

# STRENGTH

JANUARY 1921

Wrestling



Are You Physically Fit



The Big Secret of  
Training



Occupation and Health



Hand Balancing



The Development of  
the Forearm

Price, Fifteen Cents



Char. Ellis  
7-12-1911

E

# The Strength of a Strong Man

**Y**OU don't want it, of course—wouldn't have it for a gift. But you do want the bounding energy and vitality—the limitless endurance and vigor that only the strong man enjoys. Just the brute strength alone may not be of much value to you, but the confidence in your own ability that comes from the assurance that your well-trained body is capable of meeting all emergencies—what is that worth to you?

The strength of a strong man—not just a strong arm, or a strong back—but to be really strong in all parts of the body, sound organically and active physically and mentally—this is going to be worth real money to you in everyday life. You may be a brain worker, and may figure that you have no need of brawn, but of what value are your brains when the doctor shakes his head and counts you out? Your poor, weak, undeveloped body will be an actual handicap then, a happy hunting ground for germs of all descriptions.

The strength of a strong man—to be able to meet your fellow men on the ground of physical equality. To have sufficient faith in your own ability and enough pep and vigor to back that self-reliance to your own personal advantage. Strength is a breeder of confidence. You must have both to succeed.

The strength of a strong man—to have good, red blood singing through your veins and to feel that the world is a pretty good place to live in. All these things we can give you, or rather can show you how to obtain them for yourself.

Our illustrated booklet will show you how you can obtain all these things by exercising for a half hour every other day. Begin the new year right. Send for it today.



E. W. GOODMAN A MILO-BUILT MAN

The Milo Bar Bell Co.

Dept. 17, Third & Diamond Sts.

Philadelphia, Pa.





## A new Gillette Razor the Big Fellow

**T**HIS is it—the Big Fellow—the sensational new Gillette.

At once the greatest razor advancement of a generation and the most instantaneous success.

The razor big-handed men everywhere have expectantly waited for.

We never knew how many big men there are in America until a few months ago when the demand from big-fisted chaps for the Big Fellow swept over the country.

Speak for your Big Fellow today. Put one of those tried Gillette Blades in it—and shave.

*No Stopping  
No Honing*

# Gillette

MADE IN U. S. A.  
 TRADE MARK  
 Gillette  
 BOSTON  
 KNOWN THE WORLD OVER

Canadian Factory:  
73 St. Alexander  
Street  
Montreal, Quebec

New York  
Chicago  
San Francisco  
London

Paris  
Milan  
Madrid  
Brussels

Copenhagen  
Amsterdam  
Geneva  
Buenos Aires

Sydney  
Shanghai  
Singapore  
Calcutta

Saloniki  
Port Elizabeth  
Rio de Janeiro  
Tokyo



Once to every man comes a time when he must fight for his life or the safety of a loved one. When it comes to you it won't be a question of bravery or strength, but whether you know how to box and defend yourself.

## Can you hold your own?

You probably haven't had a real fight since you were very small. Settling a dispute with your fists is the last thing you'd think of. And yet, a time may come when you will have to fight.

Suppose you saw a rowdy in the act of insulting a woman. Could you look the other way? No, sir, you'd want to step right up and teach him the lesson he deserved. But could you? A quarrel might lead to the challenge "Come outside and fight." Could you do it and hold your own? Or suppose you were attacked in a deserted street after dark. You'd have to fight! Your very life might depend upon being able to disarm the thug and cripple him with a powerful blow or jiu jitsu hold.

Remember, these two fists of yours are the best weapons—they're always with you, always ready, if you know how to use them.

Marshall Stillman will teach you boxing and self-defense in your own home. His system is the result of 30 years' study. He's an expert boxer himself, and a pupil of Professor Mike Donovan, who retired undefeated middle-weight champion of the world.

In his course the fundamentals (hitting, guarding, ducking, feinting, and foot-work) are easily learned, because you start by practicing simple movements before a mirror—the breast stroke in swimming, holding out your hand for a coin, etc. Subconsciously you are led into striking heavy blows, guarding, ducking, feinting, etc., just as though you had a real opponent before you.

When you've mastered the fundamentals, you're taught every good blow in the ring—when to land it, where to land it, and how to guard against your opponent's counter attack.

