe it is to say that it is a "round-off" without touching the mat with the hands. It has the same twist and everything else is identical with the round-off except the position of the hands. The best way to learn it is by performing the round-off and trying each time to put less weight on the arms. In other words make the flip of the body hold you up off your hands. After some practice you will get the knack of the twist and the remaining in the air, so that just your finger tips touch the mat. You have practically learned it when you get this far.

The last words in ground tumbling are the so-called Spotters, Gainers and Twisters. These are difficult additions to the flip, somersault and hand-spring.

A "spotter" is the doing of the flip, somersault or hand-spring on one spot. That is to say the hands (or hands and feet as the case may be) must land on, or very close, to the spot you started from. It means the leap must be made slightly forward as well as up in the *back somersault* and *visa versa* in the *front somersault*.

In the "flip" and "hand-spring" it means the same leap forward or backward, coupled with a great bend of the back.

The "gainer" is performed in the same manner as the spotter, except you move a few inches at every contact of the ground, with the hands or feet; that is, you move in the opposite direction from the natural way, or, move forward while turning backward as in the case of the flip. The "gainer flip" makes a wonderful sight when done in a continuous manner.

"Twisters" are somersaults, flips and hand-springs in which you twist the body while in the air so that you land on your feet and finish in the opposite direction from the starting position.



Fig. 3.

Here is another proof that the head leads the body. To commence the twister when up in the air, the head must be thrown in the direction required, by a twist of the neck. The shoulders follow suit by bringing the rest of the body along with them.

ROUTINES

The meaning of "routine" is the performing of two or more of the foregoing tumbling stunts (of all three articles) one after the other in a continuous movement. Of course, it is impossible to combine all the tumbling stunts. A few examples that are not difficult are: Alternating a "forward-roll" (first article) and a "hand spring." You can do four or five of each of the foregoing, but learn to do them with no hesitations between

each stunt. I would not try to see how many you can do as this will make you dizzy and is liable to cause you to fall and injure yourself. Others are the alternating of a "cart wheel" and "hand-spring," the "forward-roll" and "snap-up." You can make any combinations that are possible if you pick out the ones in which you move always in the one direction.

A few "Routines" that are somewhat more difficult to perform, but easier to look at are; A "Round-off" and "Flip Alternating." Figure No. 2 shows the start of a "flip" just after finishing a "round-off." If you will turn this picture so that the side on your right will be down you will see the position as it is when the hands hit the mat. One "round-off" and many "flips" is another; one "round-off," many "flips" and a "somersault"; "round-off" and several "back somersaults." There are any number of these combinations, but if you do not continue on from one to the other without hesitation or a double effort you lose the advantage of the momentum acquired by the doing of the last feat and also spoil the looks of the "routine." Of course, if

you are a professional tumbler or expert amateur you can use the "twisters" in routines.

A beautiful way to finish a "routine" with a back is to do what is called the "lay-out." Because you have acquired such speed from the preceding stunts of the "routine," you can, therefore, leap higher and consequently consume more time in getting around. In fact you must turn slower or you will perform a somersault and a quarter which will land you on your spine with uncomfortable results.

So in doing the "lay-out" you simply straighten out the body more than usual, which naturally make you longer getting over on your feet. It is the same principle as fancy roller-skaters use when spinning like a top on the front rollers of their skates. When they keep their arms at their sides they go around much faster than when they extend the arms to the sides.

These "lay-outs" are not only good to look at, but also give the performer more of a thrill than he will experience in all other tumbling stunts. The reason for the thrill seems to be that because you remain in the air longer you have more time in which to enjoy this feeling of flying through the air. In other words, you are not over before you realize it, as in the case of all other tumbling feats.

DOUBLE TUMBLING FEATS

In Figure No. 3 you will see one of the simplest forms of double tumbling. You all know how it is done; one performer stands with his feet apart, and facing his partner. Then he bends over and puts his arms under his crotch so that his hand sticks out behind him. The other tumbler then reaches over his partner's back and grasps his hands firmly and lifts him up high. At the same time this lift causes the tumbler who is doubled up to unwind and he



Fig. 4.

finishes on his feet. Figure No. 3 shows it just at the finish. In this one the tumbler who is to do the lifting must be sure to get his partner up high enough so he will have room to turn before hitting the ground.

Another fairly easy one is a swing between the legs and a throw-out. This is accomplished by one tumbler lying on his back and bringing his knees up to his chest. Now the two men grasp each other's wrists, forming an interlocking hold. Then the tumbler who is

standing pulls the other man on the floor, back through his legs and then forward again like a pendulum, just clearing the floor with him. The momentum thus attained should be sufficient to shoot the swinging man far up and out in a graceful arch, landing finally on his feet.

Figure No. 4 shows the position taken for the double roll. The top man (or the one standing) goes forward and down, and the bottom man comes up until their positions are reversed. When this is performed in a continuous and speedy manner without hesitation at any point; it makes a very enjoyable feat and is not extremely difficult.

There is another one of this type that gives even more fun and which is slightly harder to perform. Both performers should stand facing the same direction; one man several feet behind the other. Now the man in front bends back in a sort of "crab" toward the man behind who in turn bends forward over the chest and abdomen of his partner. Then they clasp their arms tightly around each other's waist. Then the man who is bending backwards gives a kick up with his feet, while at the same time his partner



Fig. 5.

straightens up with him. The tumbler who is on his feet keeps the other tumbler going over his head until the other tumbler lands on his feet, reversing their starting positions. This, like the preceding one, is then practiced for speed and uniformity of motion. When performed correctly, it resembles a four-footed, headless monster of some kind.

The last two mentioned stunts can be performed with less difficulty if the partners are somewhere near equal in height or weight.

Figure No. 5 shows the finish of a very simple combination feat. In this one stand back to back and grip hands over shoulders. The performer who is going over lifts his feet up in front as the underman leans forward (as shown) and pulls him up so he can roll over onto his feet.

Do not keep the back part of the heads together as is customary in comparing heights, but let them go to the side of each other. This does away with having to bend the necks to any great degree. There is a possibility of straining the neck if you try to do it with the back of the heads together.

This feat can be improved with prac-

tice so that if the underman pulls quickly and with force (which gives momentum to the body of his flying partner) and then gives a sharp throw up with his shoulders when the weight is dead upon him (or just a little sooner than is shown in Figure 5) the flying man will be thrown higher and farther, making a far better display than simply dropping over onto his feet. If this thrust up with the shoulders is done when in the position shown, it will only result in spinning the upperman faster than is required and the result will be a fall over backward after landing on his feet.

The "Knee-and-Shoulder Spring" you will see in Figure No. 6. This feat is practiced by most beginners and is a comparatively easy one. However, it is rarely done correctly by the beginners, that is to say, they do not get a beautiful finish.

The tumbler who is going to do the spring should take a few steps to get a start and then without losing the start,

place his hands on the bottom man's knees. The bottom man will reach toward the shoulders of his partner and catch his weight as it goes over and giving the shoulders a strong upward push which helps the top man to land on his feet in a more or less upright position, and not on his haunches as it is usually accomplished.

A variation of this is shown in Figure No. 7. It is the finish of a spring from the shoulder only. The top man at first can grip the arms of the bottom man as he goes over. Then later it can be done without this aid.

One of the more difficult double tumbling feats is a back-somersault executed from the shoulders of the underman while he is standing in an erect position. The top man takes his stand on the bottom man's shoulders—both facing the same direction. The top man, of course, must be accustomed to a somersault from this height. The only thing else to bear in mind is that when he leaps off he

pushes away as well as downward. Therefore, the underman must be set against this push or else the top man will not have a solid footing and this may cause a serious fall.

Another one of this type is a back-somersault from the clinched hands of the underman. In this one the underman stands with feet apart, one slightly behind the other—in a well braced position. The knees are bent slightly and the fingers are interlaced and the hands held at the crotch.



Fig. 6.



Fig. 7.

The top man walks in and simultaneously places his hands on the shoulders of the bottom man and one foot in his hands, and without faltering pushes up with the leg that is in the hands of the underman. The underman at the same time helps him to go higher by a throw up with his clinched hands, and a straightening of his legs. The top man throws his head back and his arms up at this juncture which really makes him turn a slow somersault. Don't try this unless you are sure of it or have a very soft place to land.

A somersault can also be thrown from a position of feet-to-feet. In this the bottom man lies down on his back and brings his thighs and knees up on his chest and abdomen. The calves must be retained in a vertical position.

The top man stands upon the underman's feet while they are in this position. (You can learn to jump up to this position with both feet at once.) The somersault is thrown from this position but the bottom man must be sure and push against the somersaulter with all his might. It is best to first try a flip from this position.

SOMERSAULTING WITH WEIGHTS

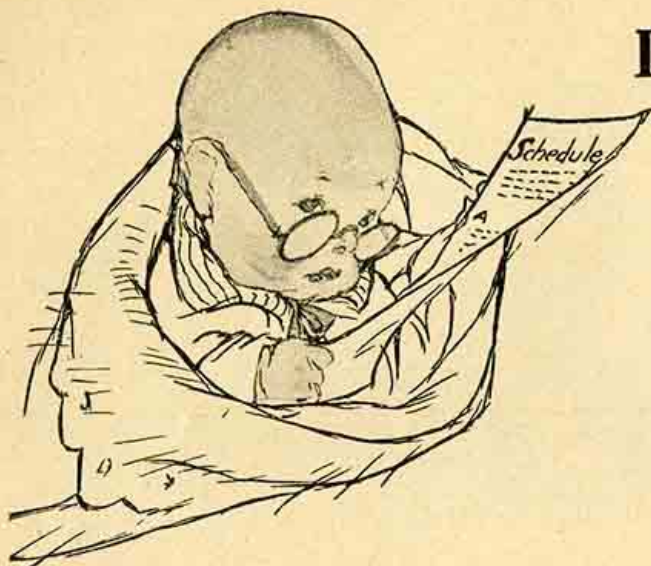
When anywhere between five and twenty pounds are used, somersaulting

with weights, that is, with a dumbbell in each hand, is not as difficult as it may seem to the novice. The truth of the matter really is that the weight within limit actually helps one to perform the "somersault" rather than hinders him.

The reason for this is, that when you throw up your hands to make the leap with forty pounds in them there is more pulling power which helps to pull the legs and body up when the leap is made. And as you go over you seem to have something to press against in keeping your upper body in the air while your feet are making the necessary half circle. This, on the face of it, seems absurd because the weights will fall as quickly as the body. But take a ten pound dumbbell or anything that weighs ten to twenty pounds and raise it up to your shoulder and then try to put it down as fast as you can. You will note that you cannot do this as quickly as you can with your empty hand. Therefore, that is where the feel of support comes from when performing the somersault with weights.

As to performing double somersaults—that is two complete turns in the air before landing, it is impossible without artificial means of giving more spring and height to the jump.

(Continued on page 80)



Lengthening Our Lifetime

II

*Did You Begin
When You Were
Born to Live
150 Years?*

By Bertha Hasbrook

TO begin at the beginning: The proper day to start in on this theoretical 150-year lifespan is the day of arrival upon the green apple. If the infant would give all his attention to this matter from his first hour, he would then be taking Time by the forelock and giving that forelock a yank that wouldn't be forgotten in a hurry.

But the infant in the cradle is so hard to convince by lectures and long tables of statistics! Chances are, he will merely howl for his bottle and let his alimentary tract, his respiratory organs, and his nervous system take care of themselves. "Ya, ya, what do I care about my arteries?" he will probably shriek. "I'm not interested in living to be an old man, ya, ya, ya! I haven't found out yet whether I'm interested in living at all, ya, ya, ya."

Now perhaps you were one of those unreasonable, ungrateful, refractory infants yourself. Were you? Did you, at the age of a week, or a month, or a year, neglect this important matter of attending to your bank account or health? Maybe you came into the world as normally sound as any other baby; and maybe, being an extravagant creature by nature, you scattered your good health to the four winds, just as some people later on scatter perfectly good greenbacks.

The greenbacks may nearly always be replaced; the health capital is far more difficult to make good. And yet, the longer science lives the more it realizes that almost nothing is impossible.

I'm going to suppose that you are a young man, in the early years of manhood, with just as much ambition to get ahead, just as much right to do so as any other straight, clean, square chap of your age. Maybe you have more than commonly good ability along some particular line—an ability that bids fair to carry you to high places, the places that every worth-while man seeks with honorable pride. You have the background of a good education; you have the asset of an attractive personality; everything is there, ready at hand, to help you spell Success at the end of your career, except—that terrible "except"—the basic capital of health. You didn't make arrangements when you were born to live to a ripe old age; and that was the proper time to begin. The first year of life is the most important year, hygienically speaking, of the entire lifetime.

Let's not blame your mother. She was the best woman in the world, except the one that is some day going to face you across your own table with a smile, God willing! Your mother did the best that she knew how. But at that time—fifteen,

twenty, twenty-five years ago—health education was very undeveloped. Mothers were not taught, as they are today. Mothercraft was not a familiar term. Nobody told your mother things like these:

“Mistakes in nourishment made during the first year of life may, perhaps, never be overcome.”

“A nervous system disturbed in infancy by noise, lack of rest and sleep excitement in general, may mean a neurotic life history.”

These and innumerable other just-as-appalling statements are startling the mothers of today and stirring them to action to save the little lives entrusted to them—as well as the health. They study, they join clubs to promote infant welfare, they consult physicians and nurses, they read volumes on the subject. But some years ago even though mother-love was just as big and warm as it is now and ever will be, they blundered very very often—all because they didn't understand.

And so I'm assuming that you are the outcome of such a blunder. Your mother didn't fully realize the dangers of that first year of life and didn't know how to protect you. You didn't die as you might have done; you somehow wriggled along, missing those first-year guns that were levelled at you, and were left over to become one of the more or less unfit. You have been able to make a start at the game of life, you may get through a good many years of it, but you are handicapped, and *the chances are that you will be lopped off before you've had your full share of happy, prosperous, helpful years.*

The three common types of ailment acquired during the child's first year of life are:

- Nutritional.
- Respiratory.
- Nervous.

Are you the unhappy victim of any of these chronic disorders? And if so, if they are all or any one of them hung

heavily like an Old Man of the Sea about your shoulders, let's see what can be done to atone, even at this late date, for the mistakes made in your infancy.

The first, nutritional ailments, result from improper feeding, I'm going to tell you frankly that it is very likely that your chronic stomach or intestinal trouble is the result of bottle-feeding in infancy. Ten bottle babies die to one that is breast-fed. Many a healthy middle-aged or old person owes the start of his good health to breast-feeding in babyhood. However, perhaps this couldn't be helped—and anyway, it's too late to help it now. So can't we set out even at this age to put that troublesome digestion in pretty fair order, at the least? Perhaps we can do even more—grim determination has been known to make an invalid over into a really healthy man or woman!

For there is such a thing as an intensive campaign for health, just as for other objects—money, or charity, or war, or education. Suppose we roll up our sleeves, give the matter our entire attention for awhile, even if it does interfere with business, and *set out with the intention of becoming well.* That intention will go farther than you realize. Say to yourself:

“Here I am, handicapped for life by a chronic ailment that keeps me always a little below par, even if I'm not laid up sick. I can't work under high pressure without giving out. I can't drive to my goal as fast as other men. I'm always less effective than my abilities warrant. In the end, I shall very likely be deprived of years of life for the reason that *a defective machine gives out earlier than a sound one.*

“Now wouldn't it pay me richly to set aside a short or long time to putting that machine in the nearest perfect shape possible? To give all my concentration to that end? To spend what money is called for, to lay aside work if I must, to do nothing on earth for a given time except *get well?* Well in the positive, constructive sense—not negatively well, but robustly, vigorously; whack-the-

world-on-the-shoulder kind of well? I'm for it!"

Good! Now, the first thing to do about it is to find who is the best specialist in your town; if there is none, go far enough to reach a good one. And the next thing is to follow his advice to the letter.

I'm ready to hazard a guess that you've never done this. Very few people do. They pay their physicians and surgeons a big price, then go away and do as they like. I can't tell what treatment yours will advise, or what diet; but whatever it is, I can urge you to obey to the fullest of your powers.

He will recommend some line of diet needed in your case. Now, don't say, "Oh, I'll try to follow it, but when I'm travelling it's impossible!" or, "I detest that kind of food. I'm going to eat greasy doughnuts if I want 'em." It can always be managed somehow, if you are once convinced of the necessity. Insist upon the prescribed diet at home, no matter who thinks it foolish. Explain your purpose very thoroughly and patiently to the mother or sister or wife; tell them that you know it will add to their difficulties for awhile, but that you hope to be able to do more for them in the end by increased health. There isn't a sensible woman alive, but will rejoice in the extra trouble taken for grape fruit at breakfast, or hot soup at lunch, or home-made custards and tapiocas instead of baker's pies for dinner, if she once realizes that you are on a wisely directed campaign to increase your physical powers.

The restaurant itinerary is deadly to the best digestion in the world. And if yours is far from the best, forswear it once and forever! Some good house-keeper in your town will take you to board, I'll wager, and cook you the meals that your doctor orders. Remember, simple, properly prepared food of the best materials is vital to a weak digestion.

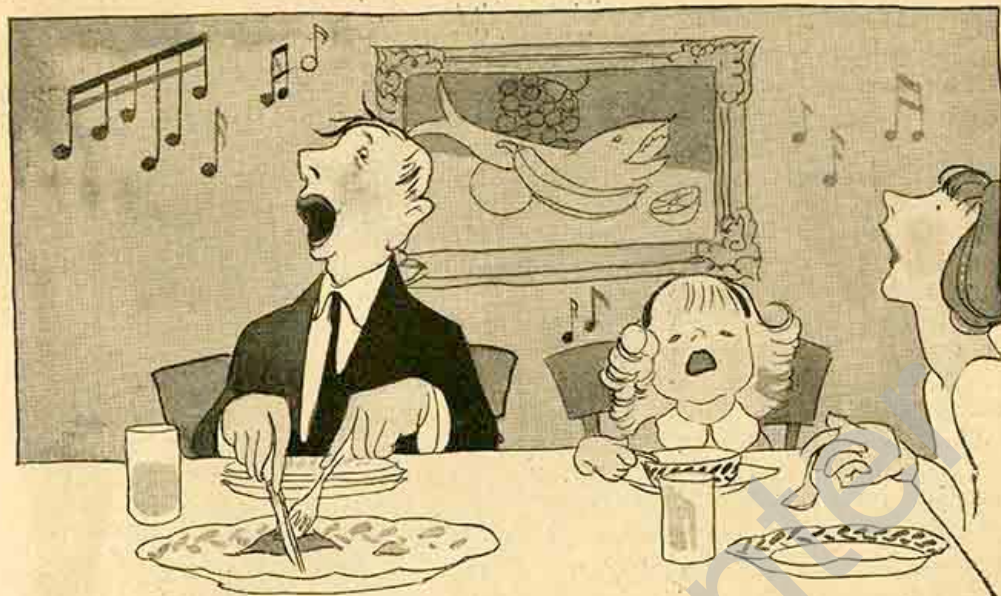
You must have the strength to give up certain foods that are harmful to you,

no matter how much you like them. I have known men who could more easily resist liquor and tobacco than they could French pastry. Rich pastries, much fried food and sweets in excess are harmful to anyone. Balance the *pro* and *con*: doesn't your indigestion cause you more acute discomfort than the doing without these foods does? You know it does! And surely you're man enough to push these things away from you if you realize that they are actually a detriment to your working powers!

You must stop all nibbling between meals, and confine yourself to the food the doctor orders. You must take plenty of exercise in the open air, in order to increase your appetite and to stimulate the general functioning of your digestion machinery. You must eat slowly, masticate thoroughly, and take a half-hour of rest after meals. You must let the heartiest meal of the day occur when the longest rest can be allowed after it—which is the evening meal with most of us. You must drink plenty of water. And you must look sharply at your mental state.

Worry, friction, home quarrels, anxiety about business, and all other forms of mental disturbance are seriously harmful to the digestive functionings. This is true at all times, but especially does it apply to the meal hour. To quarrel or worry or think of sad matters while you are eating is enough to make the mildest and best meal in the world "indigest you" as the little boy said. Think happy thoughts while at the table; the best way to accomplish this is to talk of happy things. When I was a little girl I was frequently seized with a desire to warble during meals, and I was strongly admonished to curb my Farrar-like aspirations; but I've grown up to believe that it would be better for everybody to sing at the table than to talk about some of the depressing matters that I often hear discussed.

If your chronic trouble is respiratory—with the bronchial tubes, throat, nose,



It would be much better for everyone to sing at the table than to talk about some of the depressing matters we so often hear.

or lungs—the same general rules obtain. You must consult the best specialist obtainable and follow his advice to the letter. People don't realize how seldom they do this. They have a prescription put up and take a few doses, or the whole bottleful perhaps; but pin them down; ask them "Did you never miss a single dose at the assigned time?" "Oh, well, I went out of town for a week-end and I forgot to take the medicine along—but two or three days didn't matter!" But maybe those two or three days did matter; it isn't fair by the physician or by yourself not to follow unflinchingly his recommendations.

Whatever form of respiratory ailment you have, he is pretty sure to lay stress on pure air for your breathing, day and night. He may ask you to live out of town so as to avoid the city smoke and impurities as many hours out of the twenty-four as possible. If he does, then move! It may be dreadfully inconvenient; it may upset your sister's bridge plans, or your mother's presidency of the Knitting Society, or your own pursuit of the movies; but aren't these sacrifices very small when they are put down

to offset health, efficiency, greater earning capacity, and a probably longer life-span?

On the other hand, he may advise no such thing, for commuting is now recognized as a wear and tear upon the nervous system to a certain extent, and if you are nervously weak your doctor may believe that the extra rest gained by a short trip home is of greater value than the country air. But wherever you live, let the fresh air into your waking rooms and your sleeping room! Never be without it, winter or summer, rain or shine! Your bed should be out of a direct draught, but there should be air flowing into your bedroom, cut off from you by whatever means is best available—the position of the bed, or a screen placed at the head, or a cloth ventilator in the window.

Moreover, make a sort of budget of your waking hours to see how many of them can be spent in the open in fair weather. Can't you walk to and from your work? Can't you eat on the porch? Can't you sit on the porch during idle hours instead of poring over a book inside? I'm not urging you to give up the

joys of literature; but just now you're on an intensive campaign for health, remember, and it must come first.

If your respiratory organs are weak, every cold that you have, no matter how slight, is a set-back on your road to health. Work tooth and nail to avoid these set-backs. Take a cold morning bath every day of your life to close the pores and stimulate a brisk circulation. The plunge is splendid if you react after it; if not, use the cold sponge. It is one of the best preventives of colds in the world. Then a fairly hearty breakfast and a brisk walk to business, to stimulate the circulation some more and build up a resistance to colds. See to it that your place of business is thoroughly heated without being overheated; and always well ventilated. If others object, teach them that they need fresh air as much as you. The same rule applies to your home.

Dress warmly enough for the season, but always lightly. Bundlings and swathings in excess only hamper the circulation. Protect yourself from the rain

by good overshoes, rain-coat and umbrella, but learn to go out in all weathers. And in general build up your health, thus increasing your resistant powers to the end that colds will be warded off. They lead to deafness, to sinivitis, to a weakened condition of bronchial tubes and lungs, and eventually wreck the health of anyone who is continually a prey to them.

The other ailment most likely to have been acquired in infancy is nervous weakness, and the subject is too vast to be more than touched here. As with the other ailments, you should consult a specialist; but so much of the restoration must be done by you alone, that he can only guide you on your path. In general, you must fight bravely to conquer your own nervous tendencies. You must avoid worry—"Never cross a bridge till you come to it" is as true today as when it was first uttered. You must avoid every severe emotional strain as far as possible. It struck me very forcibly awhile ago when a great physician said, "Nervous people can't afford to live by any

form of work that puts the strain of speculation on them. They break under it." Risky investments or business where all your eggs are in one basket are too much for you to endure.

Go to bed early and get ten hours of sleep every night. Take a nap in the day if possible. Work while you're at it, but quit when you quit—don't let your work tag you away from the office. Anticipate a safe and happy outcome instead of disaster, and work bravely toward that end. Keep a cool head in crises. Eat nourishing food—plenty of milk and
(Continued on page 93)



Bundlings and swathings in excess only hamper the circulation.

More About Sculpture

By Ralph Hale

SHORTLY after I had finished my article on "Modern Sculpture" in the July *STRENGTH*, I received a package containing a number of photographs showing some of the sculptural masterpieces of Mr. Adolph A. Weinman, of New York City.

You may recall that in the previous article I stressed the fact that young men seeking physical perfection would do better to strive to equal the proportions shown in the best modern statues, rather than to try and equal the development of any living athlete, or "perfect man."

It is very, very hard to find a man (athlete or non-athlete) whose body conforms to the very highest standards of proportion and beauty. Some of our athletes are magnificently muscled; others are finely proportioned; but none of them are perfect.

As I before remarked, a sculptor, when making a statue of a nude human being, absolutely *must* produce a thing of beauty. The only way to do it is to make every detail perfect. In any of our best modern statues you will find a harmony of proportion, a symmetry, and an elegance of line, which you will rarely, if ever, find in the living model. The sculptor by reason of his knowledge of anatomy, and his sense of beauty, is able to supply the perfection of proportion and development that is lacking in the model.

And that is why I say that if you are striving to make yourself physically perfect, it is far

safer to try and equal the proportions of a good statue than to merely try and copy the development of some noted athlete. It is a significant fact that of the half dozen athletes most famous for bodily beauty, at least four of them claim that their ambition was aroused by the sight of the great classical statues, and

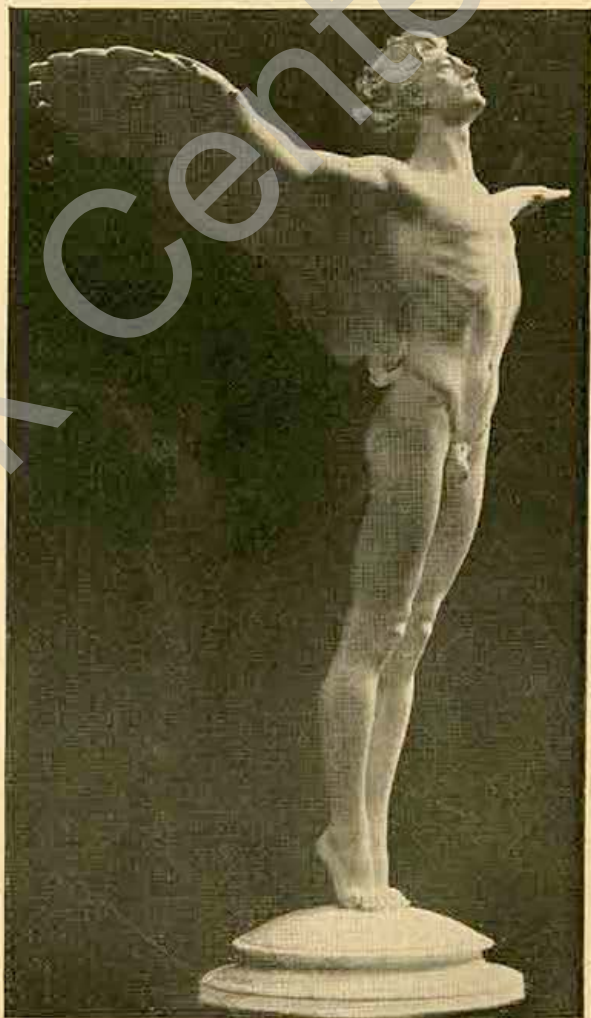


Photo by DeWitt Ward

"Sunrise." A. A. Weinman, Sculptor.



Photo by DeWitt Ward
 "The Duette." A. A. Weinman, Sculptor.

their inspiration furnished by the same statues.

As long as our leading sculptors will continue to kindly loan us reproductions of their works, we will continue to publish them for your guidance. If you are one of the many who are seeking to make yourself a fine type of physical manhood, I advise you to try and develop a figure like that of the faun in the group shown on this page. It shows a faun playing on a primitive flute while a baby satyr whistles. According to the mythologists a satyr was a creature, half-man and half-goat, but a faun was a wood-sprite; the only variation from normal being his pointed ears.

A faun, while human in shape, was supposed to have super-human physical attributes. That is, he was credited with being as swift and tireless as a stag, and as strong and supple as a leopard. Consequently any statue of a faun must show a figure of superlative lightness and strength.

See how well Mr. Weinman carries out the idea. The faun is seated, and practically at rest, but every line of his figure betokens supple power. Note how

this impression is created not by the muscular development, but by the lines of the figure. At first glance you might think that this particular faun was built more for speed than for strength, so lightly does he sit, and so easily is he posed.

But if you will estimate the figure, part-by-part, you will find that it is the body of a wonderfully strong man. For instance the neck is so properly proportioned to the size of the head and shoulders that it calls no attention to itself. When you look at it carefully you find that it is of wonderful roundness and great size—the neck of a fighting man. The same with the shoulders. As a part of the figure they are neither obtrusive nor particularly noticeable, but if you had shoulders like those you could rightly consider yourself a marvel.

Next we see the great pectoral muscles



Photo by DeWitt Ward
 "Ball Pitcher." A. A. Weinman, Sculptor.

on the upper chest — muscles like those of a gymnast, except that while on a gymnast they are unduly prominent, on this figure they fit in harmony with the rest of the physique. And the same thing can be said of the beautifully defined bands of muscle on his abdomen and at the sides of his waist. *They fit in.* His arms are smoothly tapering and suggest power from their shape rather than from their size. And as for the legs, while you get only a foreshortened view of the right and a partial view of the left you know that they are models of what limbs should be.

There you are! A man's figure cannot be beautiful unless every part of it is beautiful. Also these parts must be in true proportion to each other, else there is no symmetry.

Every one of us who look at this picture knows that this represents a man's body as it should be; and, most of us feel, as it can be. All men may have been like that when the world was young, and doubtless there are some few men alive today whose figures approach in beauty this faun of Mr. Weinman's. The point I wish to make clear is that a great artist



Photo by DeWitt Ward
"Descending Night." A. A. Weinman, Sculptor.

can, at will, produce perfect figures, and he can do it because he knows the proportions of mass and line that go to make a beautiful figure.

Most of us worship physical beauty, but an artist, and particularly a sculptor, has the inestimable joy and privilege of being able to create beauty in an enduring form. I verily believe that if you could put a replica of this statue in a big gymnasium, it would do more to raise the ambition of the club members than any amount of pictures of John L. Sullivans, Jack Johnsons and Zbyskos.

Watch a group of young men apprais-

ing the physique of a living athlete, either a picture, or the man himself.

You hear them say, "Yes! he has a great pair of arms, but—" or "He has a wonderful back and a fine chest, but— Always there is that "but." Very, very rarely do you see a man without a weak point. I do not mean that any great athlete has a part, or parts, of his body that are absolutely feeble, but that they are not up to the standard set by the *best* parts of his body; and that consequently the poorer parts look weak by comparison.

It is not necessary to have bulging muscles in order to look vigorous, or to

be vigorous. A youth may be smooth and slender and yet give the impression of great power, *provided* his proportions are right. As a proof I refer you to Mr. Weinman's "Sunrise," which surely shows an athletic youth, if there ever was one. To my mind this is a far finer representation of the vigor of early manhood, than even the famous "David" of Michael Angelo.

The companion piece "Descending Night" is an adequate depiction of the soft loveliness of young womanhood.

In my enthusiasm for these statues as illustrations of the human form divine I am apt to make you overlook the fact that these sculptors often use the human body just to express and illustrate an idea. A great pianist has to have absolute mastery of the key-board; or else he cannot convey the musical effects intended by the composer. His technique must be subordinated to his interpretation, or rather he uses his technique to *get* the effect. Similarly, a sculptor's knowledge of anatomy must be so comprehensive that he can, if he wishes, get the effect of motion in his work. Look again at these pictures "Sunrise" and "Descending Night." Can't you see that the youth is actually rising, is just leaving the earth, or in modern phrase is just "taking off." And in "Descending Night" it is just as obvious that the Night Goddess is just in the act of alighting. She is not standing on tiptoe, that is very plain, because the very position of her feet, ankles and limbs show that she is just descending to the orb. And she has not fallen rapidly—

.. (Continued on page 90).



Photo by DeWitt Ward

"On Nimble Toe." A. A. Weinman, Sculptor.

You and Your Bathing Suit

At this time of year there are about a million young and middle-aged people who are devoting a great deal of time and thought to the selection of bathing-suits.

For it is vacation time, and, to most of us, the greatest joy of a vacation is that it provides an unlimited chance to frolic in the water.

By David Wayne

IT seems to us that swimming is really our national sport and pastime. Golf enthusiasts point with pride to the growth of their favorite game, and tell us that on a fine Sunday their are at least a million golfers in action; tennis-players are legion; sporting writers give us astounding figures, showing the crowds who go to watch the big baseball and football games. But I will wager that on a hot Sunday in summer, there are more people swimming than are taking part in all other sports on the same day.

If we can judge by books and magazines of forty years ago, the only class of people who did much swimming were the small boys. At that time our seaside resorts were in their infancy, and surf bathing was just becoming popular.

In, say 1883, you would find a few thousand people bathing in the surf at resorts scattered along the North Atlantic Coast. Nowadays on any holiday or week-end in summer, there are hordes of swimmers at every coast resort from Maine to Southern California. Up on the borders of the Great Lakes the towns and villages have their tens of thousands of bathers; and every small lake, pond, river and stream, is thronged with real swimmers.

All in all, I think it is fair to say that there are certain summer days when there are at least *five million* bathers and swimmers in action. And what other sport can number such an army of participants?

If swimming is the national sport, then the bathing-suit is one of our national institutions. For five million swimmers means five million bathing suits. You cannot confound me by say-



© Keystone View Co.
The One-Piece Swimming Suit showing the cut and material preferred by Miss Gertrude Artelt—"the most beautifully formed woman in America."

ing that there are a large number of boys and men who swim in the country streams and dispense entirely with the formality of a suit, for their number is more than counter-balanced by the crowd of young women beach-bathers who don fancy suits and never go in the water.

The bathing suit is important as a factor of industry, because it provides work for scores of manufacturers, despite the fact that thousands of girls and women make their own suits. Again the bathing suit is of vast importance in providing employment for many newspaper

men. Some of our "Sunday Supplements" and "Illustrated Sections" would have to go out of business if there were no bathing girls.

THE QUESTION OF PERSONAL APPEARANCE

It has gotten to be so that swimming is more than just a sport. It is more or less of a social function. It is by far the jolliest of all athletic pastimes. Only the experts swim by themselves. Like fish, most people prefer to swim in shoals. When there comes a day that makes you feel as though you would like to take a plunge you know that hundreds of others have the same impulse. And when you get to the club pool, or the lake, or the river, you find the crowd is there ahead of you, and it is literally a case of "the more, the merrier."

If you have planned to spend your vacation at a sea-side resort, you know that you will be on the beach at least two hours a day, and you have no desire to make your daily appearances in a bathing suit which is either out of style, or which shows you to a disadvantage.

If you are going to meet your own "crowd" at bathing hours, you simply must have a suit that makes you look as attractive as the rest of them. You would be just as foolish to make your appearance in an ill-cut, unbecoming or out-of-style bathing suit as you would be to go to a dance in your oldest suit, or a gown five years old.

Our young people are distinctly a go-ahead crowd and really suffer if they have to appear in public in street or sporting clothes that are not up-to-date in every respect. It takes much less courage to be advanced, than to be behind the times. That is one reason why almost any girl however conservative and



© International Newsreel Corp.
The first figure at the right shows the ideal length suit for men swimmers.

modest, would far rather appear in public in a one-piece suit than in a suit of the vintage of the nineteenth century.

SURF-BATHERS, BEACH-BATHERS, AND SWIMMERS

Surf-bathing, which is the oldest kind, is exactly what its name implies. It became popular fifty years ago at our Eastern sea-coast resorts. Its devotees were bathers, not swimmers. The main idea was to wade out in the surf until you were about waist-deep, and then to jump up and down while uttering loud and happy cries. The costume was cumbersome, but not elaborate. The men wore

long-sleeved, loose, one-piece flannel suits with full trousers which reached a little way below the knees. In such a suit an Apollo would look like a hayseed clown. The women wore stockings, long flannel trousers of ankle length, an overskirt almost as long, long-sleeved upper garments, and huge straw hats, tied under the chin. In that costume you might be a Venus or a wrinkled crone. One looked as well as the other.

As bathing became more popular, and people actually tried to swim, as well as to bathe, the suits were modified so as to allow greater freedom of motion. The two pictures on the next page show suits that were popular thirty years ago, and which were really quite daring for that period.

Compare them with the other pictures in this article and you can see how our customs, as well as our fashions have changed.

You must remember that when your mothers were young there was still a polite fiction to the effect that all women



© Keystone View Co.

Taken from a beach fashion parade. A real swimming suit flanked by two of those "don't go near the water" costumes.

were like the wooden ones in the wooden Noah's ark sets; but about twenty years ago it became generally acknowledged that a woman was a biped,—that she actually had two legs. More than that, she was granted the permission to use those legs and take part in the vigorous sports practiced by the opposite sex.

I suppose a generation ago there was just as large a proportion of shapely men and women as there are today, but you would never think so to look at the bathing pictures of your parents' youth.

After sea-bathing became a part of our national life and as the bathing suits became more elaborate, there appeared that ornamental creature, the beach-bather—the shapely young lady who wore a "creation" which was extremely good to look at, but which was not intended to be taken into the water at any time.

But don't laugh at the beach-bather, for she is largely responsible for the beautiful costumes of this day. She made the other girls envious, and they immediately sought means to obtain suits



sort. In some of those places they allow one-piece suits in April and May before the season opens, but prohibit them in June and July. When you arrive at your your particular resort you had better be guided by the local custom. If the rest of the girls go without stockings, you can leave yours in your trunk. But if they wear stockings, you had better do likewise. If stockings are the thing, yours *must* be silk, even if you have to go without lunches for a week to save up the extra price.

GRACEFUL AND UNGRACEFUL LENGTHS

In choosing or designing a bathing suit you should bear in mind, that, as a general rule a loose garment can be long, but a tight garment must be short.

If you wear a skirt, it can reach to just above the knees, as in the two outer figures in the picture on page 41, but if you wear a one-piece suit, the trunks must be short as in the centre figure. Tight-fitting trunks which reach almost as low as the knees are very unsightly—and any loose garment which reaches only half-way to the knees is positively ugly.

There is only one really graceful length for the skirt of a bathing suit, and that is it must stop one or two inches above the knee joint.

that were both ornamental and useful.

When real swimming became popular among women it compelled the use of the only sensible costume, the one-piece suit, and as time goes by that kind will be the only one worn.

FOLLOW THE CROWD

In selecting a bathing suit for this summer's vacation, you must be guided by the customs of the place you are going to visit. If you are a girl who is so lucky as to live in California, you do not have to worry, because practically everyone out there wears one-piece suits, be they young, middle-aged, or old.

In parts of the Middle West, and in some of our Eastern bathing centers the one-piece suit is popular, but the only proper kind is the variety worn by Miss Artelt (page 39), where there is an extra fold of cloth which covers the short trunks. The original one-piece, or "Annette" is rarely seen.

Dont' be misled by the pictures which appear in the "Rotogravure sections" of your Sunday newspapers, particularly if you are thinking of going to an Atlantic Coast re-



The two photographs on this page illustrate suits that were in the height of fashion 25 years ago.

Anyone's figure, man's or woman's, can be positively ruined by a suit which just covers the knees, shoulder, or elbow joints. For some reason, the shapeliest arm can be made to look shapeless if you cover the shoulder joints and wear sleeves that reach just below the arm pits. In order to show the arm at its best you must reveal the shoulder.

The same principle applies to the legs. A person may have a pair of legs that are models of outline and symmetry, yet a pair of trousers, or a skirt that comes two inches below the knee joint, will absolutely spoil the contour of the limbs.

I mention these things because their importance is not always realized. Remember that details are important, and as custom permits of wearing skirts that are less than knee-length you would only make yourself "look queer" by covering the knees.

When it comes to materials, the wisest man is not competent to advise the youngest girl. The kind and pattern of the "goods" to be worn this season is a matter beyond this writer's ken. All he pretends to know is that some suits are wonderfully becoming and graceful and others horribly the reverse, and that grace is more a matter of length and cut than of material.

I think that there is much more latitude in the choice of suits for sea-bathing than for fresh water swimming. If you are going to spend your time where there is a beach, you must remember that what is a perfectly proper costume for swimming, is markedly improper for beach-lounging.

If you are one of those who spend all their time out beyond the breakers where the water is smooth, your suit should be as scanty as is permissible, but if, like most young people, you alternate your dips with strolls up and down the beach, taking part in the regular beach-sports and lolling around with "beach-parties," then your costume must be more conventional and ample. At that, there is a



© International Newsreel Corp.
We thought this was a bathing suit but the photographers had it labeled "A Beach Costume."

happy mean. It is perfectly possible to design a skirt that is well-fitting and of the correct length and that will at the same time permit you to swim or run, or play leap-frog without hindrance to freedom of motion.

SWIMMING AND "STREAMLINES"

All girls who are real swimmers wear the one-piece suit because it is the only

one that permits them to slide easily through the water. A few years ago our engineers discovered that in order to pass easily through a fluid an object, be it ship, aeroplane, or fish, must have a certain shape; and that there were certain "streamlines" that reduced the resistance to the surrounding fluid. (Water is a liquid, but both water and air are fluids.) Even racing automobiles have their bodies designed in the "streamline principle."

In the case of a swimmer, the more easily she slips through the water the better she will do, whether she is going for speed or distance. Any loose or projecting part of her suit will reduce her speed, and kill off her endurance by offering resistance to the water.

A loose and pleated skirt, such as shown in the right-hand figure page 41, may look well on dry land, but in the water it would mean a handicap of about twenty yards in a hundred-yard sprint. Therefore, the silk or jersey "one-piece" suit, which clings close to the

body, and which will not absorb much moisture is the only thing to wear if you are out for real swimming.

AS TO MEN

Well, nobody looks at the men anyway, so why bother to give them advice. As a rule, they wear what is most comfortable. At the same time, I would like to point out that if any young fellow has a fine build he will look best if he wears a suit like the one on the fellow at the right of group on page 40. That chap has a suit of exactly the correct cut and length.

Many young fellows wear two-piece suits, and some of them make the mistake of letting the jersey hang down outside the trunks, which, in my opinion, is the wrong way. The jersey should be always worn under the trunks, otherwise if the trunks are short, you may give the impression that but one garment is being worn; and a very inadequate one at that. The "one-piece" suit is really the best for men as well as women.

If you are a young chap who is going to spend several days at a place where there is much swimming done, be sure and take your own suit and don't depend on hiring one.