Then comes Shadow Boxing. Marshall Stillman has combined such scientific blows as the Jack Dempsey Triple, the Bennie Leonard Triple, the Mike Donovan Double, etc., into three lively rounds for daily practice.

You're also taught 12 wrestling holds and 15 jiu jitsu holds—how to disarm a man with a pistol, dagger or club, how to break a strangle hold, etc.

The course includes a set of muscle building exercises. The Colon Exercise (a remedy for constipation) and Synthetic Breathing (a lung developer and aid in curing nervousness.)

As an added feature, there's an illustrated history of 69 great boxers with "inside" stories seldom heard outside professional circles.

There are 216 illustrations in the course.

### Sent FREE on Approval.

The entire course is sent on approval. You keep it 10 days, and then if not satisfied, return it. If you buy it, you have 100 the 15th of the following month to pay, (\$5 in the U. S., \$6 in Canada, \$7 in foreign countries.) Send no money, but mail the coupon now to

MARSHALL STILLMAN ASSOCIATION  
Suite J-201, 461 Fourth Ave., New York

#### What the Course Contains:

BOOK I—32 illustrations, 5 short-cut lessons in the fundamentals of boxing—lessons in Mass Boxing.

BOOK II—35 illustrations posed for by two experts. Describes every good blow and guard in the ring.

BOOK III—36 illustrations, 3 rounds in shadow boxing. Article on Training with questions and answers. International Sporting Club Boxing Rules.

BOOK IV—A history of 69 great fighters, with their pictures.

BOOK V—23 illustrations. Muscle Building Exercises. A short criticism of all sports.

BOOK VI—54 illustrations, 12 Wrestling Holds, 15 Jiu Jitsu Holds.

.....**FREE APPROVAL COUPON**.....  
MARSHALL STILLMAN ASSOCIATION,  
Suite J-201, 461 Fourth Avenue, New York.

You may send me your complete course in Boxing and Self-Defense, including extra instruction described above. I give you my pledge that you may feel safe in trusting me as agreed, and that I will pay \$5 (\$6 in Canada, \$7 in other countries) for the course on the 15th of next month, or return it in 10 days after I receive it.

Name .....

Address .....



# STRENGTH

Vol. 5

JANUARY 1921

No. 7

## TABLE OF CONTENTS

	Page
Editorial .....	4
House Cleaning Time for Useless Habits. Drawing by Harry B. Paschall .....	6
The "Bonus Bone." By Robert W. Maxwell .....	7
Hand Balancing. By P. H. Miconi .....	10
Forearm Development. By O. R. Coulter .....	15
Are You Physically Fit? By Walter Mann .....	20
The Big Secret of Training. By Norman Evan Price .....	23
Pictorial Section .....	24
Wrestling. By William J. Herrmann .....	28
Occupation and Health. By L. E. Eubanks .....	35

Entered as second class matter November 20, 1920, at the Postoffice at Philadelphia, Pa., under the Act of March 3, 1879.

Published Monthly by The Milo Bar Bell Co.  
Publication Offices, Third and Diamond Sts.

J. C. Egan  
Editor.

Philadelphia, Pa.

D. G. Redmond  
Publisher.

Subscription Price, One Dollar and Fifty Cents (\$1.50) Per Year.  
Canada, \$1.75 per Year; Foreign Countries, \$2.00 per Year.  
Copyright, 1920, by The Milo Bar Bell Co. All Rights Reserved.



## New Year Resolutions

**B**REATHES there a man with soul so dead, who never to himself hath said—"I will!" or "I will not!" at the beginning of the new year?

Now is the open season for good resolutions. It is the accepted time for each one of us to take stock of our pet vices and bad habits, and to resolve to mend our ways. Some will resolve to stop smoking, others to stop drinking (page Mr. Volstead), and no doubt each one of us will resolve not to do something. Negative resolutions may be perfectly in order, but why not make a few positive ones? I don't know of a better one that anyone could make than to resolve to exercise regularly, and to stick to it.

If you make a resolution, and live up to it, it will at least be a distinct gain in will power, no matter how foolish or unnecessary the resolution may be. But it is just as important to develop the will power by *doing* some things as by not doing others. The people who get ahead in this world are the people who do things. Learn to say "no" and to mean it—by all means. But don't forget to include some positive resolutions in your list. The first and foremost one should be to exercise regularly.

It won't be very hard to keep that resolution, once you get started. You will not be denying yourself a thing. The short time spent in exercising will not be missed, but you will never know what you are missing by not exercising until you begin. Do it today.

### SUNLESS SUNDAYS

Speaking of New Year resolutions, one of the best possible would be for some people to resolve to stop trying to make life miserable for the rest of us. There is a movement afoot for a "Sunless Sunday," which aims a blow at all forms of amusement and recreation on the Sabbath. Very laudable—perhaps. It may be quite in keeping to stop commercialized sports on Sunday, but the movement does not stop there, and is intended to check all forms of exercise on that day.



There is inherent in all of us a love of the out-of-doors. Most outdoor sports can be practiced only during the day. The vast majority of the American people work for a living, and work six days a week. Sunday is the only time we have for recreation of this kind. This proposed law would bar us from all forms of recreation on that day. Can it be done? It can not!

Some of the leaders of this movement tell us that they do not intend to stop the publication of newspapers on Sunday. How magnanimous! Probably because they like to read the Sunday papers. It may fit in with the eternal scheme of things that each one of us should sit around on Sunday, twiddling our thumbs and with eyes raised sanctimoniously toward heaven, but it would not make the world a better place to live in. It would discourage general participation in sports and healthful recreation, and would tend to make us a race of mollicoddles.

Some of the gentlemen who are agitating the passage of this bill may feel the occasional need of exercise. And who knows but what some of them might even relish (very secretly, of course) a walk on the Sabbath? A nice, sedate and dignified form of recreation, but I hardly think the recording angel will make any fine distinction between this type and the man who takes his exercise and recreation in a more strenuous form. The man who refrains from all forms of exercise on the Sabbath may be a better man than the one who does not, but religion is something that can not be legislated into the soul by an act of Congress. If we observed such a law just because it was a law, and not because of religious feeling, we would be a nation of hypocrites. If we did not observe the law, we would be classed as lawbreakers and criminals. Not much choice between the two.

This movement may be inspired by holy zeal, but it has the earmarks of the same old intolerance that burned witches at the stake. The Christian virtues of charity and tolerance are conspicuous by their absence.

Some day, when our lives are entirely regulated by statute, and what we shall eat, what we shall wear, and each and every act of our daily lives is regulated and prescribed by law, some daring soul will organize a movement against fanatics who pose as reformers. Why not now?

### THE WEIGHT LIFTING ASSOCIATION

In the February issue, we have arranged to submit for your approval a plan for the formation of the weight lifting association. The editor has received many letters from the readers of *STRENGTH* voicing their approval of the project, and has obtained many valuable suggestions from this source. If you have any ideas on the subject, don't keep them to yourself. Help the good work along by sending them in.



HOUSE CLEANING TIME FOR USELESS HABITS



## The "Bonus Bone"<sup>99</sup>

By ROBERT W. MAXWELL

**I**N another month, a couple of hundred big league ball players and those who have sincere intentions of being big league ball players, will pack up the old valise, purchase a new collar, board a train and hasten gleefully to the Sunny South to indulge in some spring practice in preparation for the coming season.

Big league managers will study the list of candidates, predict a pennant and the 1921 derby will be well under way. Every year sixteen pennants are won in the National and American Leagues. There is no opposition until after April 15, which means it is easier to win baseball championships in the winter than in the summer.

Last year was the most prosperous the game ever has known. Every club owner made money, some for the first time since 1908. Huge crowds, increased prices and intense interest in the pennant races in both leagues were responsible. Never before have the races been so close. Usually one can dope out a pennant winner in early September but last year it was a fight to the finish. There was plenty of excitement.

Now the magnates are looking forward to another big season. They are not looking forward with confidence, however, for the game was dragged in the mire last October when the pillow lifters and members of the wives and kiddies club admitted they had sold out in the 1919 world series and threw the games to Cincinnati. It was a dirty scandal and shook the very foundations of a sport which had been built on public confidence. Now the game is on trial. Perhaps the public will attend the games as of yore and perhaps again, it will not. It's a big guess.

Eight members of the Chicago White Sox team have been indicted by the Grand Jury. Other players on other clubs are likely to suffer the same fate. The magnates say they will get rid of all suspected athletes no matter how valuable they may be to their teams.