These people who hire out suits are awfully poor pickers when it comes to fitting you out. Their suits are made to last several seasons—and they look it. Almost invariably they will hand you out a suit that has quarter length sleeves and "pants" so long that they gather in folds about your knees.

Did you ever see any of these English



© International Newsreel Corp.
Two conservative models worn at Palm Beach.

track athletes? They wear shirts with quarter length sleeves and pants which just clear the knee, and they certainly look awkward when they step out in company with a lot of our college athletes in their sleeveless jerseys and abbreviated trunks. Well, if you hire a suit you will get such an ungraceful looking suit as those English trackmen wear. And, as Mr. Briggs says, your day will be completely ruined.

There are two other matters I might mention which are some times overlooked in selecting a bathing suit. Many young women, when selecting the color, or colors, to be used in the suit, make the mistake of picking the colors to suit their winter complexions. They forget that after spending several days on the beach they will become pretty thoroughly tanned, and that colors which harmonize with a pink-and-white skin, do not always go well with the same skin when it is darkened through exposure to the sun.

The other thing is in reference to buying your suit at a store. A "beach-bather" frequently makes her own costumes, and is thus assured of a perfect fit, but is not always safe to buy a suit according to measure. Again, even if your intentions are of the best, you cannot make a real one-piece woven (or knitted) suit. Few stores afford the facilities for "trying-on" a bathing suit, and therefore, I suggest that when you get your suit, you buy it subject to a "try-on" at home. Then when you do try it on, be sure to have some friend or



© Keystone View Co.

A Florida cottager on her way to the bathing beach.

member of your family present to help you decide whether it really does fit, and whether it is becoming to your style.

Readers' Service Department

If you want any baseball, football, golf, tennis, soccer, basketball, skating, track or other sporting equipment and do not know either where to obtain it or how much it will cost, get in touch with STRENGTH and we will send full information at the earliest possible moment.

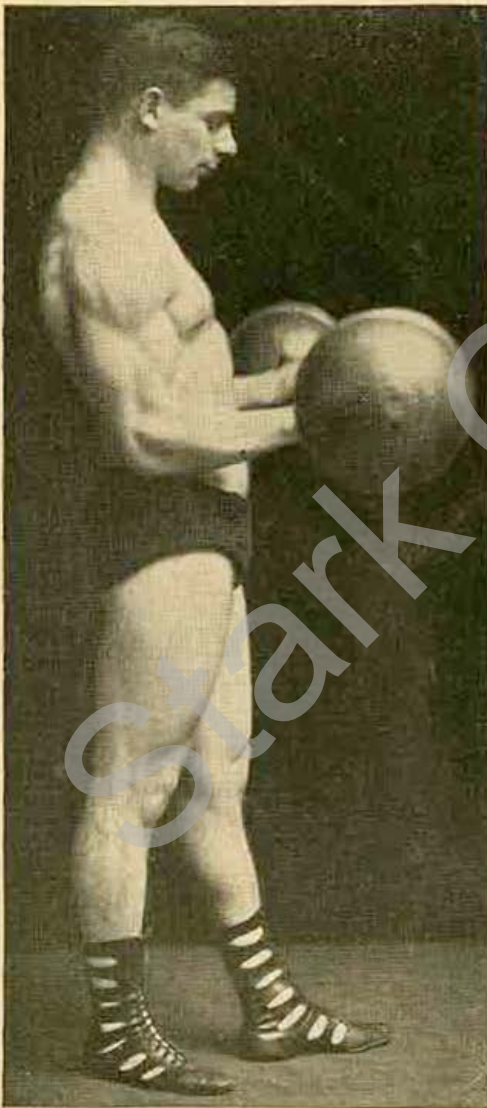
If you would like a sweater, jersey, leotard, pair of Roman sandals, trunks or any similar athletic clothing, we can obtain prices and full information for you.

If you want Indian-clubs, chest-weights, rings, parallel bars or any gymnastic equipment, let us know.

The Upper Arms and How to Develop Them

By B. H. B. Lange

*Director of Department of Physical Education, St. Edward's College, Austin, Texas. Formerly
Director of Physical Education, University of Notre Dame, Notre Dame, Indiana*

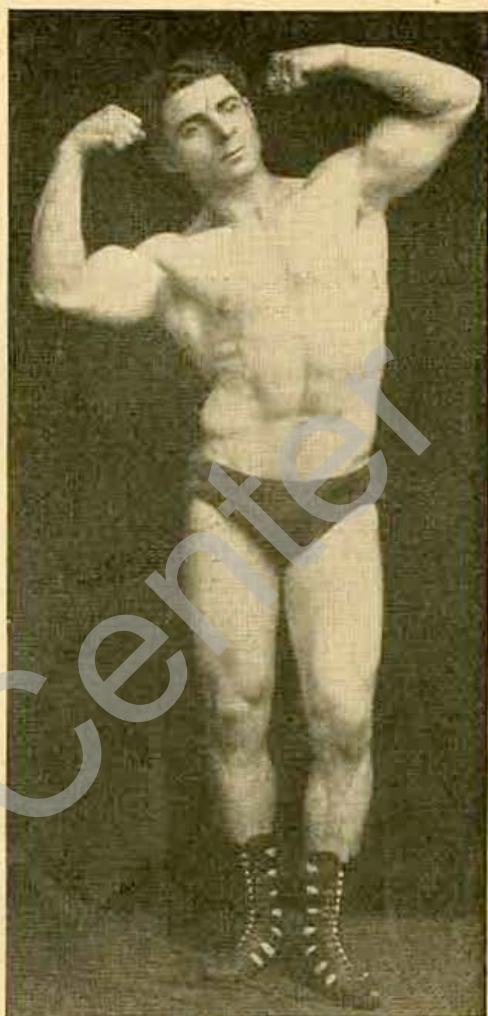


The "two-arm-curl" with a moderately heavy bar bell. Recommended as a great developer of the biceps.

PECULIAR as it is, the fact remains, that in the minds of most boys and young men, when they think or speak of their arms or "muscle" it is always their biceps that occupies the center of the thought stage. Apparently the young man forgets that his arm, especially the upper arm, is composed of a bit more than just that little hump or rise of muscle which he very proudly exhibits every time he gets an opportunity. Obviously the arm would be an extremely odd looking affair were there really nothing more to its structure than just the biceps muscle, than just the hump located on the front part of the humerus, the bone that constitutes the framework of the upper arm. How especially this one muscle group occupies the mind of some youths can be gathered from this fact, that the afore-said kind of youth will even go so far as to accredit a young man with having a "fine build" solely on the strength of the size of his biceps muscles. Now a boy or young man with the least particle of reasoning power will instantly see how absurd it is to consider a man very strong, or even just ordinarily strong or well built, simply because that man has a fairly well developed biceps. It should be borne in mind that the biceps muscle is chiefly and largely a lifting muscle, and that even the sphere of its lifting activity is somewhat limited. This muscle, called "biceps" from the Latin words "two-headed," is the muscle

that causes a man to raise his forearm, bending the arm at the elbow, so that his fingers will come in contact with his front shoulder muscles. That, briefly, is the chief action of the biceps muscle. With the arm hanging at full length from the shoulder the duty of the biceps muscle is to bend the arm at the elbow and lift or raise anything grasped in the hand to the height of the shoulders. It will also be used in lifting objects from the floor, but here it does not act alone, it works in cooperation with various other muscles, and groups of muscles of the body, the legs and back and others. Furthermore, when anything is to be elevated or raised above the shoulders then the biceps has very, very little work to do. Comparatively speaking, for at this stage the triceps, or the three-headed muscle group largely comprising the back part, the larger part of the upper arm, takes up the burden of lifting or strictly speaking of pushing or pressing up any weight or object above the head. However, in raising anything to arm's length or at any length above the head, the triceps muscles are always largely assisted by the deltoids or shoulder muscles, by the latissimus dorsi or upper back muscle, by the pectoralis group or front chest muscle and various other smaller and deeper lying muscles.

The upper arm then, is not just the hump of flesh on the front of the humerus (or bone of the upper arm) which makes its appearance every time a boy or young man bends his arm at the elbow; for that part, the biceps is much smaller and much less powerful than that muscle group on the back of the humerus, that muscle group known as the triceps. To have a perfect arm, it is very plain therefore that both groups must be developed in proportion. Usually most boys and young men think only about developing the biceps. Strange to say, also, so many exercise systems devised by many so-called physical culture professors, put



A pose by Sigmund Klein, showing the kind of upper arms you can acquire by practicing Professor Lange's exercises.

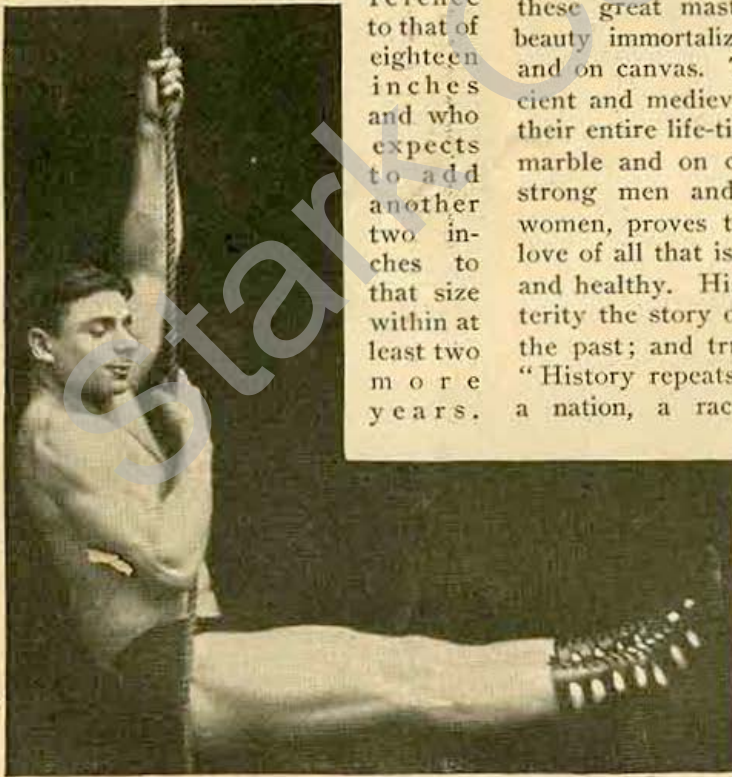
little or absolutely nothing in their systems of exercise for bringing about complete all-around arm development. They stress biceps development and let the rest of the arm go. Perhaps they are of the opinion that it will take care of itself.

The functions of the upper arm muscles are chiefly these. The biceps to lift and to aid in lifting anything from the floor to shoulder height, and also to flex or bend the arm at the elbow. The triceps to press or push anything before, behind or above the shoulders or head, and also to

straighten the arm. Then there are smaller muscles working in harmony with these two groups whose duty it is to assist these groups in maintaining the upper arm in a straight position, or whose duty it also is to help these groups turn the upper arm to the right or left, inwards or outwards.

With the foregoing points in mind it will be easy to understand just why and just how the following few exercises will develop a pair of good-looking, strong and, best of all, very healthy arms. These exercises are not just theoretical ones. They are most practical. They have been evolved by men whose physiques bear the strongest testimony, proof, the stamp of tried efficacy, that these exercises are really worth while. The writer has within three years time developed his own upper arm from a twelve inch circum-

ference to that of eighteen inches and who expects to add another two inches to that size within at least two more years.



Professor Lange says that "chinning the bar" and rope-climbing add size to the biceps muscles.

There are many others, hundreds of other various exercises that are described as arm developers, but some of these will be just mentioned. Those that really and actually develop alone will be given.

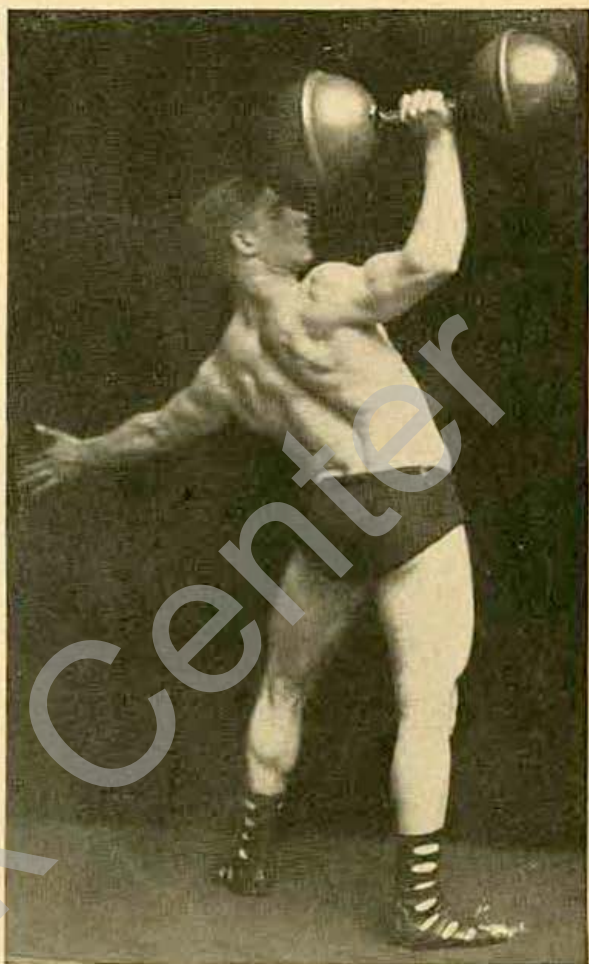
In pursuance of the instructive idea that good illustrations or pictures of athletes whose physiques prove the worth while of exercise, are the best and greatest means of inspiration to other young men, it has been thought wise to give the names and descriptions of some such real athletes. In that division of exercises pertaining to the shoulders a few men and exercises were described. Some reference was made to certain sculptural masterpieces famous because of the beauty and strength of physique represented. It would be well for the reader, for the young man, for every young man to possess prints or pictures of these great masterpieces of physical beauty immortalized for us in marble and on canvas. The fact that the ancient and medieval masters did spend their entire life-time in reproducing in marble and on canvas the figures of strong men and beautifully formed women, proves their belief and their love of all that is beautiful and strong and healthy. History has left to posterity the story of the great people of the past; and truly has it been said, "History repeats itself." As long as a nation, a race or a people, are

physically and really strong and beautiful, its men and its women will be mentally and spiritually strong and beautiful. On the other hand, as soon as a nation, a race or people indulge their bodies in empty ease and vicious licentiousness, as

soon as they make the mistake of imagining that they can develop red blooded, strong, virile bodies by substituting vitriolic dissipation for dynamic exercise, then there is but one result—dissolution! History—the history of nations as nations, the history of man as man and the history of woman as woman has time and again proved this to be so. Macedonia, Sparta, Carthage, Greece, and Rome; each in turn ruled the world, until—luxury and dissipation took the place of exercise and good health.

Every one knows who Hercules was, a figure personifying virility and great strength; super-human strength and massive proportion. True it is, that his strength is more desired than his size, but Hercules does inspire. There is Ajax, another figure of strength and beauty of development. Hector, Achilles, Mars, Atlas, even the lame god, Vulcan, and many other great heroes and gods of the days of long ago, whose memory lives in poetry, prose and sculpture, are all fine examples of men who possessed ideally developed arms.

And today, perhaps even more than in those days of ancient heroes, will be found young men whose development of the upper arms is phenomenal. Some are indeed as massive and as strong as Hercules of old, others enchant with arms as clean-cut and beautifully formed as are those of Mars, Achilles, Hector, and all the numerous other immortals. Today, as in the days of long ago, there are men who, although their bones are small or large, their arms have been proportionally moulded and developed. The youth whose framework, whose bony structure is slight in circumference,



The "one-arm-press" with a dumbbell is the most effective exercise for building up the triceps muscle on the back of the upper arm.

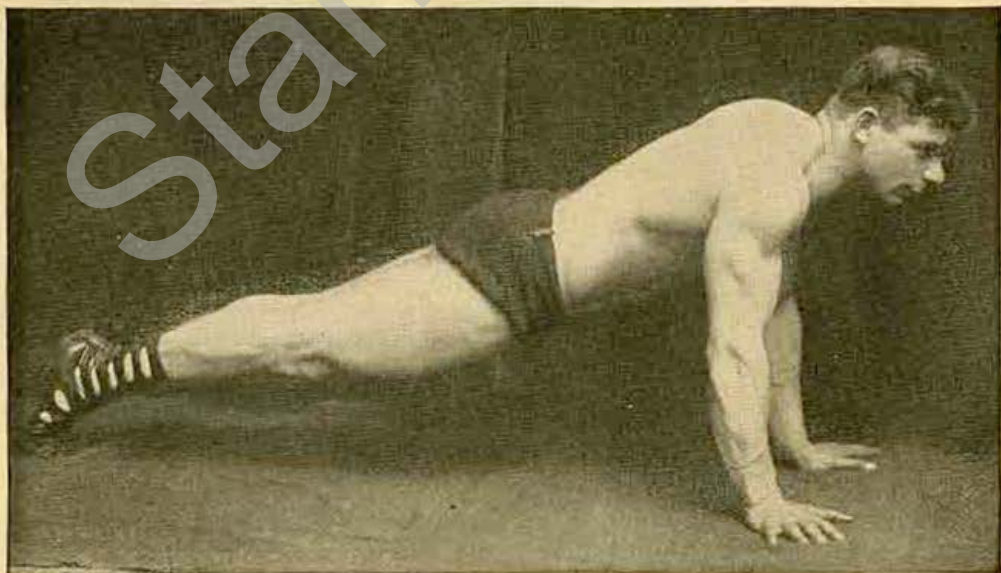
obviously and naturally will not develop the same sized muscles as will the young man whose bones are large in girth. It is the old principle of beauty and of harmony again. There must be consistency in everything, even in the matter of muscular development, and especially in the case of these upper arm muscles.

Eugene Sandow, the man who more than any other could lay claim to the title of "the world's most perfectly and most beautifully developed man," possessed but a small sized wrist, the indicator which shows the smallness or largeness of the entire arm, yet Sand-

dow developed an extraordinarily large upper arm. He studied the different actions of all the upper-arm muscles and exercised them accordingly. Arthur Saxon, Joseph and Adolph Nordquest, George Jowett, Maurice Deriaz, George Hackenschmidt, Henry Steinborn Milo, Ignatius Newbauer, Noah Young, the writer, and numerous other present day athletes, are all men whose framework is conspicuous because of its heaviness, because of the large circumference of the wrist. These men have all acquired upper arms of seventeen inches or more when flexed. If a man like Sandow with his small wrist—it is said to have been no more than seven inches in circumference—could and did develop his upper arm so that it took over sixteen inches of tape measure to go around it, and if men like Goodman, Snyder, Coulter, Tauscher, MacMahon and an entire army of others in the light weight and light-heavy weight class developed upper arms of between fifteen and sixteen inches and more within a comparatively short period, it should give impetus and inspiration enough to every

boy and man to try and do likewise. There is this point to bear in mind, namely, that next to the neck, the upper arm muscles have proven to be the easiest muscles to develop; that is, they respond to exercise treatment the readiest and the quickest.

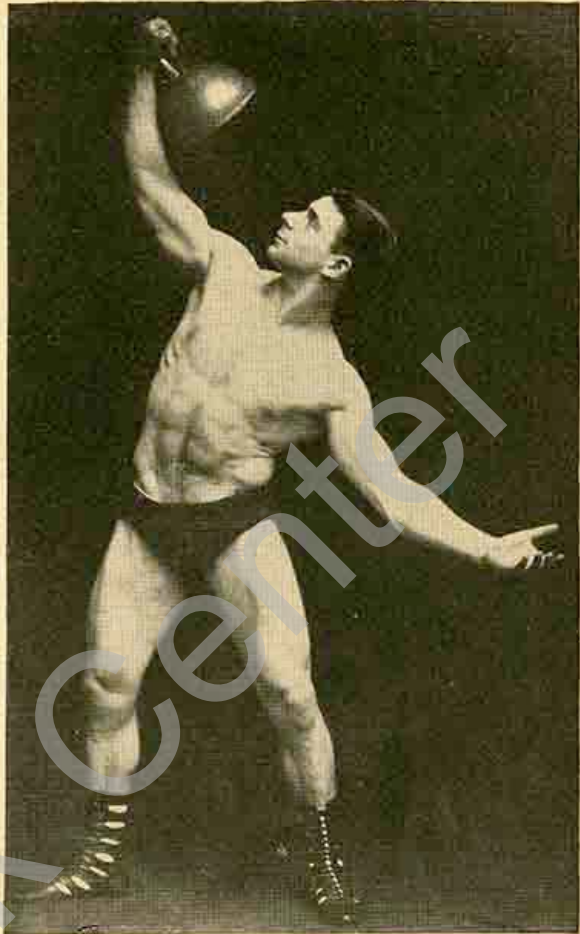
It was stated in a preceding paragraph that the biceps or front upper-arm muscle is a lifting muscle, that it bends the arm at the elbow. Now keeping that point in mind it will be understood why such more or less often repeated movements of the arm while holding some weight in the hand or hands will soon develop the biceps or front upper arm muscle. This movement, because of its characteristic motion, is called the "curl." When performed with one arm it is called the "one arm curl," and with two arms the "two arm curl." This is the most effective as well as the most standard exercise for developing the front upper-arm or viceps muscle. Briefly, it is performed as follows. Use a bar-bell, that is, a long-handled dumbbell. Unless the user is very weak, about twenty-five or



The floor-dip is another effective triceps builder, especially if you keep the body rigid and do all the work with the arms.

thirty pounds is a sufficiently heavy weight with which to begin. The handle should be gripped in such a way that the weight is evenly balanced. The hands should not be any more than shoulderwidth apart, nor less than that with the "knuckle down" grip, that is, as the hands grip the bar-bell, the palms are upwards, the knuckles downwards. The bar-bell is now held at arm's length in front of the athlete, he starts the curl first by bending his wrists upwards—he should keep his wrists bent all the time during the course of this exercise, as this has a decided developing effect upon the muscles on the inner side of the fore-arms. The movement is continued, with fair slowness until the athlete has raised the weight to his chest. The writer's method has been to raise or curl the bar-bell until the handle of the bell touches the front of the chest. Care should be taken that the bell is curled, not swung or thrown up. It must be curled by the power of the biceps muscles solely.