A short time ago President William F. Baker of the Philadelphia National League

Club, issued a statement which is very significant.

"Baseball is undergoing a thorough housecleaning," he said, "and there are other players besides those who have been indicted by the Grand Jury who probably will be missing from the major leagues when the roll is called on the opening day next Spring."

This means that all ball players under suspicion will be quietly dropped and placed on the blacklist for all time.

Last year few realized that more than one hundred defectives were employed in the major leagues to keep a close watch on all ball players. For six months they were on the job and their discoveries were startling. Players were watched on and off the field, their associates closely scrutinized and weekly reports sent into the league presidents. All of this data will be used before the opening of the season and it is rumored several stars will step out of the picture.

This gambling scandal is the worst thing that ever has happened to baseball. Fans couldn't believe it until some of the guilty culprits confessed. They figured that games could not be "thrown" because the players for their own protection, would prevent it. Now it is different. They have seen how easily it can be done.

\* \* \*

Everything has a beginning and to my mind the present scandal was caused by none other than the baseball magnates themselves several years ago. Sounds funny, doesn't it? Nevertheless, it is true.

The bonus system which is quite popular in the major leagues planted the germ which sprouted the crooked work that made the 1919 world series a travesty or rather, a baseball tragedy. Club owners are in favor of this system because they had a hazy idea that the promise of \$500 or \$1000 at the end of the season would cause the men to play better baseball.

For example, take the case of Oswald Thorndyke. There never was a person by that name, so he will be used as an example.



Oswald was an outfielder. He had a good season and the next year refused to sign a contract until he received more money. In other words, he became a holdout.

He called on the club owner to talk things over.

"I played for \$3,000 last year," he complained, "and this year, I want \$4,000. My record entitles me to the increase in salary."

"How do I know you will be as good this year?" countered the president. "Now, I'll tell you what I will do. I will sign you for \$3500 and you will receive a bonus of \$500 if you hit .300 or better."

Oswald accepted the offer and was confident he could earn the extra money. However, his hitting fell off and when the season was near a close, he still was several points shy of the .300 mark.

He told his troubles to the opposing pitchers and hinted that a grooved ball occasionally would be greatly appreciated. If the game was not close and there was no one on base, a hit wouldn't hurt the result, was his argument.

The outcome was that he suddenly started to hit and, aided by the opposing pitchers, gathered enough safe wallops to pass the required average and receive the extra money.

That was one way of cheating under the bonus system. Here is another, which is more or less a hypothetical case.

Four players on different clubs were working for a bonus. They were good hitters, but did not care to take any chances on losing out. Therefore they entered into an agreement to help each other.

Every time they played, they connected with two or more safe hits, because it was easier to hit the ball than in batting practice. The system—remember this is a hypothetical case—was for the man in the field to flash a signal to the batter, telling him what kind of a ball was to be pitched. He knew whether it was a curve, slow ball or a fast one. With this advance information he could set himself and place his hits where he wanted to. Perfectly simple, wasn't it?

If a pitcher had to win twenty-five games to get a bonus and in the last week of the season he needed one more to make the desired total, it's a thousand to one shot he will win that game. The other club will see to it, if he is anyway popular.

But how does this affect the crooked playing? Easiest thing in the world. First, the pitcher who grooved the balls for Oswald, got away with it without the faintest trace of suspicion. The four ball players who gave each other the pitcher's signals also were unsuspected and the ball club which allowed the hurler to win the game that gave him his bonus never was questioned.

Therefore, it was proved time and again that ball players could get away with questionable stuff on the ball field and when the big temptation came, these cases, or similar cases, were cited as arguments. If they did it once, why not try it again? No one ever would know.

For years this has been going on. The players know it and so do the managers. Exchanging base hits is a common practice in the big show.

If there were no bonuses in the contracts the chances are that this practice would stop. But the short-sighted magnate, who, to save a few paltry dollars, placed temptation in the way of his players insisted on taking a gamble and almost lost everything he had.

In the future it might be a good plan to pay the players what they are worth and pay it in a lump sum. The president of the National and American Leagues should abolish the bonus system. It caused the present scandal and let's not have another one.