In order to facilitate this it is best to keep the elbows as close and as stationary to and at the sides as possible. Lower the bell slowly until the arm is again perfectly straight, but the wrists should always be kept turned up even when the arms are in the completely down position. This exercise should be repeated at least ten times in the beginning, and for four exercise days it should be repeated that number of times. Then it should be tried eleven times for four exercise days. Then twelve times for four exercise days until the athlete is able to repeat it twenty times for four exercise days, using all this time twenty-five pounds and exercising only every other day!



In this picture you can see how the act of elevating the weight flexes the triceps muscle.

Then the weight should be increased by five pounds and the same schedule should be carried out as just described, then five more pounds added, and so on. By the time a young man is able to curl sixty pounds twenty times, he will have a real pair of biceps. There is a second form of this same exercise known as the "reverse curl." As its name implies, this exercise is done while holding the bar-bell with the hands in a grip the opposite or reverse of the other method. The knuckles are turned up instead of down. This exercise will be treated more specifically when describing fore-arm exercises as it is chiefly a fore-arm exercise.

Probably the most popular exercise or "stunt" there is, is the one known as "chinning" the bar. When it is possible to have a horizontal bar, pair of rings, trapeze or some other more or less suitable contrivance from which a young man can hang by the arms, the exercise called "chinning" can be indulged in. It is a good biceps developer. It is not as good as the exercise just described, however, and it is not always as convenient, nor is it possible to practice progressively by chinning. There is this point to bear in mind when practicing chinning, that it should be done rather slowly, and not jerkily. The body should be pulled up until the performer's chin is over the bar, and the body should be lowered until it is at full arms' length—that is, the arms must be straight, not bent.

Another good method for developing the biceps muscles is hand-over-hand rope or pole climbing; and whenever a young man has the advantage of a gymnasium apparatus room, he will gain some biceps development by going up and down, using the hands only, on the inclined ladder. Lifting any weight from either the floor or from a chair or box, etc., and pulling it up to chest or shoulder height by the use and power of the biceps muscle, tends to develop these muscles. The two-arm curl has been described: the one-arm curl will also greatly develop the biceps muscles as it is practically the same as the two-arm curl. The difference being, as is obvious, that one arm is used at a time. A dumbbell is better than a bar-bell for the one-arm curl.

To turn now to the triceps or back upper-arm muscle group. As the biceps is chiefly a lifting and arm-bending muscle, so the triceps has the opposite function. It is a pushing and arm straightening muscle, and any movement or any work done whereby a weight, light or heavy, is pushed or

lifted up above the head and shoulders, tends more or less to develop the triceps muscle. But as well-regulated, methodical, systematic, intelligent and progressively arranged exercises alone will bring the best and quickest and safest results, a few of the most effective ones will be described. In the treatise on deltoids and shoulder development several exercises were described that are also very efficient triceps developers, especially those lifts or exercises known as the one-arm press and two-arm press, military style and also side-press—one arm.

The writer has personally found out the following exercises to be the best triceps developers. The youth should use a light, adjustable dumbbell, for real results. It need not be heavier than twenty pounds at the start. An increase of five pounds about every six weeks is sufficient. The bell is on the floor in front of the athlete. He should assume the correct position. When the right arm is being exercised he must stand in such a way that his right foot is pointing straight ahead. Not "pigeon-toed" fashion, not "flat-footed" fashion, but straight ahead, the left foot a little to one side and to the rear of the right, but the left foot points off at an angle, not straight ahead. This position of the feet is reversed when the left arm is being exercised. The athlete picks up the bell, holds it shoulder-height in such a way that the handle of the dumbbell is pointing not straight towards the front, but on a line parallel with the line of the shoulders. The free arm is held straight out at the side from the shoulder. Then the athlete should with fair slowness push up or press the weight to arm's length above his head, leaning towards the side opposite the pressing arm, while the free arm as he thus leans over should touch the side of the leg near the knee. Then he lowers the bell

(Continued on page 84)

How to Perform a "Strong Man" Act

By Alan Calvert

AS soon as a young physical culturist becomes better built and noticeably stronger than his friends, he is constantly requested to give exhibitions at various entertainments. This is particularly the case with those young athletes who are devotees of weight lifting. As most of you know, the average man cannot put up a 50 pound dumbbell, nor lift a 250 pound weight from the ground. So when a group of young men see one of their number lifting 150 pounds above his head with apparent ease, lifting anywhere from 500 to 1,000 pounds clear off the ground, and doing other remarkable feats of strength, that particular young man soon gets a local reputation as the strongest man in his vicinity. I know this to be a fact, for I constantly receive letters from users of bar-bells stating that they have reached a certain point of strength and development, and going on to say that their friends have asked them to give an exhibition. Invariably the letter closes with a request that I tell them just how to give such an exhibition.

Recently we had a distinguished visitor to the editorial offices, in the person of young Mr. Siegmund Klein, of Cleveland, Ohio. I wrote an article about this young athlete in *STRENGTH* for October last, and several times before that we have shown pictures of Klein, and both the article and the previous pictures had created favorable comment.

I, myself, had marveled at the beautiful figure and the wonderful muscular development shown in the pictures which Klein had mailed us from time to time, but I always reserve my final judgment on a man's build until I see him in the flesh. Shortly after Mr. Klein arrived in Philadelphia, I took him to our favorite photographer and

secured quite a number of poses. He is the athlete whose pictures illustrate and adorn Professor Lange's article on upper-arm development in this number. I knew that Klein had given a



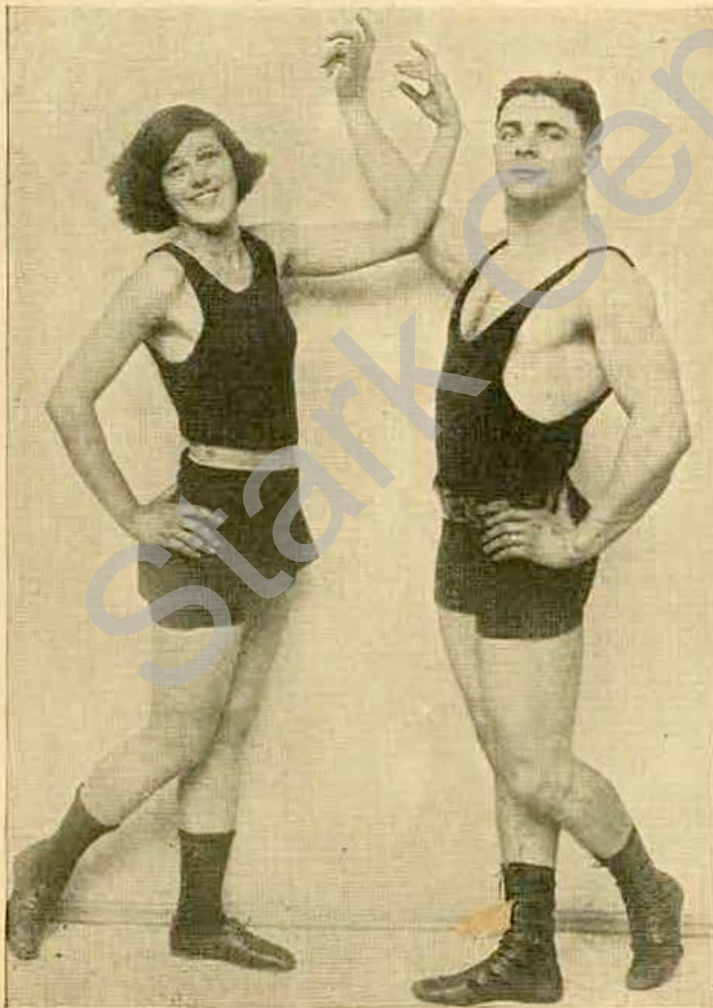
Fig. 1.

number of exhibitions in his own town, and he brought with him a lot of press notices which showed that his act made a tremendous hit. So we secured the services of another model, and had pictures taken showing some of the stunts which Klein does in his regular act, which are reproduced herewith for your benefit. It seems that some time ago Mr. Klein had the idea of writing an article on this very subject, and he had brought some notes. I have used his notes as the basis of this article, so that while my name appears as the author, he is really responsible for the

ideas which appear in the article.

Before going on with the suggestions for an amateur act, I would like to say that in my opinion, Mr. Klein is just about the best built man in the rising generation of lifters. He is a short chap, standing only five feet five inches, and he weighs 144 pounds. His proportions are simply superb. There is not a weak spot in his whole physical make-up. In a way he is like some of these great statues written about by our Mr. Hale, in that he looks impressive from any angle of view. This is undoubtedly due to the perfection

of his proportions, and also perhaps to the fact that he is naturally and unconsciously graceful in everything that he does. The photographer, Mr. Scott, who has taken the pictures of scores of strong men including Matysek, Nordquest, Massimo and Steinborn said to me, "Mr. Calvert, this boy is about the best built athlete you have ever brought in here. He has a wonderful form, and all his muscles are beautifully shaped. He really does not have to pose, because every position he takes and every movement he makes is the perfection of balance and rhythm," Mr. Scott and I were both impressed with the pose shown in the



Introductory Pose—Mr. Siegmund Klein and Miss Alberta Faust.

frontis-
piece. Many
of you will rec-
ognize it as a
pose made fam-
ous by Sand-
ow. Klein has
copied Sand-
ow's position
with rare fidel-
ity, and i. it he
shows the
same wonder-
ful depth of
chest, the same
clear cut ab-
dominal mus-
cles, and the
same round-
ness of limbs
that are so no-
ticeable in Sand-
ow's picture.
Mr. Scott thinks



Fig. 2.

that the most
unusual of Klein's muscles are those at
the sides of his waist, but I think that
they are no more remarkable than his
abdominal muscles, nor any other
muscles of his body. In my opinion,
the most outstanding muscle shown in
this particular pose is the triceps of
the right arm, which in the picture you
see apparently projecting sideways
from the right arm pit. The remark-
able thing is that Klein made no effort
to flex that muscle; it just naturally
fell into that shape when he raised his
arm.

HINTS ON GIVING AN AMATEUR SHOW

In the first place, if you are re-
quested to give an exhibition at some
smoker or entertainment or fair for
benefit of a charity, you had better
give up all idea of using your bar-
bells and dumbbells. Remember that
the scientific lifting of weights is not
understood by the general public. If
you are going to give an exhibition to
an athletic club or before an audience

composed of other lifters, then you
could use your bar-bells, but the gen-
eral public is not educated to either an
understanding or appreciation of scien-
tific lifting, so in your act you must
lift live weights instead of dead
weights. In other words, you have to
secure and train a partner (either man
or girl) and do a little bit of practic-
ing before you put on your show. In
selecting your partner you should al-
ways pick out a person who is from
twenty-five to thirty-five pounds
lighter than yourself. Of course I am
assuming that you have put in a good
deal of practice with dumbbells, and
that you have reached the point where
you are easily able to lift over the head
(with either one arm or both arms) a
bar-bell as heavy as you are yourself.
It is harder to lift a human being than
it is to lift a bar-bell, and that is why
it is necessary to have your partner
weigh considerably less than you do.
No "strong-act" is impressive unless
all the feats are performed with the

appearance of ease. If you weigh 150 pounds, it is better to have a 125 pound partner that you can lift around without apparent exertion, than to have a 150 pound partner whose great weight would make you show every indication of strain, each and every time you pick him off the ground. Mr. Klein says that the best type to select is a short and rather chunky person, because one of such build always looks heavier than the tall, slender variety. His regular partner is a young athlete of tremendous physical development, but very short. In these pictures Mr. Klein is posed with a young lady who weighs about 115 pounds, but who is so proportioned that she looks considerably heavier.

Mr. Klein recommends that the show should be opened with muscle



Fig. 3.

posing. In order to display your muscles to the best advantage, the posing should be done within the walls of a lighted cabinet. It is easy to construct such a cabinet by draping black cloth over an old fashioned, three-piece clothes-horse, or it is even possible to use a three-leaf folding screen, providing you can get one that is wide enough and high enough. The stage should be darkened while you are posing, and the illumination is furnished by a powerful incandescent light, which is fixed high up in the front of the cabinet. This light must be backed by a reflector which keeps all the rays of light from the audience, and directs them downwards upon the figure of the athlete.

While posing, wear your sandals and a pair of trunks such as shown in the poses of Mr. Klein. It is a great mistake to try and make too much of a feature of this part of your act. The average audience likes a little muscle-posing, but gets bored with too much of it. Therefore, do not make more than six or eight poses, but be sure and select those poses which show your figure to the best advantage. Mr. Klein varies his poses, and rarely gives the same set in any two successive shows, and he can afford to do that because he has not a weak spot. Some of you may not be as well built all-around as Mr. Klein is, and if such is the case, you had better omit the poses which display the weaker parts of your make-up and confine yourself to poses that show the best features of your development.

As soon as the last pose is finished, the lights should be turned off while you make a hasty exit from your cabinet, which is of course at the very

back of the stage. As soon as you gain the shelter of the wings call for "lights," and while you are donning your leotard, your partner can be doing a few tumbling stunts. Or, if it is an act intended to show the benefits of physical culture, he or she can give a little talk and demonstrate some of the exercises used for general body building. As soon as this part is finished you make your entrance, and after one preliminary double pose as shown on page 54, get right to work at the act itself without loss of time.

In selecting stunts for your act, be sure that you can perform every one of them easily and gracefully. Do not include a single stunt that makes you labor. Naturally the easier stunts must come early in the program, and the hard ones at the end. If you can do your work with a smile on your face, and if it seems easy for you to handle your partner in the various stunts, the audience will be much impressed and will go away singing your praises, but if you have to strain and grunt and bend, the audience will get the impression that your act is extremely hard work for you. The worst thing you could do would be to put a difficult feat in the early part of your act, because if you had to stand around a minute and rest and get your breath back before attempting your next stunt, the audience would get restive.

You will find that you will get a great deal bigger reputation by lifting a live weight in any easy manner, than by lifting your very heaviest dumbbells. So many vaudeville "strong men" have used fake dumbbells that the general public is very sceptical and never believes that the athlete is act-



Fig. 4.

ually lifting as much as he claims. On the other hand, everyone in the audience will understand and appreciate the strength you display in lifting your partner, because almost everyone has tried at some time or another to lift, or carry, a fellow human being.

After your introductory pose, the easiest way to "open the act" is to show your ability to handle your partner's weight. As the partner was a girl in this particular set of poses, it will be easier for me to refer to her in that way, so hereafter I will say "she" or "her."

Have her stand directly in front of you, with her back towards you. Place your hands on her hips, and then have her grasp your wrists with her hands.

Now lift her an inch or two from the floor as shown in Figure 1 (anyone can do this who can make a two-hand curl with a 100-lb. bar-bell). After holding her in an upright position for an instant, then rotate her body so that she is lying horizontally in the air, with her head to the right and her feet to the left, and most of her weight resting on your right arm. If you are very strong, you can do this with your arms slightly away from your body, and if you are weak you will find that it helps to rest your right elbow on your right hip, as this steadies the weight. Then bring her slowly to the upright position as in Figure 1, and lower her very slowly until she is

again resting on the ground. If you are very strong, you can rotate her until her body is again horizontal, but with her head to the left, and then bring her to an upright position.

Next make the lift known as the "swing" with a "human-kettle-bell." Have your partner sit on the ground with her knees drawn up, and her hands clasped across her shins. Slide your right hand under her left arm, and grasp her right arm just below the arm pit. Then grasp your right hand with your left hand, stand with your feet well apart, swing her backwards between your legs, and then with a mighty heave swing her up and over your head, letting go with your left hand as her body comes above yours. This will make the audience believe that you actually swung her up with one arm, and you can stand for a moment holding her aloft with your right arm in order to heighten that impression. This stunt is really a very easy one, because her left arm is pressing on your right arm just at your elbow. This makes the stunt much easier than if all her weight was actually on your right hand instead of being distributed along your fore-arm.

The next stunt is what is called the foot or calf lift, and to perform it properly you have to have a very strong table. Lie face downward on this table and grasp the far edge. Your knees must rest on the far edge of the table, and your legs are straight out with the toes pointed. Your partner then stands with her back towards you, grasps your ankles, and



Fig. 5.

gives a slight spring, and sits squarely on the soles of your feet. Then you slowly bend your legs until your calves are perpendicular to the floor, as in Figure 2, and as they come to the upright position, your partner must arch her back and lean forward, otherwise she will topple over backwards. This stunt always commands a great deal of applause because the audience realizes that it takes enormous strength in the muscles on the back of the leg to raise any weight while in this position.

Next you can do a two-arm lift. Have your partner lie sidewise on the floor with her feet crossed. With your right hand grasp her right arm near the shoulder, and slip your left hand between her knees. In this position it is easy to lift her up as high as your chest, and when you have her there, you should take a few backward steps and sit on the edge of the table, and while sitting there you should push her up to arms length two or three times in succession, as shown in Figure 3. Of course a 115 pound two-arm press is nothing to you, but the audience would think it quite wonderful to see you make two or three such presses while you are apparently in a sitting position.

Next you can lift her above your head with one arm in the usual manner. She stands erect and you put your right hand on the back of her waist, as in Figure 4. You stoop down and she gives a slight upward spring, and as she does so, you give a slight heave and stand upright, and she



Fig. 6.

will be lying in a horizontal position at the height of your shoulder, supported only by your right hand. From this position you can raise her to arms length by the "one-arm jerk," and you can finish this stunt by holding her aloft and standing on one foot as in Figure 5. (Note: This stunt is much harder for your partner than it is for you, and do not include it in your act unless you are sure your partner can hold her balance. It will help her a whole lot if she puts her hands behind her and grasps your right wrist.)

The next stunt is rising from a reclining position while supporting your partner's weight on one arm. Lie flat on your back and have your partner sit to the right of you while in the "human-kettle-bell" position. Reach under her left arm as before, and grasp her right arm near the arm pit. (Your partner must be sitting quite close to you so that your arm is almost straight.) After you have gotten a

firm grip on her arm, you must suddenly roll onto your left side, carrying your partner up above you on your straight right arm. Then you raise your head from the ground and get your left hand on the floor under your left arm pit, and straighten your left arm and bring your body into the position shown in Figure 6. From that position it is easy to get first to your left knee, and then to stand erect while still holding your partner at arms-length. (Some performers prefer to first lift the partner aloft, and then to lie down on the back and stand up again, but for some reason it is a more impressive stunt when you start from the reclining position in the way I have described.)

Next you can do a teeth-lift. If your teeth are strong you can use a loop of ordinary rope, but if your teeth are not in perfect condition, you had better use a soft leather strap at one end

of the loop. Your partner takes the loop of rope from you and passes it around the small of her back, and then lies down on the stage. You stand above her, straddling her body, lean over, get a firm grip on the rope (or strap) with your teeth, and then slowly lift her weight from the ground as in position Figure 7. If your neck and jaws are strong, you can swing her back and forth.

To conclude your act you can do a one-arm press, first announcing that it is much harder to raise a weight to arms length by slow and steady pressure than it is by lifting weight quickly and with the aid of a jerk or a swing. Stand facing the audience and have your partner get in the "kettlebell" position on the floor, right in front of you. Grasp her right arm in the usual manner and swing her up to the height of your chest, and then

(Continued on page 93)

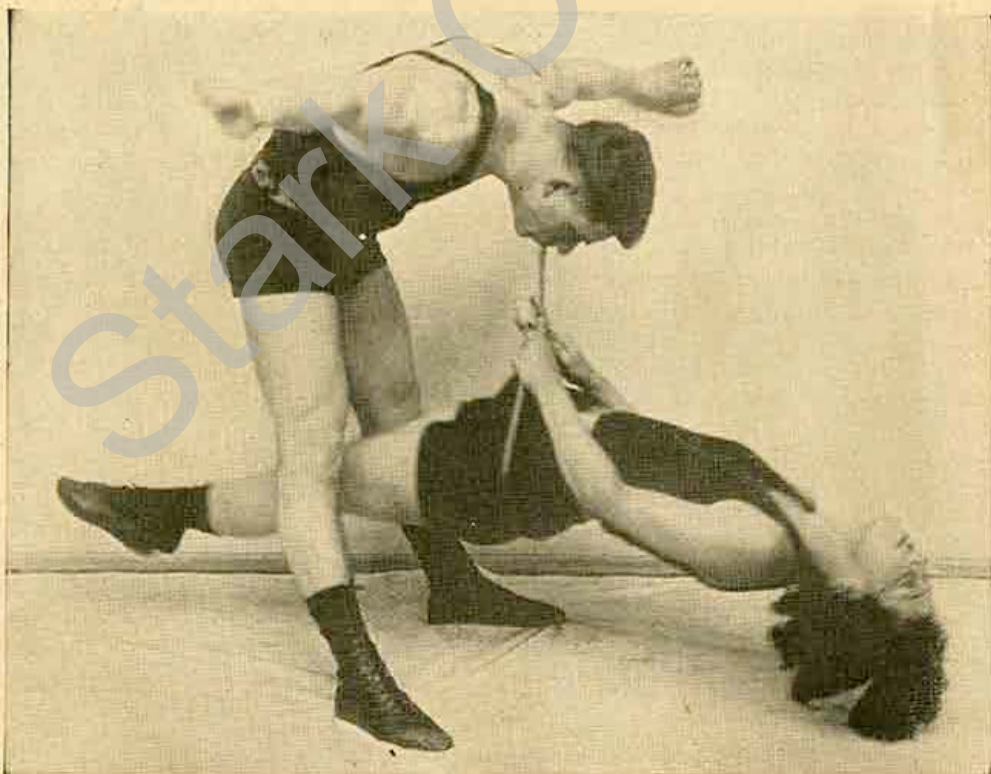


Fig. 7.

The Power of the Punch

In the last article on "The Power of the Punch" as applied to the ring, I spoke of Dempsey's crashing blows hurling men out of the ring and into the audience. One punch in particular, with which he lifted Flynn over the second strand of the ropes was the hardest blow I ever saw. By the same token the hardest wallop I ever saw on the diamond was a Ruthian bust of an inside fast ball that not only cleared a long right field fence, the street beyond it, the row of houses on the opposite side of that street and the row of houses fronting the next street but fell in a yard on the third row of houses. And to show that he meant it he did it again the same day in the second game of a double header.

By T. Von Ziekursch

EVERYTHING moves in circles or cycles. At least, such is the belief of a large proportion of those who look back over the pages of that thing they call history.

That may seem to be a long way from a discussion of Babe Ruth's batting average or the value of the slugger in baseball, but it isn't.

In a recent article we discussed what we called the power of the punch in boxing, and pointed out that the most popular champions and ringmen the game has known have not been the magnificently scientific boxers like Jack Britton, Mike Gibbons, Jim Corbett, and their breed, but the spectacular bone crushers of the type of Sullivan, McGovern, Jeffries, and Dempsey.

Of course, the reason for it is obvious, and the same thing applies in the realm of the diamond, the sport of the American—baseball.

It is hardly fair to go back too far and dig up things that are almost forgotten, meaning the old St. Louis Browns on which Charley Comiskey, the old Roman of the present Chicago White Sox, played first base. Also it may be stretching matters slightly too much to involve Cap Anson's old Chicago crew and yet they belong to this argument in a way.

They were factors in the eternal strife that exists within the sports realm as to whether the power of the punch, the irresistible slam—whether it be of the ring, the diamond, or the gridiron—shall



Rogers Hornsby.

dominate completely over science and sheer skill.

In the ancient days of two generations ago when baseball was really only a lusty infant that battle started and it is still a question whether the names of those mighty clouters who could ride the apple out of the county are remembered above those giants of the pitching peak who had arms that could pitch fifty, sixty, seventy games a season and think very little about it.

And that strife rides right down to the present day. Will the name of Babe Ruth outlast that of Mathewson, of Bender, of Ed. Walsh? Very likely.

Why?

The answer is simple. The man in the stands pays and always has paid for the spectacular. There is a marvelous thrill that comes of seeing some master moundsman strike out a Cobb, a Speaker, a Ruth when the sacks are loaded and the score is tight. But does it compare to that reaction which comes when a home run smash of herculean proportions settles a close game? Hardly. At least, not in the memory of the fan who saw both feats. The fan has proved to the satisfaction of the magnate that he wants to see the slugger, will pay any price and in large numbers to see some titan at the plate swinging a young tree trunk. The magnate is wise. In spite of all denials, he has made the ball more lively, he has sacrificed the skill of the game on the altar of the great god Slug. He has been a long while doing it but at last he has succumbed. In the last analysis Babe Ruth has revolutionized baseball. That is what it amounts to, but that does not settle it definitely. Will the revolution hold? We and a lot of others who have followed baseball closely as writers, players and fans believe the handwriting is becoming more legible on the well known masonry. It is not difficult to believe that another cycle is coming around, that the game will have a rejuvenation within the next couple of seasons in which the era of slugging will play second fiddle in spite

of all the factors in its favor. Even the rabid sunfish of the bleachers who sets the terrific slugger on a pedestal and worships him is showing signs of being surfeited with the drives that clear fences, that batter in the ivory of pitchers and maim infielders.

At present, however, the man who can wield a willow that is likely to make a perfectly good baseball resemble a speck of dust in the distant heavens is the one who is the drawing card. And rarely is he a truly great ball player. He has brought baseball around to a place where up to the present season, at least, the artistry of the game was hanging on the ropes, a bad second. Undoubtedly, he will continue to dominate the game in its spectacular end forever, but there is a deep-seated hunch that his day as the sole factor of importance is passing for the present at least.

All of which brings us back to the original idea—that baseball, like a lot of other things, moves in cycles.

Let's start with the Baltimore Orioles of three decades ago. From nowhere they came, a team of comparative youngsters, of sharp-witted youth who loved the game. Slowly they were molded to a point about as near to perfection as a baseball team can attain. And in their rise they brought a new era of baseball. The thing they superseded was domination of the game by crushing strength. Prior to their advent the power of the punch had ruled. And yet, they were not lacking in the punch. They, individually and in toto, possessed plenty of it both on and off the field. They were a fighting, scrappy crew. But they placed their premium on skill, developed the thinking side of the game, believed that the power of the punch alone must give way to a combination which included as much of that power as could safely be handled, a lot of keen, resourceful thinking, a vast amount of speed, and a highly developed defense.

Is there any man who will say they were not a great team? We doubt it.

They proved their greatness on too many hard-fought fields and ruled the diamond too long to have the measure of their might questioned.

Then came their end, gradual disintegration and strife between the leagues and baseball staggered along wearily for a while. But the new force came and it was only a recurrence of the old era of slug.

There were the Delehantys, Flick, Lajoie, Sam Thompson, and their ilk, and once more the power of the punch was baseball's outstanding claim to fame. The cycle had come around and reached its apex in 1905 when the Giants and Athletics clashed in that famous series for the world's title. Then it was that defensive power won a notable triumph and that defensive power was the mighty wing of Mathewson which stopped the slugging of the Athletics.

After that the pendulum swung the other way and the power of the punch twanged away on the second fiddle once more. True, there were Sheekard and Shulte and Chance of that famous Cub machine and they were sluggers in every sense but the Cubs, like the Orioles, triumphed because the power of the punch was subjugated by brains, by marvelous defensive play, by superb pitching, by combinations such as Tinker, Evers and Chance, of Ruelbach and Brown.

And the machine that outsped that Cub machine was one in which the power of the wallop was the dominating factor at first. With Baker, McInnis, Collins, Schang, Murphy, Oldring, and Lapp that Athletic team was a crushing thing, but, like the Orioles, it reached the ultimate heights of greatness because it did not sacrifice skill on the altar of the spectacular. And then it passed on, broken and scattered and in its place the power



Cy Williams.

of the punch came back once more, reaching its height in that champion array which bears the banners of New York in the American League at the present time.

The turnstiles tell the tale. The old, scientific game backed water and gave way, hammered into palpitating subjection by the macing of the sluggers. And fandom proved once again that it wanted the smash, was willing to pay for it. Never have such crowds attended baseball games as those which have turned out to see the kings of the realm of Swat. The biggest drawing card baseball has ever known is the result of that era. We speak of Babe Ruth who today stands forth as the dominating figure of baseball. The game has its Judge Landis, its Ty Cobb and Ban Johnson but Ruth is the outstanding figure, the one who commands a king's ransom as yearly stipend

simply because he represents the ultimate in power and strength. In him the power of the punch is developed to a greater degree than it has ever been in any of the mighty ones who went before. The stands feel the awe of it when he slaps one a hundred or two hundred feet farther than any other batter is capable of doing. He has all but wrecked defensive play. There is no defense for him except one. Connie Mack, the manager of the Philadelphia Athletics, called the turn recently when he dubbed Ruth the most dangerous player in baseball and asserted that at the Bambino's feet can be placed the credit for the rule of the Yankees in the American League pennant race.

Ruth wrecks the opposition. That is about the way Connie describes it. And he is right. The pitcher knows that the Babe is likely at any time to ruin the ball game. He labors under the strain of

that constantly, focuses his attention on Ruth and consequently is off his guard for the other batters.

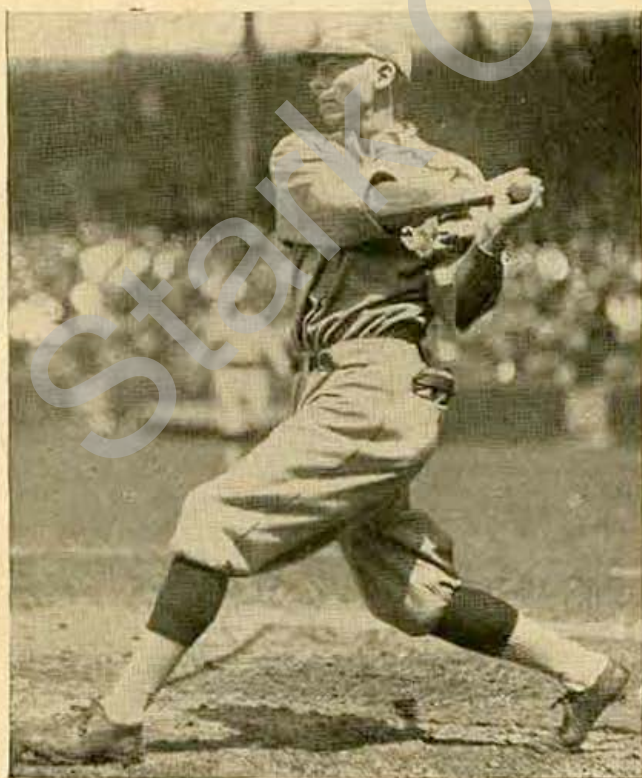
I recall an incident that happened while watching Ruth in action. In the next seat was an old timer who has lost his taste for baseball after the ancient heroes of the game passed on. He had been a worshipper at the shrine of Slug and had little use for the hitter of singles. Somewhere about the middle of the game Ruth caught hold of one on the nose and the ball appeared to be still mounting as it cleared the right-center field fence.

The old timer's eyes were wide and his head shaking slowly from side to side.

"At last I've seen a better man than Delechanty," he said when his amazement had passed off. I don't believe he misses many games when the Yankees are in town.

There is color about such a hitter. He is the spectacular figure of the game.

His feats, his very presence will draw crowds, pack them in. It is not to be wondered at that every other club in the game immediately threw all else to the winds and started looking around for a counter attraction. The day of the slugger ruled. Team play went by the boards, the ball was made more lively, the pitchers were all but forgotten in the shuffle. Then came what looks to be the start of a reaction. We would not be startled to a state of breathlessness to see another cycle swing in along about next season when some team that has been calmly developing team play on both defense and attack and bringing along a crew of promising young pitch-



Kenneth Williams.

ers may upset the present order of things.

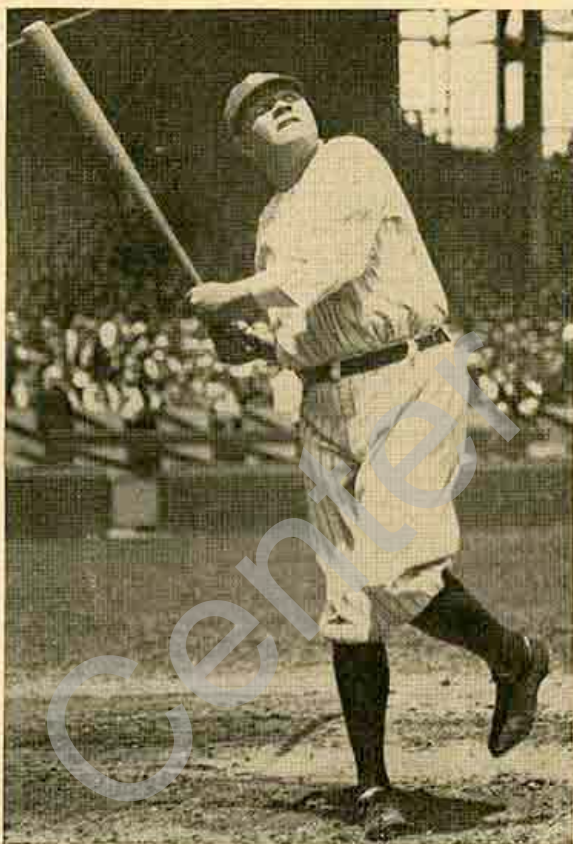
It may be those Philadelphia Athletics. Down in the ruck at the bottom since the great old team of 1914 was deliberately broken up because it dominated baseball to such a degree that it killed interest and the gate receipts fell off, there now are indications and mighty strong ones that Connie Mack has another championship array needing only slight polishing to blossom forth.

Mack was the man who said there was only one defense for Ruth and that was to pass him in a tight situation, thus allowing the pitcher and the whole team to save its energy for use on the lesser dangers. In other words Mack would pull the teeth from the power of the punch.

But all this does not mean that Mack or any other manager who chances to develop a formidable team would sacrifice the spectacular, smashing attack entirely in favor of winning. The man who can drive a ball beyond any of his fellow workers is a figure to be prized. He serves a dual purpose. He has the other fellow, the other team continually very much on the defensive and he draws at the gate. What more could be desired?


And such hitters are natural rather than developed. Beyond a doubt it is possible to bring a batter along to a stage where he hits better than he would if left to his own devices, but the ruling prices of Slam are the ones who not only have the forearms and wrists that can get the power behind the swing but also the perfectly co-ordinated eye and mind that make for perfect judging of the ball, perfect timing of the swing and mental confidence.

Such a one is Ruth, such are Cy Williams of the Phillies, and Kenneth Williams of the Browns, Sisler, Hornsby, Cobb and Speaker—born batsmen all of them.



George "Babe" Ruth.

All of us who are fans know that we admire the hurler of the Bender, the Mathewson, the Walsh, the Johnson type. There is something to admire in the man who can go out there and master slingers day after day with the speed of a fast ball, the deadly break of a hook. But, after all, the slugger wins. The fan in the private box as well as the sunfish out there in the bleacher is apt to tire, to become bored to perfection of defensive team play, by the pitching duels in which there is little of action. When the hurlers are in the ascendancy, the spectacular side of the game is lost. The old wallop, the crash of ash on horsehide, a singing drive, the power of the punch, these are the things that draw at the gate. It is proved by the fact that over the years it is not pennant winners that have had the biggest crowds, but those arrays that numbered in their ranks the batters with the wallop.



BOXING

Prepared by William J. Herrmann

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FEINTING AND DODGING

Continued from July issue.

Although there are slight distinguishing features and different tactical reasons governing their use, feinting and drawing to a certain extent are almost synonymous terms and may be described under the same head.

Feinting is principally used in pretending to strike at one place while actually intending to hit at another. Whereas drawing is usually meant to draw a particular blow which you are prepared to counter.

The main object in drawing is to induce your opponent to deliver a certain blow for which you are all prepared and which it is your intention to stop or counter.

In other words, by drawing is usually meant that opportunity you purposely offer an opponent in order to induce him to deliver a certain blow—a blow that you feel quite sure he is likely to attempt in answer to your draw. His blow was purposely drawn in order to enable you to deliver the blow you had in mind to use in case your draw proved successful.

Of course, it is understood that your opponent was not aware of the fact that you purposely offered him this opportunity in order to further your own ends. He failed to surmise that you in reality were playing to turn his move to your own advantage.

For example, you may notice that whenever you lead left at face, your

opponent was partial to countering with his left at your face. In such a case, feint a left-hand lead off to his face in order to purposely draw his left-hand counter. As you purposely played for this counter, in answer to your draw, you, in consequence, are not only ready but also waiting for the particular counter you drew in order that you can sharply duck your head to your right and counter heavily with your left at the pit of his stomach.

Again, for example, you may want to land a right hander to his face. Get your distance, make a left hand feint at his head and as your opponent answers with his left hand counter to your head as you supposed he would do, duck instantly to your left and drive your right to his head.

The right hand body blow, another favorite with many boxers, can be drawn in the following manner. Work within hitting distance, accidentally-on-purpose raise your left arm slightly in order to give him a fair chance to try for a hit at your heart with his right. As he falls for the ruse and shoots right to your body, bring your left arm close to your side and receive his punch on it, while at the same moment drive your right fist to his heart, or uppercut him with your right, if his head should be forward.

Another useful draw, but likely to react against you unless cleverly done, is to duck rather low to your left in order to invite an upper-cut on that side. Should such be his answer then suddenly bring up your head and shoot left

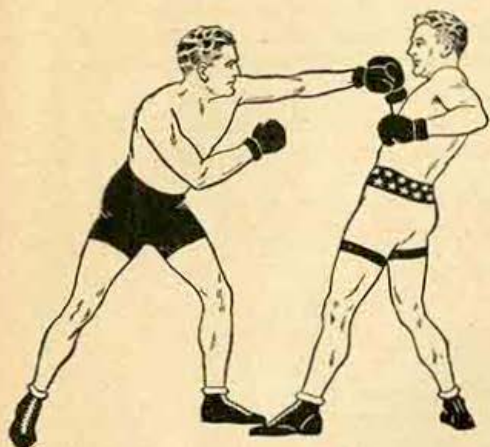


Fig. 1. Right hand block against straight left at face.

to opponent's face. Bear in mind it must be done with speed and agility or your opponent may land on you, thereby killing your chance of scoring with the stop and counter you had played for.

You can also simulate a retreat while in reality you are in readiness to step forward again, should your opponent be deceived and come after you. Purposely drawing his advance by feigning a retreat in order to enable you to suddenly step in and attack him on his advance, gives you a good opportunity to deliver a telling hit on his advance.

You can also feign laying yourself apparently carelessly open to an attack you wish him to make and as he answers the draw with the blow you were anticipating, use your stop and counter while avoiding his answering move.

Faking a sudden unexpected rush may cause your man to leave an opening as big as a house due to his going wild in the attempt to suddenly block or otherwise evade you. A sudden side step may also cause your man to move or hit in a way you can turn to your advantage.

Drawing, if anything, is a little more difficult to effectively do than feinting. To cleverly draw looks so easy and gains one so much gallery that it is not surprising to see a novice try to imitate it at too early a stage of his instruction.

Don't attempt to draw too soon nor

too often until out of the novice class, and not even then unless you are quite sure you know a good deal more about boxing than the man you are sparring with. To cleverly and effectively draw requires a cool head, keen judgment, long practice and wide experience. First attempts are more likely to prove disastrous than successful to the uninitiated.

A draw is usually followed by a stop, hence the term "draw and stop" for so and so. A stop is a counter blow delivered and timed so as to reach an adversary a second before his blow reaches you. In other words a stop is a counter timed to get there first and is often given without guarding the blow meant for the person making the counter, because if properly done you beat him to the punch.

In drawing a certain amount of risk must be taken as your opponent, if clever, may be contemplating some drawing scheme himself, in consequence, you cannot expect to have it all your own way if facing a man your equal. Of course your chances of success are enhanced if you meet a man who has fixed stereotyped methods of replying to certain hits, or a man who favors certain punches and apparently takes special delight in delivering them. His pet blow, can all the more readily be drawn should he have landed one or two successfully.

It is time well spent to learn and train yourself to be able to keep up a continuous series of effective and confusing feints and draws. At first it will be some-

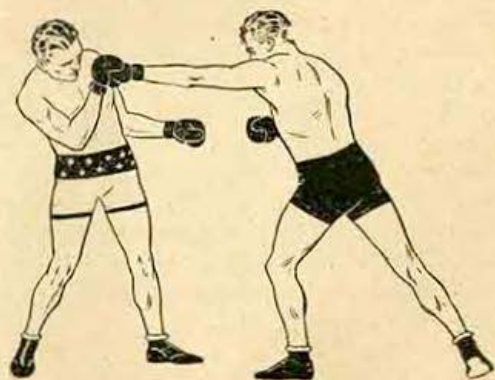


Fig. 2. Right hand block against straight left at face.

what tiring and probably induce arm and leg weariness, but with practice the action becomes easier and in time can be kept up with comparatively little exertion.

Besides it is exasperating to your opponent to induce him to waste punch after punch in hitting empty space to say nothing of so completely bewildering and confusing him as to make him an easy subject of your wiles.

It is wise for the beginner to first cultivate a safe attitude, be good on his feet, develop a good boxing balance in order to facilitate his movement, acquire quickness, agility and some proficiency in straight hitting, clean guarding and safe ducking before he turns his attentions to maneuvers which are more likely to get himself, than his adversary, into trouble unless they are performed with good judgment in the best of form with great rapidity.

Strive to develop a good boxing sense in order to better divine your opponent's intentions while concealing your own. To get an opponent to act exactly as you wish to his own disadvantage is a faculty few possess. It surely is a valuable possession and worth all the time, study and attention given its requirements.

Last but not least, be careful you do not let yourself be deceived and fall a victim to clever feints and draws on the part of your opponent.

In studying and practicing the preceding deceiving moves with your boxing partner, do not try to take mean advantage of him by hitting at that point where you know beforehand his head or body is sure to move to. Don't try to knock each other's heads off, but instead, help, assist, coach, advise and correct each other as much as you can and you will both make quicker progress. Feinting and drawing are most important branches of a good pugilistic education and much time, practice and study must be given them to become proficient.