In another month the ball players will be traveling South for spring training. Perhaps I am too optimistic in making this statement. I should say that "some" ball players will go South. Others will seek employment in other lines of endeavor, where the whistle starts them off at 7 A. M. and chases them home at 5.30 P. M.

Never again will they earn easy money for playing ball a couple of hours in the afternoon. They are on the blacklist for life.

\* \* \*

Bambino Ruth, the fence buster and holder of the world's record for home runs in one season, was the biggest drawing card in baseball last year. It was he who was responsible for the success of the game, for his work stimulated interest and drew the mobs to the ball parks. Never before has the great national pastime had such an attraction and perhaps it never will.



The owners of the New York Yankees made a fortune last year and hope to do the same this season. And everything depends on Ruth.

Last year, Colonels Ruppert and Houston paid \$137,500 for the noted slugger. They doubled his contract, and signed him for two years at \$20,000 a year. The contract has another year to run.

Now comes the big question. Will Ruth come back and play for \$20,000? The chances are he will not. This is only a guess, but in a short time it would not be at all surprising to read about the Babe joining the holdouts.

Fame and fortune have come to Bambino in one year. He is making more money than any dozen athletes in the game, and this includes Ty Cobb, Tris Speaker and Grover Alexander. As this is being written, Ruth is in Cuba, playing ball for \$1,000 a game. He is to play fifteen games. He also received this amount for playing in exhibition games in the East after the season ended. Twenty games meant \$20,000. In the American League, he had to play 154 games for the same amount. It took him six months to earn as much money as he

now gets in three weeks. What's the answer?

Ruth receives \$129.87 a game during the regular season. Compare that with the money he gets on the outside. He knows he is a drawing card. Smart friends have told him so. Will he come back for a paltry \$20,000? Figure it out for yourself.

Other ball players are likely to do the same as Ruth. Realizing that the owners enjoyed a prosperous season, the athletes will not be backward in demanding an increase in salary. Holdouts will be numerous this year—if they can get away with it.

Once upon a time a baseball star was considered a high salaried person when he received \$4,000 a year. Charley Comiskey received \$2,500 when he was in his prime and Cap Anson never passed the \$5,000 mark. Today, the ordinary player will scornfully pass up a \$4,000 contract and consider himself insulted.

Frenzied finance is reigning supreme in our great national game. The magnates are not allowed to have any profits, but the players want nothing but one hundred per cent.

It's a great game, this baseball—a great game.



JUDGE LANDIS SIGNS AS BASEBALL'S CHIEF EXECUTIVE.

Scene in Judge K. M. Landis's chamber where the Federal jurist accepted the offer of \$42,500 per year to assume supreme charge of the national game.

Copyright by Underwood and Underwood.

# Hand-Balancing

## THE HAND-STAND ITSELF

By P. H. MICONI

Illustrations by the Author

**A**LL of us have at some time tried to stand on our hands, either when we were very small or later when in the gymnasium while at school, or perhaps on an outing with a crowd of young people on vacation at the seashore or country.

As song and laughter generally is conceded to denote joy, happiness and contentment, so it is with the average active boy or young man; he being manly, he will more likely show appreciation by adding a demonstration of some physical accomplishment, such as turning handsprings or other forms of tumbling or even just walking on his hands if surroundings will permit so doing.

There are certain definite reasons for the fascination



Figure 3

connected with the putting of one's self in an unusual position, such as being upside down or turning, even if just for a few moments. Only one who has tried hand-stands or turning realizes what these changes are, and as one progresses with practice in handling his own body, when in any other position than that of standing on his own feet, it becomes a second sense as it were and creates

a pleasant sensation.

Whether as amateur or professional, the hand-stand is one of the very first exercises to be learned, and it is really the beginning of all other figures, especially in hand-balancing and tumbling. It should be practiced by every boy, not only as a start for some other form of gymnastics; but the hand-stand in itself is a remarkable means of developing and strengthening the whole upper half of the body when done alone regularly, and when



Figure 1



Figure 2

two or more persons work together in hand-balancing combinations every muscle in the body is brought into action.

It can be practiced by anyone and anywhere, in the home or out in the open, there being no special need of any gymnastic apparatus or large floor space. The length of time taken to learn a good hand-stand varies and depends on the person in question, the amount of time used in practice, together with patience and persistence. Some have held a hand-stand after a short practice, while most persons will require several months to really master a perfect hand-stand on both hands. Practice of course, is indispensable to gaining skill in anything, and one must keep everlastingly at it until the required movements largely become automatic before any noteworthy measure of



Figure 4



Figure 5

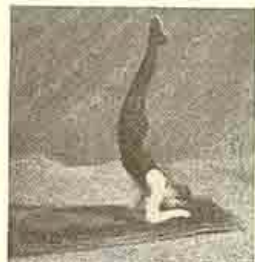


Figure 6





Figure 7



Figure 8



Figure 9

skill results. We all know that physical strength is the first requisite and the more strength we have the more we can accomplish. Start with the simplest exercises and master one particular feat in good form and with ease before thinking of attempting a more difficult



Figure 10

figure. Hand-balancing is not exactly weight lifting in all cases, as "team work" plays a good part. Some figures when done slowly are purely strength feats, while others require the "knack" of knowing how to work quick at the right moment. In an exhibition, either all strength or all quick moving figures can be used, or we can alternate these two methods of working.

The first step for a beginner would be to learn the head-and-hand-balance (Fig. 3). This should be the first preliminary figure to be practiced before proceeding with the hand-stand. The head-balance in this manner is very easily learned and will not take very long to master. It gives an excellent idea of the inverted position of the body.

In trying this, place your head forward on floor and put hands on floor apart about a foot back of your head, forming a right angle with the hands and head, keeping arms



Figure 13

bent at the elbow. With most all the weight on the hands, draw legs upward by the use of the abdominal muscles to position as in Fig. 1-2-3. The feet should be kept close together, toes pointed and body arched slightly as legs get beyond the vertical position. This balance

can be learned by getting close to a wall and allowing the feet to rest against it until confident enough to do without its aid. Nevertheless, if one does not need the assistance of the wall in this exercise, it should be used in the practice of the hand-stand by the beginner. Other figures that can be practiced along with the learning of hand-stands are—the balance on the neck and shoulders (Fig. 4); the head-balance with aid of the arms in folded position (Fig. 5); the fore-arm-stand (Fig. 6); the half-lever (Fig. 7-8); the half-backward-balance (Fig. 9); and the elbow-lever on both elbows and also on one elbow (Fig. 13-14).

The hand-stand (Fig. 21). The width of the shoulders apart and about a foot and a



Figure 11

half from a wall, place the hands flat on floor with fingers well spread and wrists forming a right angle with the arm and the hand. Keep arms rigid and slanting slightly forward; head to be held high as possible and look forward so that you can see the angle of the floor and wall (Fig. 11-12). Swing the legs upward, either foot leading, but both to reach the wall at the same time. Give only enough force to the upward throw of the legs to send them over the head and let them rest lightly against the wall (Fig. 11). With body arched, gradually straighten the knees and back and raise the feet. Do not push away from the wall with your feet, but instead you must press with the finger tips and raise the head more, then finally straighten the legs to the utmost and you will stand

the width of the shoulders apart and about a foot and a half from a wall, place the hands flat on floor with fingers well spread and wrists forming a right angle with the arm and the hand. Keep arms rigid and slanting slightly forward; head to be held high as possible and look forward so that you can see the angle of the floor and wall (Fig. 11-12). Swing



Figure 12



Figure 14





Figure 15

free of the wall (Fig. 12). In trying to get away from the wall do not carry the chest and shoulders backward, giving the arms the wrong slant. Do not place the hands and spring with the feet from the floor at the same time. There is no need to go at it so hard, but take your time and use a little thought. Study the position of your hands; the proper distance from the wall; head up and looking forward; all before you start to take a foot from the floor, keeping arms rigid and slanting towards the wall at all times while practicing in this manner.

As to the mechanics of the position, a perpendicular from the center of gravity must fall within the base. In this case the center of gravity of the whole position is evidently outside the body, somewhere in the curve of the back. If, now, in your position leaning against the wall, the perpendicular from the center of gravity does not fall within the base, it must fall beyond your finger tips, since if it fell back of the wrist, you could not stay up against the wall at all. If you find that the action outlined above, pressing with finger tips, raising head, and slightly straightening knees, does not free you from contact with the wall, it will show that your center of gravity is not over the base. Try, then, placing the hands two inches or more nearer the wall. This may produce the desired result.