To do any of them correctly as is the proper thing to do if done at all, requires

first that they be thoroughly studied so that they may be perfectly understood and then practiced consistently, slowly at first to get the proper action and balance and then rehearsed frequently every day until they can be performed in best of form and style with utmost speed and agility.

If possible get a few lessons in feinting and drawing from an able teacher for a practical illustration is better than a long explanation. Also avail yourself of every opportunity to see good clever boxers in action in order to study their individual styles and methods of feinting and drawing effectively.

Defense

A GOOD defense is at least one-half of what there is to scientific boxing. One cannot expect to always win by merely swapping punches—tactics in which the strongest, biggest, heaviest, toughest or he who can stand the greatest amount of punishment or lands a lucky punch usually wins.

Making no pretense at defense but relying solely on purely slugging methods—to rock and sock your man—won't get you far if your intentions are to learn how to box cleverly.

Trusting to luck to land harder, oftener or before your man does, is not scientific boxing. Any big fellow, long-shore man, husky or rugged he-man who doesn't know anything at all about boxing, can if unafraid, fight in such hit or miss fashion, providing he has the guts to stand the gaff—can take as well as give—be no quitter, dog it or run.

Yet a clever boxer well up on the defensive side of boxing can easily make a human punching bag of any burly opponent unskilled in the art of self defense. Making the harder hitter miss and turn that miss to good advantage; letting your opponent waste his superior strength and hitting powers by repeatedly striking empty space; slipping and shifting so as to "always be where your opponent thinks you ain't"; working round his vic-

tim as he would go around a barrel; jabbing opponent's head back with tantalizing straight lefts; side-stepping ferocious rushes; tying him up in knots by misleading puzzling feints; "drawing his punches" and skillfully combining a varied defense with effective counters, will enable a clever boxer to hit at will, have at his mercy and easily defeat men far bigger, stronger, heavier, tougher, and harder hitters than himself.

No science, study nor practice is necessary to run head first into punches. Bouncing your nose or bumping your bread-basket up against a hard bony fist moving speedily in the opposite direction, or stopping with your eyes a punch that will enable you to discover more new stars in a minute than the most distinguished astronomer ever did in a life time, or running full tilt against a sleep inducing punch coming your way, are not winning tactics, nor the best way to learn the scientific side of defense in boxing.

Defense primarily is the first essential in any form of self defense. In consequence, pay as much, if not more attention to defense as you do to attack. Besides, it is a little more difficult to learn a clever, varied and scientific defense than attack. Pains should be taken to learn all forms of defense to safely and effectively be able to protect yourself against any and every form of attack. All care and attention given to the acquire-

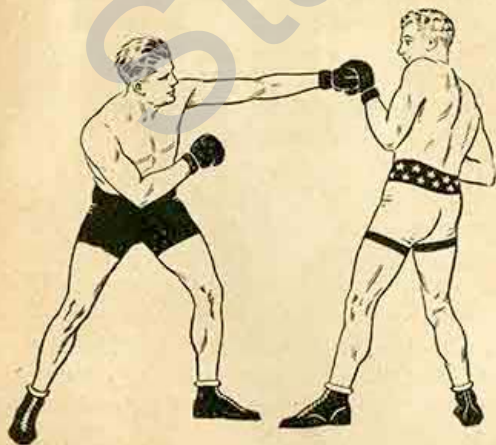


Fig. 3. Left hand block against straight left at face.

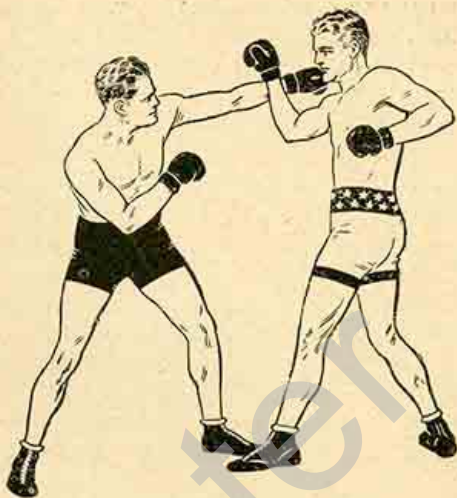


Fig. 4. Right arm guard against straight left at face.

ment of a good defense is time well spent from a boxing standpoint.

Disregarding the defensive side of boxing is a losing policy. This rule holds good not only in boxing, but in fencing, wrestling or any physical combat between man and man as well. Even in the college football, baseball, basketball, and lacrosse games defense is an important factor. You wouldn't expect a team to win that couldn't defend its own goal.

GUARDING AND BLOCKING

The superiority of the "duck and counter" over the "guard and counter" is conceded. Providing combat conditions warrant otherwise, it obviously is better to avoid a punch by a timely duck, dodge, shift or side step than to stop an oncoming blow with your hand or arm. Ducking, dodging, etc., have the additional advantage of leaving both hands free with which to hit, thereby giving good opportunities to effectively combine both defense and attack. Besides, always resorting to purely defensive measures with hands or arms alone, must eventually result in bruised muscles and arm weariness that in time render the arms less effective for either defense or attack.

In a general way it is better to hit than to guard with your hands. In actual con-

test, guarding or blocking with the hands and arms should be indulged in no more than necessary, unless tactics employed are purposely based on them. Nevertheless combat conditions for the moment may be such that it is absolutely necessary to rely on hands or arms alone to protect your face or body. Much depends upon knowing how to properly mitigate or at least lessen the full force of such blows that you cannot easily duck, slip or otherwise avoid.

Although blocking and guarding in consequence are on the whole less desirable defensive measures, they nevertheless are the means most commonly used and really are the fundamental ground work in the acquirement of any good defense.

In guarding two methods of defense blocking protects against oncoming blows are available—blocking and parrying, by interposing between the attacking fist and its objective, the palm of the open glove, fist, forearm, upper arm or shoulder of the blocking arm as combat conditions may warrant.

Parrying differs somewhat from blocking in that instead of palming the punch or stopping it with any other part of the hand or arm, the blow is sharply glanced aside so as to deflect the hitting arm out of its line of attack on the same principle as using a parry in fencing.

The right hand inside parry for the face which glances aside the attacking arm, and the right hand block for the face which catches the punch in the open glove, are the two most often used defensive measures against left hand blows at the face. They form the ground work and foundation of all other guards and blocks that follow. As they are not so very difficult to learn, care and attention should be given to their proper acquirement in order to use them quickly, safely and effectively to their best advantage.

A good parry is the first essential in learning how to guard safely and effectively. As the first blow taught in boxing is the straight left at face, so should

the most common defense against it, the right hand inside guard for the head, be the first guard taught in learning the defensive side of boxing.

In using the regulation right arm parry for the head move the right fist and arm diagonally forward upward and outward in the direction of your opponent so that your right hand glove at its farthest point will be about opposite your left temple although you can meet the blow with your forearm or wrist. Beat the attacking arm quickly aside in order to glance it up and off to your right. Let the palm of the hand be outward so that momentary contact is made by the muscular part of the forearm. Besides the arm with the palm turned outward presents a better, stronger resistance, than is given by the unprotected ulna bone. Properly performed, the attacking arm is thrown harmlessly aside out of its line of attack.

By striking with your forearm against the wrist of the attacking arm, you can easily knock the attacking arm away or glance it aside without actually feeling the force of the attacking blow to any great extent on your guarding arm. Perfect timing in striking the blow is necessary to use this parry properly and effectively to its best advantage.

A common fault of the beginner in learning this guard is to raise the elbow as high or higher than the glove. This not only looks and is awkward but puts you in such a position that the attacking blow could still pass under your guarding arm or besides it opens you up wide to an attack on your body in case your opponent was only feinting you out.

Also don't make the error of raising the forearm in such a manner that the forearm is in a horizontal position across your face. The forearm held horizontally in this manner is but a narrow bar of defense. When opponent leads left at your face, you cannot be quite sure just on what part of your face he intends landing. His blow may be traveling in a line as high as your temple or as low as your chin or throat. In conse-



Fig. 5. Cross guard and counter right to body.

quence, it stands to reason that if the defender hopes to catch the blow on his arm, by raising his forearm in a horizontal plane on a level with his forehead, as so many beginners do, he is likely to be the recipient of a punch under his arm on his exposed chin, or should he instead, place his guarding arm in a horizontal line on a level with his chin, then he is likely to stop the punch coming his way with his eyes or temple.

So be sure the forearm is raised and held in a diagonal position with your elbow down and the right fist higher and in advance of your elbow. Held on a slant it acts as a better shield in that it will cover and protect the whole front of your neck and face, not only a part of it. Proof of the greater efficiency of this slant over the horizontal position of the forearm is that, even if held motionless, the diagonal guard covers far more of the target than when forearm is held in a horizontal position.

The fact that the defending forearm when held in a diagonal position can more readily be moved up or down, right or left, than when held in a horizontal position is another factor in favor of the diagonal over the horizontal position of

the forearm when guarding or blocking. Besides keeping your right fist ahead of and higher than your elbow as it is when the forearm is in a diagonal line forward, you are in a far better position from which to hit.

Bear in mind that in parrying the guarding arm is not raised in order to stop the punch by catching the full force of the blow on the arm, but in order to smartly beat or strike up or outward the attacking arm in order to let the blow pass harmlessly by.

As soon as you have deflected his blow, recover "position," ready, if necessary, to parry another blow or to hit as combat conditions may warrant. Properly done it leaves your guarding arm free to hit immediately after the parry. In time, when further advanced in your lessons, you will be able to parry and counter to advantage with an inside right to jaw.

Be careful you don't shove your guarding arm too far forward in trying to parry a blow. If possible restrict the action of your right arm in guarding to within the inside line of your left elbow. Reaching too far out and forward for a blow will leave you unprotected and exposed to an opponent who was merely feinting you out.

In learning to parry never lean your body forward nor step forward with your

(Continued on page 94)

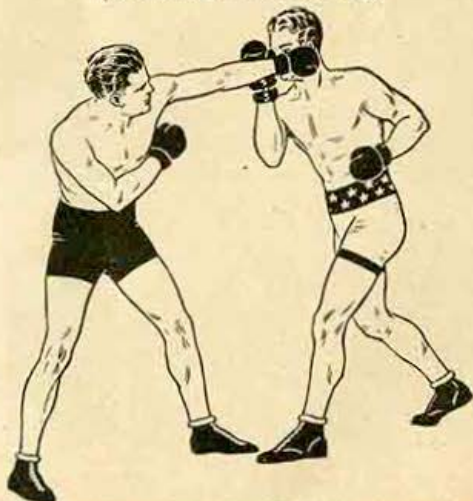


Fig. 6. Right outside parry against straight left at face.

The "Million-Dollar-Legs"

By Oswald E. Colonna

AFTER what seemed to be a wild goose chase lasting over two weeks, I finally obtained an interview with Mr. Vincent Madonna, the famous International champion Motor-



Vincent Madonna, the acclaimed International Motor-paced follower champion, has developed his body through swimming, bicycle riding, skating, running and mountain climbing.

paced follower. Even then all I did was to make an appointment, because he had just been notified by telegram that he had been entered in a ten mile race, which was put on the program as an added attraction, just before the starting of the big six day race at Madison Square Garden. He told me that his time was limited because he was a little overweight, and therefore, had to train hard, but he promised to give me a real interview on his return, and with a nod and a smile he was on his way.

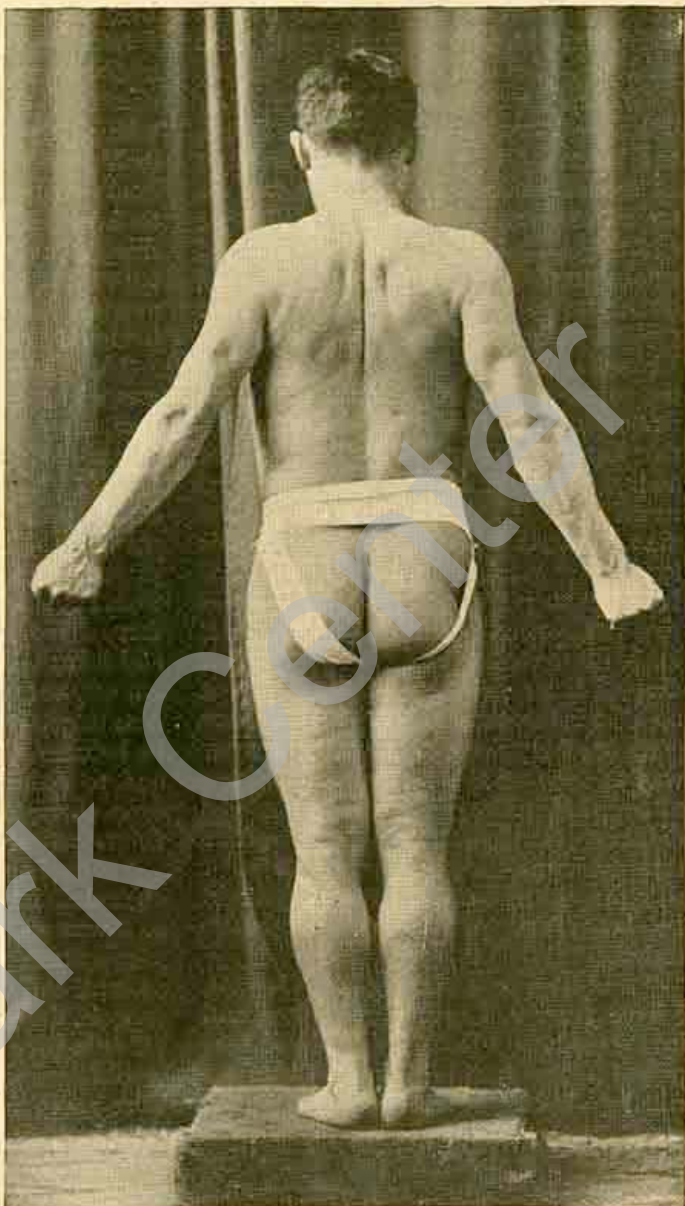
Five days later he returned from New York with the first victory of the season tucked in his pocket, and he told me to come to see him early the next morning at his hotel. I found him just ready to start out at his day's training. He explained to me that if I cared to come along with him on his morning walk, he would answer all my questions. While I was not prepared for any strenuous exertions, I did not want to lose my chance of having a chat with him, so I at once agreed, and we started out.

What Vincent calls his morning walk is really a fifteen mile hike at a fast pace. The only variation from the regular grind was when he would increase his pace and trot for a few hundred feet. Interviewing under such circumstances is a rather strenuous task, and all I could do was to save my wind by asking the shortest possible questions and letting him do the talking.

This little Italian is a self-made athlete. His present eminence in the bicycle racing world is due entirely to perseverance and the hardest kind of work. He was not a wonder to start with, but slowly and steadily climbed the ladder of success, until today he is rated as one of the best in the world. To show you how he is regarded by his competitors I can tell you of a remark made by Mr.

George Wiley, who is a veteran of the game, has been racing for twenty-five years, and is still going strong. Mr. Wiley said, "There will be other riders, but I doubt if there will ever be another 'Push' Madonna. None of the others will ever be able to touch that Italian boy." Even more conclusive is the testimony of the record books, which show that Madonna has beaten practically every champion here and abroad.

Vincent has been practicing athletics almost all his life. Even as a small boy he was a great swimmer. He spent the first few years of his life in Italy, and he told me that when the big steamers stopped at Naples, the passengers would amuse themselves by tossing coins into the water and watching the Italian youngsters dive for them. He says that he got many a coin in that way, and that ever since then swimming has been a large part of his training program. Incidentally I might mention that since living in this country Vincent has twice distinguished himself by saving the lives of drowning persons. Most of his swimming has been of the endurance variety, and recently he won a bet by swimming from Crescent Park to Rocky Point, R. I., and return, without stopping. On this swim he covered a distance of thirteen miles. Madonna is just as much at home in the water as he is on his bicycle.



Note Madonna's massive back, suggestive of plenty reserve power he developed through hard outdoors athletic games.

As you can see by the pictures I am sending with this article, Madonna is very sturdily built. He stands only five feet two inches in height and weighs a trifle over 140 pounds when in hard training. His arms and shoulders, while not very big, are finely developed. His chest is very large for a man of his height, and his legs are simply wonderful. He

has a 16 inch neck, $39\frac{1}{2}$ inch normal chest, $23\frac{3}{4}$ inch thigh, and a $15\frac{1}{4}$ inch calf.

On this first morning walk we really did little more than become acquainted, and when I told Vincent that I had not all the information I wanted, he told me to accompany him on the following morning. That night it turned cold and commenced to storm, and by morning there was several inches of snow on the ground. But that made no difference to Vincent. In fact he seemed to prefer the rough going. He said that the snow made the walking more difficult, and that therefore he would get harder work and more strenuous exercise than he usually got. I asked him if walking was the only work he ever did to develop his legs. He smilingly replied, "Oh, no! In order to get my legs to their present size and strength, I have had to do all kinds of exercise. I have done a great deal of bicycle riding, and have kept it up even in the winter time. Often I have gone out for a long ride when the snow was as deep as it is today. In addition to my daily riding, I walked, ran, and did any other kind of outdoor exercise that made me use my legs; and after I was through the outdoor work I would go home and practice on my home-trainer.

"And here is something else, Oswald, I have never told anyone up to now, and it is something which in my opinion, has played a great part in giving me my present leg development. As soon as the water gets warm in the spring, I wade out until the water is just above my knees, and then I turn and walk parallel to the shore, and keep it up until I have covered about five miles. I always keep in the same depth of water, and I walk as fast as I possibly can. This gives my legs the hard work I am after, for it is really hard work to walk against the resistance of the water, and there is nothing that develops the muscles as much as working against resistance. I am a great believer in fresh air, and I keep outdoors as much as possible. In the winter time

I do a lot of skating, and in the summer I take long hikes through the country, and always try to get in a lot of mountain climbing. Whenever I get a chance I take a trip up to the Green Mountains in Vermont, and spend all my waking hours on the hills. If an athlete wishes to keep himself in condition, the great thing is to avoid monotony, so I always try to get fun out of my training, and as soon as one form of exercise becomes tiresome I change it for another.

"My first success as a bicycle rider was when I won a twenty-five mile road race, after giving a three minutes handicap to the amateur champion of Rhode Island. My second contest was at a track meet at Revere Beach, Massachusetts. I had no money to pay transportation, so I rode the fifty-five miles from Providence to Revere. When I got there I had only ten cents in my pocket, and I knew that if I did not win I could not eat, and therefore, I made it my business to get 'in the money.' I then decided to become a professional bicycle racer, and to specialize on the sprints, but I soon changed my mind and decided to follow motor-pace.

"Here is where I found my first big obstacle. I knew that I needed practice, so I was on the track all the time. The pace-makers got tired of leading me around, and when they thought they had enough, they would step on the gas and hit up a pace that I could not hold, and I would have to drop off. But I would be back again just as soon as some other rider had his work-out, and I would follow all the pace-makers in turn. This was an invaluable experience to me, because I got accustomed to riding behind the different men and learning their methods. The fact that I was a bother and a nuisance to them did not make a bit of difference to me, for I was out there to succeed and I stuck until I realized my dreams and was accepted as a regular rider.

"Then came my first race behind motor-pace. It was a fifty mile affair, and every minute that I was not actually



Vincent Madonna, the idol of the bike world, behind the motor for a work-out. The photo will give a good idea of the position he has behind the motor.

training I dreamed about riding to victory. Finally the time to get ready arrived, and I sat on my wheel with my feet strapped to the pedals. Every second of waiting seemed like an hour. Every muscle in my body was tense, my heart was beating rapidly, and I was shaking with nervousness. But at last the starter pulled the trigger of the gun, and we were off. All through the race I thought of nothing but pushing myself to victory, and my efforts were not in vain, for I came out the victor and my dream was realized. Ever since then my 'Million Dollar Legs' as they call them in the newspapers, have been winning about 70% of my races. In the past few years I have been the greatest point winner on the tracks. I have acquired the art of following the motorcycle at the dizzy pace of better than a mile a minute, and I have learned to keep my front wheel one sixteenth of an inch from the protecting roll on the back of the motorcycle. If you will look at the photograph, you can see how closely I follow my pace-maker.

"Although I was successful from the very start, my success never made me relax my training. It was only the hardest kind of work that enabled me to

break the ten mile record, and make the time ten minutes and fifty seconds in a race against Wiley (for a while world's champion), Carmen (the American champion), Walthour and Bedell. I trained even harder before: I won the 'Golden Wheel' race in Philadelphia. This race was for fifty miles, and I covered the distance in less than an hour and rode the last mile in fifty-eight seconds, beating Carmen, Didier and Linard, who finished in the order named."

From what I have seen of Vincent Madonna I can safely say that he is possessed of almost unequalled endurance. You may remember that in 1899 a rider by the name of Murphy succeeded in covering a mile in less than a minute while riding on a board track and paced by a locomotive. After the finish of the test Murphy said that he would not do the same thing again for love or money. While fighting for the lead in his races, Madonna often goes faster than a mile a minute, and at the end of the race dismounts from his wheel apparently unperturbed. What is more, during the bicycle racing season he will do this six nights a week in six different cities, and to make it worse, he has to get all his sleep while
(Continued on page 94)

THE MAT

THERE are a certain number of you who have been anxious to see an article on weight-throwing. For some time past, I have been anxious to publish an article about the great California weight-thrower, Jack Merchant.

A couple of months ago, I had several letters from one of your fellow readers, Mr. Fred Harter. Like most bar-bell lifters, Mr. Harter has a great enthusiasm for the heroic type of muscular development. In his letters he mentioned that he was a fellow-student of Merchant's, and he spoke of Merchant with the greatest admiration. The letters which Mr. Harter wrote showed me that he knew how to use his pen, so I commissioned him to write an article about Jack Merchant, and that article appears in this number. Mr. Harter also induced Mr. Merchant to pose for a number of the pictures which illustrate the article, and what is better still, he secured an interview with Merchant, in which that great athlete gave his views about the proper form in throwing weights. I hope this may serve as an inspiration to some of the rest of you. Here is a first-class article by a man who three months ago had no idea whatever of writing for this or any other magazine. I am sure that Mr. Harter enjoyed writing the article, and I know that we were glad to have an article from one of the magazine's own subscribers. Furthermore, Mr. Harter would never have written to me if it had not been for this department, and I hope that "The Mat" will bring me many more such correspondents, and that it will inspire others among you to submit articles for our consideration.

* * *

Medford, Ore.

Dear Sir:

I am writing to tell you about a feat of strength which I heard about recently. I can not vouch for it nor will I pass an opinion on it. I will simply pass it along as it was told to me.

It was told to me by a reputable person of my acquaintance, who claims he witnessed the

fact. Mark Hanna was the gentleman's name.

He said that nine years ago while working on the Dupree ranch in or near Santee, California, he saw a Swiss milker employed on the ranch take a dollar in both hands, using his thumbs as a fulcrum, bend the coin until it was bowed or arched; then squeezed it between the fingers and thumbs of both hands until the halves touched. He did not know the man's name, but described him as medium sized, with enormous fore-arms and powerful hands. This was, no doubt, due to the constant milking which he probably did eight or nine hours a day, every day.

This is the nearest feat to breaking a coin I ever heard of. I presume he could have continued the breaking process until the coin was finally broken. If you ever get a hold of a dollar, you might try it yourself sometime. Probably it was easier to break a dollar in those days.

I suppose it would be comparatively easy to verify the feat, as the ranch records would probably contain the man's name, and undoubtedly there are others in the vicinity who at one time or another saw him perform a like feat. Mr. Hanna said it was a very large ranch and employed many hands.

It's a good story anyway, whether or no it be true. I have every reason to believe in Mr. Hanna's truthfulness, and it would hardly seem as though he would fabricate the story himself.

Very truly yours,

Harry A. LeTourneau.

Like Mr. LeTourneau, I have had many athletes tell me that they have seen men bend or break coins; or else that they have known men, who have known men, who have seen other men, etc., etc.

I have never seen a man bend a coin a fraction of a degree, much less break one. I have heard of a number of professionals who announce that they break coins, but most of this coin-breaking is done when the athlete is on the other side of the footlights, and at a distance where it is impossible to tell whether he is actually bending coins or whether he is getting away with a slight-of-hand trick.

I understand that the French Weight Lifting Club of Paris investigated the case of a German, or Polish, "strong man" named Bienkowski. That man toured the world under the name of Cyclops, and I remember seeing him perform in Philadelphia in 1891. In

Gee! but it's Great to be Healthy

Up in the morning brimming with pep. Eat like a kid and off for the day's work feeling like a race horse. You don't care how much work awaits you, for that's what you crave—hard work and plenty of it. And when the day is over, are you tired? I should say not. Those days are gone forever. That's the way a strong, healthy man acts. His broad chest breathes deep with oxygen purifying his blood so that his very body tingles with life. His brain is clear and his eyes sparkle. He has a spring to his step and a confidence to tackle anything at any time.

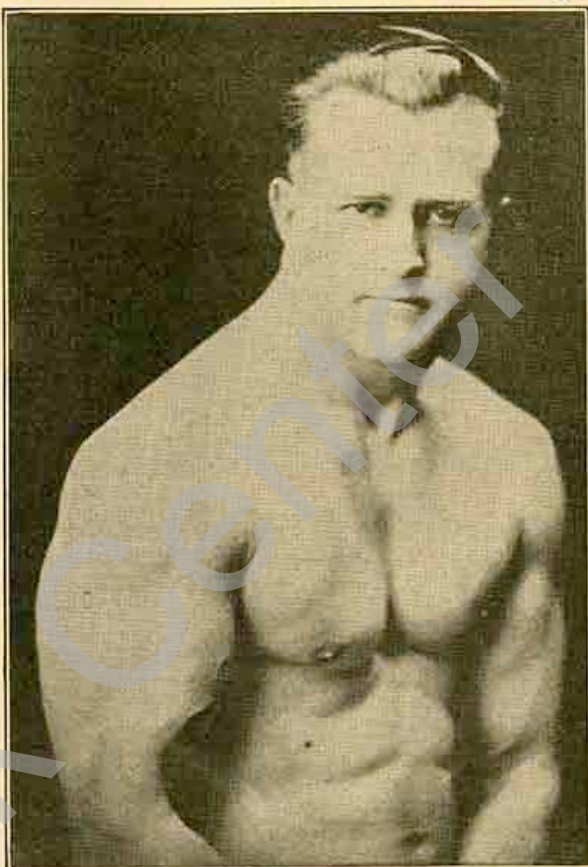
Pity the Weakling

Don't you feel sorry for those poor fellows dragging along through life with a neglected body? They are up and around a full half hour in the morning before they are half awake. They taste a bite of food and call it a breakfast. Shuffle off to work and drag through the day. It's no wonder so few of them ever succeed. Nobody wants a dead one hanging around. It's the live ones that count.

Strength Is Yours

Wake up fellows and look the facts in the face. It's up to you right now. What do you plan to be—a live one or a dead one? Health and strength are yours if you'll work for them, so why choose a life of suffering and failure?

Exercise will do it. By that I mean the right kind of exercise. Yes, your body needs it just as much as it does food. If you don't get it you soon develop into a flat-chested, narrow-shouldered weakling with a brain that needs all kinds of stimulants and foolish treatments to make it act. I know what I am talking about. I haven't devoted all these years for nothing. Come to me and give me the facts and I'll transform that body of yours so you won't know it. I will broaden your shoulders, fill out your chest, and give you the arms and legs of a real man. Meanwhile, I work on the muscles in and around your vital organs, making your heart pump rich, pure blood and putting real pep in your old backbone. This is no idle talk. I don't promise these things—I guarantee them. If you doubt me, come on and make me prove it. That's what I like.



EARLE E. LIEDERMAN as he is to-day

Send for My New 64-Page Book "Muscular Development"

It contains forty-three full-page photographs of myself and some of the many prize-winning pupils I have trained. Some of these came to me as pitiful weaklings, imploring me to help them. Look them over now and you will marvel at their present physiques. This book will prove an impetus and a real inspiration to you. It will thrill you through and through. All I ask is 10 cents to cover the cost of wrapping and mailing and it is yours to keep. This will not obligate you at all, but for the sake of your future health and happiness, do not put it off. Send today—right now, before you turn this page.

EARLE E. LIEDERMAN
Dept. 708, 305 Broadway, NEW YORK CITY

EARLE E. LIEDERMAN

Dept. 708, 305 Broadway, New York City

Dear Sir:—I enclose herewith 10 cents for which you are to send me, without any obligation on my part whatever, a copy of your latest book, "Muscular Development." (Please write or print plainly.)

NAME

STREET

CITY STATE

Europe he is known as the "money-breaker." The French Weight Lifting Club stated that this man actually could break copper and silver coins with his fingers.

Many a novelist has used coin-breaking as a test of strength for his hero, and the thing that strikes me funny is that the average amateur seems to think that it is about as easy to break a silver half-dollar with the thumbs and fingers, as it is to rip one pack of cards in two. Now almost any strong young fellow can halve a pack of cards, especially after he is shown how to use the grip of the full hands, but I firmly believe there is not one man in a million who can bend a silver half-dollar one-eighth of an inch out of line. I do not say that it cannot be done. All I say is that I have never seen it done. As many of you know, I have had the opportunity of meeting scores of professionals, and hundreds of amateur "strong men." A great many of these athletes have been eager to demonstrate to me their strength in various lines. I have seen them lift dumb-bells; I have seen them lift enormous weights from the ground; I have seen them break chains and bend spikes, but I have never seen any of them break coins. Some of them have *talked* about bending coins, but when I have produced half-dollars, or quarters, or nickels, or dimes, I have never been able to induce any of these men to even attempt bending them.

If you want to satisfy yourself of the immense strength that would be necessary to bend a coin, and if you do not mind wasting a quarter, just make the following test: Put the lower half of a quarter in the jaws of a vise, and then grab the upper half of the quarter with a pair of pliers and try to bend it. Of course you can do it, but while you are doing it you will realize that the exertion required is beyond the power of human thumbs and fingers. At least that is my experience and opinion.

I am open to conviction, and if any one will come to this office, roll up his sleeves to the elbows, allow me to ex-

amine his hands, and then bend or break silver coins taken from *my* pocket (not from his), I will give that man a whole lot of publicity; I will have the personal satisfaction of seeing something done which I have always claimed was impossible. If I am convinced that the man bends and breaks the coins by the unaided strength of his digits, I will cheerfully acknowledge that I have been laboring under a false impression.

This invitation is only to coin breakers. I am not particularly interested in seeing chains or horse-shoes broken, or nails or spikes bent into shapes. I have seen that kind of work done dozens of times. All I am interested in is the coin-bending or coin-breaking.

If Mr. Hanna sees this article (and I hope he will), I trust that he will send in the name of the Swiss who did the coin bending, and if possible, photographs of the coins.

LIMITATIONS OF THIS DEPARTMENT

Once again I must remind some of you fellows that "The Mat" is not a question box. If you want information as to where to get certain kinds of athletic costume, or gymnasium apparatus, your inquiries should be directed not to "The Mat," but to the Reader's Service Department.

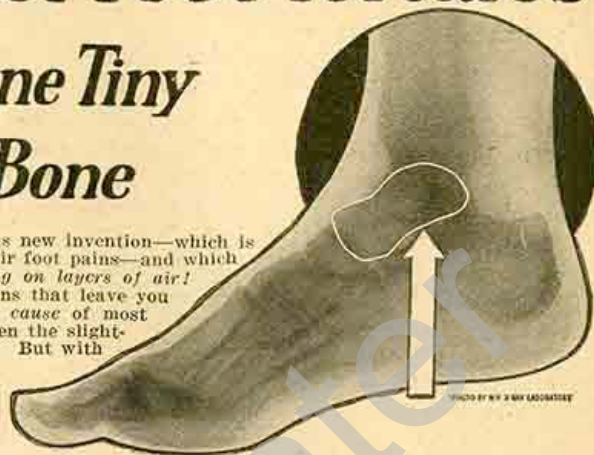
I cannot use space in "The Mat" to discuss individual cases. "The Mat" is to be devoted to the interests of *all* the readers. Therefore, when a man writes a description of the kind of exercise he has been taking, and then asks why he is not making progress, or exults over his progress he has made, his letter should have been sent to the director of the concern from whom he bought the course, and not to this department of the STRENGTH Magazine. I am always glad to hear your opinions about the conduct of the magazine, or about different kinds of exercise, or about great athletic feats of the past or present, but I positively cannot and will not devote these columns to discussing your own personal troubles.

Some of you are continually writing

Millions Suffer Foot Tortures

-because of One Tiny Misplaced Bone

FOOT specialists have just perfected a marvelous new invention—which is instantly relieving thousands of people of their foot pains—and which gives one the feeling that he is actually walking on layers of air! No longer need you suffer those terrible foot pains that leave you exhausted! For scientists have found the real cause of most troubles—a tiny misplaced bone in the foot. Even the slightest displacement of this bone means terrible pain. But with this new invention you can gently work this bone back into place, with the result that every pain disappears instantly—as if by a touch of a magic wand!



How Startling New Discovery Corrects the Trouble—and Relieves Foot Pains Instantly!

BUT Science now proves that 99 of every 100 foot pains are caused by a displacement of the *astragalus* bone—a small bone at the top of the foot arches. This bone supports your whole weight. It is held in place by tendons and ligaments. But very often these tendons become weakened. This tiny bone is then forced out of place. The result is fallen arches.

The arches are the "springs" of your body. They "give"—absorb the shocks of walking. But when the astragalus bone gets displaced, the arches lose their spring. Then the whole weight of your body falls solidly on the delicate bones and muscles of your feet, causing all sorts of foot misery. The muscles become twisted out of place, sensitive bones are placed under terribly unnatural strains, delicate nerves are tortured.

How New Invention Works

The old way of treating fallen arches made no attempt to bring permanent cure. The arches were merely forced into position by using hard, unyielding braces or props. Instead of strengthening the foot muscles that support the arches, these rigid props actually weakened them because they did not exercise the muscles.

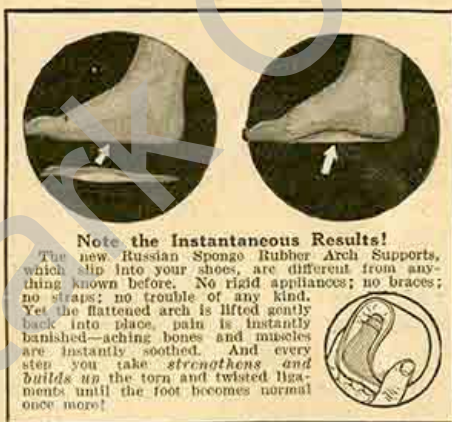
But how different is this marvelous new invention! It is made of Russian Sponge Rubber, and is in the form of a light springy pad, scientifically formed to the natural arch. It can be slipped into any styled shoe, yet were it not for the comfort that it brings, you would never be aware of its presence.

With a gentle even pressure at all points this resilient rubber at once raises the fallen arch to its natural position, gently working the displaced astragalus bone back into place. This instantly releases the pressure on the sensitive nerves and blood vessels, and takes all strain off the weakened muscles.

Brings Permanent Relief

As this light springy rubber yields to your weight, it reproduces exactly the natural spring of your arch! Its constant compression and expansion with every step massages, exercises and strengthens the muscles in a natural way—quickly bringing back their old-time strength.

The beauty of it all is that results are evident instantly! The moment you put on those wonderful supports all pain vanishes and walking becomes an actual pleasure.



Note the Instantaneous Results!

The new Russian Sponge Rubber Arch Supports, which slip into your shoes, are different from anything known before. No rigid appliances; no braces; no straps; no trouble of any kind. Yet the flattened arch is lifted gently back into place, pain is instantly banished—aching bones and muscles are instantly soothed. And every step you take *strengthens and builds up* the torn and twisted ligaments until the foot becomes normal once more!

SEND NO MONEY

Don't send a cent. Simply fill in the coupon, giving the exact size of your foot as instructed below. Don't hesitate to order by mail, for every day we fit hundreds in this way. When the postman brings you your supports, just pay him the amazingly low price of \$1.95 (plus few cents postage) in full payment.

Slip the supports into your shoes. Walk on them. Then if you are not amazed at the wonderful relief and comfort they bring simply, return them after 5 days and your money will be instantly refunded. Mail the coupon today—now.

THOMPSON-BARLOW CO., Inc.,

Dept. A-408

43 West 16th Street, New York City.

LOW PRICE INTRODUCTORY OFFER COUPON

THOMPSON-BARLOW CO., Inc.
Dept. A-408, 43 West 16th Street
New York

Send me, at your risk, the proper pair of your new Russian Sponge Rubber Arch Supports. I will pay the postman \$1.95 (plus few cents postage) with the full understanding that there are no further payments. If I am not satisfied after wearing them, I will return them in five days and you are to refund my money without question.



If not sure of shoe size, stand on piece of paper—trace outline of stockinged foot. Hold pencil upright. Enclose this with coupon.

Name

Address

City and State

Size of Shoe.....Width.....

Men's

Women's

me and asking me the most impossible sort of questions. I am willing and anxious to help anyone who is seeking health, strength, and development, but I cannot take it upon myself to decide questions involving a man's private life and actions. Several men have written me and wanted me to advise them as to whether they should give up their jobs in a small town and go to a big city, merely because the big city has several big gymnasiums. It seems to me that I am not the one to decide whether a man should leave his home and his job and start life anew, at a distant point. I think exercise is important, but not *that* important.

THE QUESTION OF VACCINATION

Recently I had a letter from one of these anti-vaccinationists. He had a job in a good sized factory in a large Western city. There was a small-pox scare, and the manager of the factory issued orders that every operative must be vaccinated or lose his job. My correspondent wanted me to write a letter to the factory manager saying that vaccination was foolish and unnecessary. Even if I held such radical views, I certainly would not try to force them on an executive in a distant city. When I answered my correspondent, I told him he should get vaccinated for the good of the community in which he lived.

This seems a good place to state that this magazine is positively *not opposed* to inoculation as a means of prevention of diseases. Neither is it opposed to the medical profession; and I get rather irritated at times when some of you write me and seem to calmly assume that I, and the rest of the editorial staff, are "agin all doctors."

It seems to us that any human being gifted with ordinary powers of observation and reason, should be able to see that the wide spread practice of vaccination has practically stamped out small-pox in all civilized countries. I admit that there are *occasional* cases where the effect of vaccination for small-pox is bad,

or worse, than the disease itself; but such cases do not happen once in ten thousand times. It is of course, hard on the unfortunate individual who reacts unfavorably to vaccination, but from the point of view of the State, it is better that one man should suffer in that way, than to abolish vaccination and have 25% of the whole population suffer from a preventable disease.

Fifty years ago one could not walk a city block without meeting several people whose faces bore the signs of small-pox. Today, you can walk for ten hours through a big city, and you will possibly see one or two pitted faces; and invariably you will find those faces are on elderly people who contracted the disease before the days of compulsory vaccination.

So the **STRENGTH** Magazine is for vaccination, and also it is for every other form of inoculation which has been approved by the leaders of the medical profession.

I believe that every one has a right to live his own life, and think his own thoughts. But I also believe that no man should carry either his actions or his belief to a point where they endanger the welfare of the community, or the nation, in which he lives. Therefore, I believe that any man who deliberately tries to evade vaccination, is a deliberate enemy to his family, his friends and his community, and is just as dangerous as any other kind of anarchist.

A. C.

Tumbling Into Health

(Continued from page 29)

It can be done with the use of a good spring board or from some high perch. But no matter how adept you are in tumbling, I would be careful of this one or rather, do not try it at all.

The hunting season will soon be here. Write to the "Readers' Service Dept." for information early and be assured of a prompt reply.

The Famous Edgar Weyer Tumbling **\$2.00** and Hand Balancing Course for Only **2.00**

Owing to the great demand for a good tumbling and hand-balancing course, we are now publishing the *Weyer Course*—as good a tumbling course as ever was or will be on the market.

The Weyer Course introduces the progressive element and rapidly transforms beginners into experts. Altogether it describes 193 different feats and combinations. The illustrations in this course are a great feature.

HEALTH, STRENGTH AND AGILITY THRU FUN

It is great fun to tumble and do hand-balancing feats. Nothing monotonous or slow about them; they use every muscle in your body and start your blood racing thru your veins, filling you with new life and vigor. For all-round bodily development there are very few activities equal to tumbling. It combines exercise with sport and play, and it is fascinating because it includes the popular feature of exercise thru fun.

EVERY ONE ADMIRES A GOOD TUMBLER

Just suppose you wanted to demonstrate the benefits of physical culture

to some friends. Now how are you going to do it; roll up your sleeves and say "feel that?" That's a weak demonstration compared to the string of cart-wheels and hand springs you could throw for them if you knew just a little about tumbling. And wouldn't their eyes pop out if you threw in a couple of back "flips" for good measure. You don't have to go around showing off but there are times when it pays and then you want to be ready.

SIMPLE TUMBLING CAN BE MADE SPECTACULAR

Who is the most popular man in your athletic club—isn't he the man who is good at tumbling and hand balancing? You never get tired looking at him and he never gets tired performing the stunts for you.

When you are in the theatre who get the most applause? The man or woman who does tumbling stunts! You begin with the simple Somersault, and in three months you can be an expert. You advance rapidly from the forward to the backward roll; from head stands to hand balancing, cart wheels, flips, and many other feats.

SPECIAL COMBINATION OFFER

The price of this course is \$2.00 post-paid. You can save money by ordering the Weyer Course and one year's subscription to "STRENGTH" (renewal or new) at the same time. The price of the combination offer is only \$2.75 (the regular subscription price of "STRENGTH" is \$1.50). This offer will hold good for a limited time only. Clip and fill out the attached coupon and mail it to us together with your remittance *today*.

Strength Magazine,
301 Diamond St.,
Philadelphia, Pa.

Enclosed find

{	cash
	check
	money-order

 for

{	\$2.75	
	}	\$2.00

 for which send me the Edgar Weyer Course and one year's subscription to STRENGTH.

Name

Address

State

Readers' Service Department

THERE is one part of our body which, among a great many of us, is a source of much pain and trouble. Have you ever had your feet spoil all the fun for you at a dance, at the theatre or while you were on an outing of some sort?

We are very apt to discuss the things we feel. Frequently foot troubles form the principal topic of conversation just like the weather.

The Aboriginal man and woman, science teaches us, lived in the tree tops. Man had progressed very little at this stage. The trees were his fortress. He was not safe on the ground.

Many scientists claim that the vast amount of foot trouble which exists today is due to the fact that during the long process of civilization, our foot has not adapted itself like the rest of our body to new living conditions, but is still constructed more for climbing than for walking.

This page is not written for the purpose of organizing an Anti-Shoe League, but to help some of our readers to enjoy a comfort, which they have not had, possibly, for many years.

Today a man would much prefer to cut down a tree for the lumber, than he would to climb to a lofty perch in order to reach a choice coconut.