A free hand-balance is maintained largely by the varying pressure of the finger tips and heel of the hand. In standing on the feet the same principle may be observed. When you lean a little forward you check the movement by pressing with the toes and ball of the foot. If the body swings backward, the weight is thrown on the heels, and the toes may even come up off the floor. In doing hand-stands, pressure with the finger tips tends to throw the body backward, and pressure with the heel of the hand and trying to raise the fingers off the floor tends to throw the body forward. As the hand is shorter than the foot, the scope of these balancing movements is less. Still, an experienced hand-balancer would feel safer standing on his hands than on his feet on a lofty or insecure object. As soon as the back-

ward effort—pressure with the finger tips—begins to take effect, the pressure must be shifted to the heel of the hand. This is done by bending the elbows, then carrying the head and shoulders forward, and trying to bend more in the back. It is not very good form to bend the knees on hand-stands, but the beginner will find it will help him some to do so while learning.

Balancing on the hands is like steering a motor-boat or aeroplane. If you steer to the left you must be ready to steer a little to the right again at the right moment to keep it straight. So in standing on the hands, you throw the body backward when necessary by pressing with the finger tips,



Figure 16

etc.; you must be ready, then, to lower a little with the elbows and force forward again. This, in turn, must be met by again pressing with the finger tips, thus the balance is maintained.

The seat of the faculty of balance, or orientation, is in the semi-circular canals of the ears. This delicate little system of spirit levels in the bony structure of the inner ear sends an immediate report to the brain when any change of the equilibrium of the body occurs. Sometimes this apparatus sends to the brain an entirely unwarranted alarm. Hand-balancing and the practice of gymnastics and acrobatics in general serve to educate the canals of the ears, or, perhaps one should say, to educate that part of the brain which receives and interprets the reports sent in by the canals.

With respect to position we may be said to have consciousness of two kinds, the "right-side-up" consciousness and the "upside-down consciousness." In standing on the hands the beginner is verging on the up-side-down consciousness, but the experienced equilibrist retains perfectly his right-side-up consciousness. This explains why a hand-stand with the head straight down is so extremely difficult. The mechanical difference is not great. With the head down, it would seem a simple matter to carry the feet a little further over to make up; but somehow the whole faculty of muscular co-ordination is lost as soon as the hand-balancer lowers his head. Only the most expert hand-balancers can stand with the top of the head to-



Figure 17



wards the floor and between the arms.

Acrobats and tumblers rarely come into the up-side-down consciousness at all. In doing a somersault, the turn is made so quickly that doubtless the centrifugal force, acting on the fluids in the ear canals, prevents the sensation of "up-side-downness." Trapeze performers, however, and others who make long swings head downwards have to feel at home in the up-side-down consciousness, and must be able to execute muscular movements of great precision and complexity while so turned. Uneducated, or inexperienced ear canals are thought to be the cause of seasickness. It is certain that acrobats are rarely seasick.

After having mastered the hand-stand position against the wall and having strengthened the muscles used and the wrists and limbered the spine by regular practice, one may go a step further and try the free balance on the center of the floor. The ability to "kick up" or throw up to a perfect hand-balance (Fig. 21) when there is no wall to stop you from going over, can be gained only by several months' practice. The best way is to throw not quite clear up and then take the weight on the heel of the hand and force the rest of the



Figure 18

learn to throw exactly into position as in Fig. 21, legs straight and all with one motion.

One can kick up to a hand-stand on objects the height of the knee or a little more very well by jumping a little harder. On objects waist high or more, this way of going up is difficult. When a performer will want to do a hand-balance on some object where there is no place to put his feet for a spring it will be necessary for him to push up slowly.

The push up or "press up" (Figs. 15 to 21) method of getting up to a hand-balance takes more strength and muscle control to accomplish and should not be tried until you have mastered and practiced often the other way of



Figure 21

way. The beginner should aim to catch the balance with the knees bent first, then straighten up and point the toes afterwards. Eventually the hand-balancer will



Figure 19

doing hand-stands as described in preceding paragraphs.