Leather has been found to be the best material with which to encase the foot. It is serviceable and affords protection. Protection, however, from a pebble, a piece of glass or the hot sidewalks is not enough. The shoe itself may sometimes cause more damage than a rusty nail.

What causes corns, bunions, ingrowing toe nails and the troublesome callous? The answer in most cases is shoes which

are too small and which do not conform to the shape of the foot.

There is altogether too much personal vanity exercised in connection with foot apparel. Women who should wear a 7-B shoe will force their foot into a 6½-A, and then go down the street as though they were walking on ice.

Men do the same thing, although, no doubt, the army shoes made some realize what a comfortable shoe really was.

The writer has a very generous foot. One time a friend passed the following unkind remark. He said, "When you take your shoes off, you're half undressed."

The purpose of the READERS SERVICE DEPARTMENT is just what the heading implies. Those of you among our many thousands of readers, who have foot troubles, and do not seem to get any relief, should write in to this department, explaining your case. Perhaps we can help you.

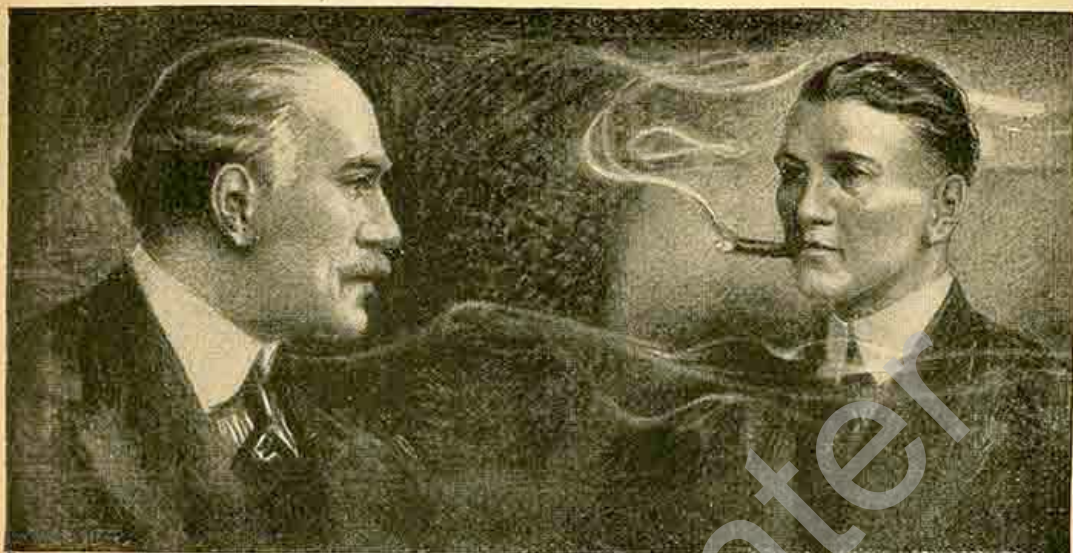
There are many great shoe concerns today engaged in the business of manufacturing shoes which will give real comfort. These shoes for the most part are very snappy looking, so one does not need to worry about appearance.

What is the use of letting a pair of shoes, which do not fit, upset one's whole nervous system? We shall be glad to consider each case and will advise you, without cost what kind of shoe you should be wearing, or perhaps we might suggest an arch builder or a corrective exercise, depending upon your particular needs.

R. L. H.

Note:—

We do not claim to be able to diagnose conditions which should be attended to by foot specialists.



Tobacco Is Hurting You

Look at the facts square in the face, Mr. Tobacco User. You may think tobacco is not hurting you.

That is because you haven't as yet, perhaps, felt the effects of the nicotine poison in YOUR system. For you know that nicotine, as absorbed into the system through smoking and chewing tobacco, is a slow working poison. Slow, yes—but sure.

Tobacco is lowering your efficiency. It slows a man down. Makes it harder for you to concentrate your mind on your work. You haven't near the amount of "pep" and energy you would have if you stopped using it. There's many a man twice as old as you in years who's twice as young in energy, simply because he lets tobacco alone.

Some day you will realize to what an alarming extent tobacco has undermined your system.

When your hands begin to tremble—and your appetite begins to fail—and your heart seems to "skip a beat" now and then—and slight exertion makes you short of breath—then you have a right to suspect that TOBACCO is getting the upper hand.

Any well-informed doctor will tell you that these are only a few of many symptoms of tobacco poisoning.

And YOU know that the use of tobacco in any form is an expensive, utterly useless habit. You know you ought to quit.

Tobacco Habit Banished Let Us Help You

It doesn't make a particle of difference whether you've been a user of tobacco for a single month or 50 years, or how much you use, or in what form you use it—whether you smoke cigars, cigarettes, pipe, chew plug or fine cut or use snuff—Tobacco Redeemer will positively remove all craving for tobacco in any form in a very few days. Not the slightest shock to the nervous system. Your tobacco craving will usually begin to decrease after the very first dose—there's no long waiting for results.

Tobacco Redeemer contains no habit-forming drugs of any kind and is marvelously quick, scientific and thoroughly reliable.

It is in no sense a substitute for tobacco. After finishing the treatment you have absolutely no desire to use tobacco again or to continue the use of the remedy. It helps to quiet the nerves and make you feel better in every way.

Results Guaranteed A single trial will convince you. Our legal-binding, money-back guarantee goes with each full treatment. We will refund every cent you pay for the treatment if after taking it according to the easy-to-follow directions, it should fail to banish the tobacco habit completely.

SEND Free Coupon Let us send you our free booklet on the deadly effects of tobacco, together with testimonial letters from men all over the country telling how they have been absolutely freed from the tobacco habit by this simple home treatment. You could not ask for stronger proof that Tobacco Redeemer will free you from the habit than the evidence we will gladly send on request. Just mail the coupon—or a postal will do.

NEWELL PHARMACAL CO.

Dept. 974

St. Louis, Mo.



Free Book Coupon

NEWELL PHARMACAL CO.

Dept. 974

St. Louis, Mo.

Please send, without obligating me in any way, your free booklet regarding the tobacco habit and proof that Tobacco Redeemer will positively free me from the tobacco habit or my money will be refunded.

Name

Street and No.

Town State

Keep Young by Internal Baths

Pure blood is the prime necessity of true health, the ever-young feeling that vaults over years. Yet not one out of ten—men and women, all ages—has pure blood. One reason only—auto-intoxication.

The seat of auto-intoxication

Auto-intoxication is the result of constipation, the clogging of the colon or large intestine. This constipation is not always apparent. Frequently, a partial constipation, not noticeable save through a growing depression, leads to most serious auto-intoxication.

Because we lack strenuous exercise the muscles of the colon become flabby, unable to fulfill completely the pushing out process. As a result particles of residue lodge in the folds and bends of the colon. This waste matter is poisonous in itself under fermentation. Dangerous, often deadly, disease germs breed here and create more poison. Then, the blood passing by the intestinal walls absorbs these poisons and carries them to every part of the body.

The danger signals

The first stages of auto-intoxication are hardly noticeable; a mere dripping of poison into the blood. And for a time the blood can free itself partly by aeration at the lungs. Then, when across our smooth way of life come the warnings of headache, blurring vision, jumpy nerves, mental slowness, despondency, or the tell-tale complexion and lack-luster eyes, we think it merely some more constipation and resort to cathartics.

The relief is purely temporary and not sufficient. The colon is not able to function properly afterwards. Eventually cathartics or any drugs are powerless against advanced auto-intoxication.

Dr. Tyrrell's research

Constipation is as old as the sedentary habits of the human race. But its result, auto-intoxication, is comparatively a new subject of medical research. And the pioneer in this study, one whose work and achievements will probably stand out pre-eminently in the future as they do in the present, is Dr. Charles A. Tyrrell.

Dr. Tyrrell's method is that of the internal bath. Adequate internal bathing (the proper cleansing of the whole colon) is possible only by the use of the "J. B. L. Cascade" which Dr. Tyrrell has perfected. It is simple and easy with this.

A health guide FREE

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The Upper Arms and How to Develop Them

(Continued from page 52)

slowly, straightening his body at the same time. As the bell is lowered care should be taken that it is not let down near the shoulder, keep it clear of the shoulder, a bit to the rear, but not too far below the level of the shoulders. Repeat the movement six times with each arm for four exercise days. After that repeat it eight times for four exercise days. After that repeat it ten times for four exercise days, and so on till twenty repetitions can be accomplished. Then increase the weight by five pounds and proceed as before, increasing by five pounds until twenty repetitions are accomplished. When a man is able to perform this exercise twenty times, right or left arm, using a seventy-five or eighty pound bell, he will then have a real triceps.

For the youth not possessing a barbell or dumbbell the well known "floor dip" is very effective though not as effective as the different barbell and dumbbell exercises. For those unacquainted with the technique of this exercise a brief explanation will be given. The young man lies face downward upon the floor. Now keeping his back perfectly rigid, and with nothing but his toes and hands touching the floor he slowly pushes himself up till his arms are straight. Then slowly lowers himself. This is repeated until his arms begin to feel the effects. Here, as is the case in all exercises other than those performed with adjustable bells, it is impossible to progress far or satisfactorily, though it is possible to acquire a fair pair of triceps by practicing the floor dip. It can be made harder by gradually elevating the feet, putting them upon books or a box, or a chair, etc. Walking on the hands will also tend to develop the triceps. Turning hand-springs, cartwheels and other various forms of tumbling will help.

(Continued on page 86)

At Last—The Torch Bearers of Physical Progress

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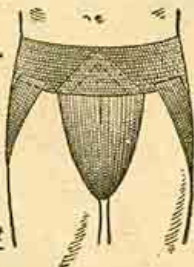
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(Continued from page 84)

ing a bag, putting the shot right and left arms, any movement whereby any weight is raised or pushed to any height above the head, will tend more or less, to develop the triceps muscles.

Here, it will not be out of place to repeat emphatically, that for the boy or young man who really wants a pair of upper-arms triceps and biceps that will possess classical contours, that will symbolize great power and strength, that will be more than just average arms, then such a youth should practice diligently the two-arm curl for the biceps muscle, and the one-arm modified side press—as described above—for the triceps. These two simple exercises will do more in the way of producing all-around upper-arm development, than all the other "free movement" exercises, wooden dumbbells, Indian clubs, standard gymnasium apparatus work, etc., put together. If a youth desires to rival the world's strongest and best developed men, then he should practice the one-arm and two-arm military press, the shoulder-bridge press, the wrestler's bridge press, the one-arm and two-arm jerk, as well as the one-arm and two-arm snatch, the bent-press, etc. Some of the lifts or advanced exercises were described in the treatise on the shoulders and more will be said about them from time to time in dealing with the development of other parts of the body later on.

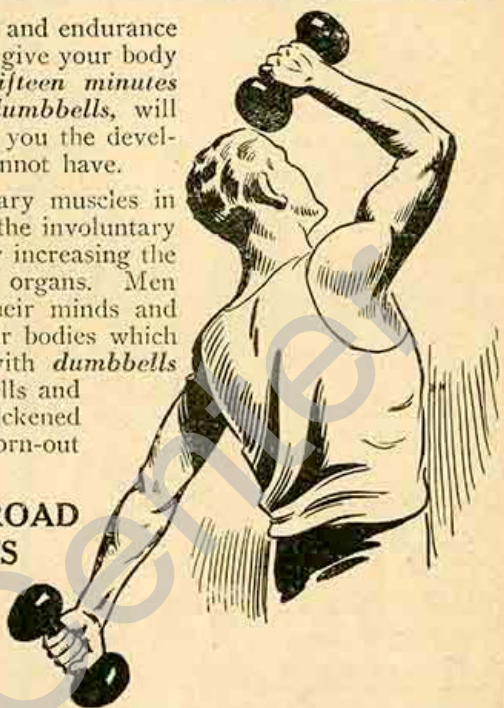
What has been described in the above paragraphs are in effect but the methods used by the writer in acquiring his own upper-arm development. There are absolutely no guess work methods used. Everything is the result of years of study and careful anatomical analysis. The exercises are all based upon the time-tried exercises used by Sandow, Saxon, the Norquests, Milo, Newbauer, Goodman, Jowett, Matysek, Snyder, Young, and

(Continued on page 88)

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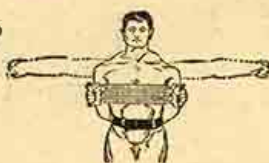
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(Continued from page 86)

countless other human muscular masterpieces.

There is but one great drawback, one great enemy in the way of arm development, in the way of development of any part of the body, and that is, lack of "stick-to-itiveness"; will power, in other words. It is a most peculiar situation indeed, when young men will sit and envy another young man's development, long earnestly for that same sort of development, yet, instead of trying to acquire that same sort of development, will go right on and roll cigarettes, and dice, and pool and billiard balls, push a spoon around the inside of a tea-cup, shuffle cards, instead of tearing them, and still wonder why their muscles do not show improvement! There are Indoor Sports, and Indoor Sports!

Jack Merchant

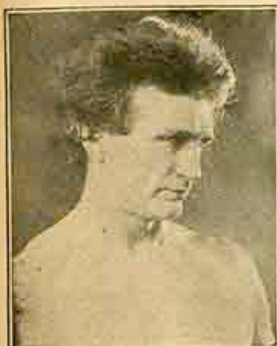
(Continued from page 22)

and the statement that he set the inter-collegiate record in the hammer throw last year.

While Merchant's name is nearly always connected with the hammer-throw, he is in reality, an all-round man. He holds the California-Stanford broad-jump record, with a leap of 23 feet 11½ inches. Believe me this is some leap! Merchant has placed second to Paddock in competition, and on one occasion when Paddock was disqualified for studies, Merchant easily beat the rest of the University of Southern California 100 yard men. His best time is 10 seconds. This proves beyond all possibility of doubt that handling weights does not make a man slow or muscle bound. On the other hand, it lends strength to the running events and increases speed.

Even as a youngster Merchant liked athletics, and started his foundation early. Wood-chopping, farm work, swimming, hunting, and similar outdoor sports have contributed in his development. While Jack has never used a bar-bell, he is proud of the fact

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(Continued from page 88)

that he can muscle out to arm's length, a 56 pound weight, used in the 56 pound throw.

Nearly all of Merchant's pictures have been taken while in track clothes, and I thought all of you would like to see the real "works" and not merely the covering, so Merchant consented to pose without his jersey. Can you see the latissimus dorsi muscles, in photo? And how does the back view appeal to you? I guess you can find a great deal more in the pictures than I can express in words. If any of you are so fortunate as to view Merchant, do not let the opportunity slip by.

Besides being a strong man, Merchant is the ideal type of athlete, a real man, and liked by all his teammates. He trains faithfully. He is now competing for the Olympic Club of San Francisco, and will in all certainty represent United States in the 1924 Olympic Games, as he did in 1920.

It is a noteworthy fact that in nearly all cases of men having wonderful bodies, the mind too has been raised to a high degree of perfection, and the individual looks upon the world with beneficence and peace. His personality is dominant and delightful. Who knows but that if we strugglers will persist in developing our bodies, we too will have these superb qualities and be a joy to mankind instead of being "also rans."

More About Sculpture

(Continued from page 38)

literally she has come down as lightly as a falling leaf.

Now, don't ask me how Mr. Weinman managed to convey this effect of rising and falling motion. All I know is that there is some nicety of modeling, some knowledge of the appearance of muscle in motion that is the work of the artist; for no model could possibly hold either of those positions long enough to allow the sculptor to merely copy the outlines.

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To learn this counter alone is worth many times the price of the book and yet it is but one of a great variety of intimate details revealed to you by "Tommy" Burns. He devotes a great deal of attention to clinching, both inform-

TABLE OF CONTENTS

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9. On Fouls.
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ing you the steps that you should take against a man who persistently clinches himself and also explaining how you may use to advantage this method which is occasionally the only method by which a boxer can escape punishment.

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that as a rule it is wisest to reserve all your offensive movements for fighting at close quarters? If you come to close quarters in the crouch you are up to your man with your shoulders rounded and your arms well placed both to cover up securely and also to give him all the digs for which

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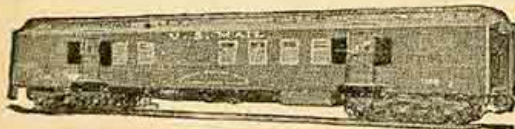
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in the statue "On Nimble Toe," which shows a very young girl at play. But here the treatment is different, for in this statue the position and modeling of the right foot shows that the next step will carry the body forward. There is a tenseness in that foot that is in marked contrast to the slightly relaxed right foot of the "Descending Night."

It was not necessary for the sculptor to explain his title. If he had said "On Nimble Toe," a statue of a young girl, his last phrase would have been superfluous. Even when the youthful face is covered you know by the lines of the figure that this is a maid of fourteen or so.

In the last figure, "The Ball Pitcher," I believe that the sculptor has intended to portray physique of the modern athlete. Fine as this figure is it seems to me to fall short of the ideal proportions of the faun in the picture on page 36. But then the average athlete today falls short of being as finely built as was a faun; and this difference in appearance is undoubtedly deliberate and intended on Mr. Weinman's part.

At that, I believe that the sculptor has shown us the types of physique that a ball pitcher *might* have.

I doubt if in all the leagues—major and minor—there is one heavier that can show as fine a body as Mr. Weinman's "pitcher."

Again in these pictures I want you to note the poise of the figures as well as the muscular development. Study the position of the limbs and you will see just why certain muscles appear as they do. Gradually you will realize that a sculptor can signify action by the model-

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Kenneth T. Jones

ing of a limb, which in turn means intimate knowledge of the shape a muscle will assume in any conceivable state of flexion.

Lengthening Our Lifetime

(Continued from page 34)

eggs especially—and spend every possible hour in the open. And *play*. Out-of-door sports are best—swimming, riding, golfing, tennis, hiking, skating, skeeving—but when you can't play outdoors, play indoors. Play with the children, play with the puppy, play jackstraws, play Old Maid, play any old thing—but for goodness' sake, *play*.

How to Perform a "Strong Man" Act

(Continued from page 60)

pass her around to your side and let her weight rest on the top of your right hip. While she is practically

sitting there, bend your body slowly to the left and forwards, and you will find that you can get your right arm straight without perceptible exertion. Because you are bending forward, the audience will not realize that most of her weight is on your hip and not on your lifting arm, and they will think that you are forcing her weight aloft by sheer arm strength. From that position it is easy for you to stand erect and bring your partner to arms length, and while holding her aloft, you should march slowly off the stage.

If you are very strong you can do a "bent press" while your partner is lying in a horizontal position with your right hand at the back of her waist, but that stunt requires considerable practice. If you will make the press the way I have described, it will appear to the audience as though your partner weighed no more than the traditional feather, and also as though

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Michael McFadden

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you did the hardest stunt of all with the utmost ease. It is always best to leave your audience with the impression that you have done your act smartly, skillfully, and above all, easily.

Boxing

(Continued from page 71)

foot to meet the punch. Also don't retreat nor bend back with your body as you parry. Learn to guard yourself correctly, safely, and effectively, even under conditions where no change of ground is possible. This does not imply never to make good use of your feet or body in getting away from a punch but to be able, in an emergency, to confidently and effectively protect yourself with some safe form of block or guard without being obliged to break ground or to resort to other assisting defensive measures. Even if hard-pressed a good guard, properly used should be its own protection.

(Continued next month)

The Million-Dollar-Legs

(Continued from page 75)

traveling on the trains from one city to another.

To enumerate the races won by Madonna would cover too much space so I will just say that he has carried off the honors in the last six or seven races held in New York City. Recently he established a new record for twenty miles by going in twenty-five minutes and two seconds. He did that just after recovering from a broken collar bone resulting from an accident in one of his races. His present great ambition is to break the world's hour record.

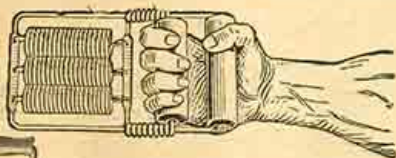
To keep himself in condition an athlete has to use a great deal of judgment, besides doing an immense quantity of hard training. Madonna seems to have solved his own problem by getting plenty of fresh air, lots of exercise, regular meals, and by learning the knack of complete relaxation when he is resting.

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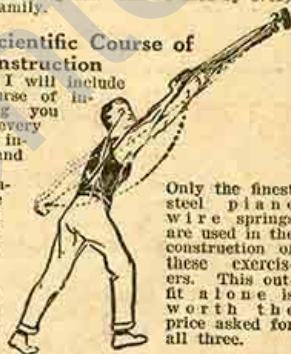
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I even tried a hair tonic, but soon threw it out of the window.

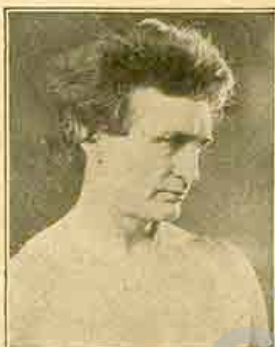
After a period devoted to intelligent consideration of the reason for loss of hair, together with sensible, dependable methods for building hair health, I found a way out.

Here I am, thirty years later, with a head of hair as shown in the accompanying picture.

I want to pass on this invaluable information to every owner of a head of hair. It is worth just as much to you as your hair is worth.

Barbers rarely know anything about remedying dandruff or falling hair. Hair culture is a sealed book to them. Doctors are as much in the dark as the barbers. So-called experts are often little better than "quacks."

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instructions presented therein. You can thicken and strengthen the hair you already possess. You can make it more healthy and lustrous in appearance.

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