The performer's hands, his base, are placed in the plane determined by the line drawn, as shown for example in Fig. 21 and the lens of the camera. It is evident that to balance on his hands there must be as much weight forward of this central plane as there is back of it. His center of gravity will always be in this plane no matter how he changes his position, as long as the hands are the only parts touching the floor. Fig. 16 shows the easiest way of starting the push up. With knees resting on back of arms above elbows, he tips forward until there is as much weight forward of the central plane as there is back of it. Then the feet will leave the ground. Fig. 17 shows the knees still resting on arms but the hips and the spine approaching a vertical position. The first powerful effort of strength is in raising the knees off the elbows, as in Fig. 18. Note that the feet are drawn in close. A common fault of beginners in this stage of the push up is carrying the feet horizontally back too far. Fig. 19 shows clearly the peculiar arching of the back before the legs are carried over. The motion should be at an even speed throughout. A beginner, upon reaching the position of Fig. 19, is likely to shoot the legs over with a speed that destroys the whole balance. Fig. 20 shows how the hips and belly are brought back to counterbalance the legs and feet carried over. In the push up the arms should never be bent lower than a right angle. When the push up is finally mastered, you will, in most cases find

it more convenient to start from a position as shown in Fig. 15, with the knees free between the arms.

After having progressed with the preceding method of pushing up to a hand-balance, try raising the legs together from the floor, keeping the knees stiff and body bent at the waist only;

first with

legs separated and arms bent (Fig. 22) and later trying with straight arms and legs not separated (Fig. 23). This last method is with better form and although some-



Figure 20



Figure 22

Those with years of experience in pressing up hand-stands can perform a hand-balance by going up with straight body throughout or "scale up" as it is called, shown in Figs. 24-25-21, arms bent at elbows. This is very difficult and only learned by the most efficient. But the acme of perfection in hand-stand work is the accomplishment of doing a one arm hand-balance (Fig. 26) with the legs separated and



Figure 24

better still with legs together and with the arm which is free, held close to the body. This is a feat that generally takes several years to learn, even after one is expert on two hands.



Figure 25

what more difficult, it looks much better. As shown in Fig. 22, this method of doing a push up is that used by most hand-balancers when performing.

better still with legs together and with the arm which is free, held close to the body. This is a feat that generally takes several

Whenever opportunity permits one should try doing hand-stands on most any stationary object on which he can have a purchase or place to put his hands, as in doing this you will certainly come to a point where you have really mastered the hand-balance and become a skilled performer of this form of gymnastics.

Now that we have covered the subject of the hand-stand alone we have come to a point where we can take on another person to practice with and the work will then become more interesting and beneficial as the opportunities for different figures with two or even three or four persons working together is unlimited.

Similar to learning a single hand-stand, we must learn double work gradually to accustom ourselves to each other's weight, as "team work" or working in unison counts a great deal towards success in hand-balancing. The person working "top" should be somewhat lighter in weight and shorter in height than his "understander," the person working "on bottom."



Figure 23



Figure 26

Editors Note—This is the first of a series of articles on Hand-Balancing and deals with the hand-stand itself. The second article will be published in an early issue of Strength.



## Forearm Development

By O. R. COULTER

*(Continued from last month)*

**L**AST month I explained various methods of light exercise used for forearm development and their results. This time I will give progressive methods used for the same purpose and endeavor to show just what forms of exercise are most efficient as applied to forearm training.

Some occupations require considerable use of the forearms and oftentimes working men have them well developed. In fact, blacksmiths, carpenters, longshoremen and men in similar occupations, without any selection or thought in the matter, usually attain far better forearms than those of the most enthusiastic advocates of light exercise. In the days of the old sailing ships, sailors were noted not only for their forearm development and strength of grip, but also for the exceptional size of their hands due to climbing and pulling on thick ropes.

Some competitive indoor sports are good forearm developers. Wrestling is a good all-around developer. The hands are in almost constant use and in many varied positions, and as a result wrestlers usually have good forearms, but I have observed that as a class, they do not have as highly developed lower arms as weight lifters or hand-to-hand men. Hand wrestling is probably better than catch-as-catch-can, as the work is concentrated so much more on the hands and grip, but it is so little practiced that I do not know just what it may have accomplished in the line of forearm development. In India, the natives have a form of competition called wristing. There are a few different styles depending upon the grip used, but all of the work consists in two competitors each trying to force the other to weaken in the hand or wrist. This naturally is very good work to apply to the forearms.

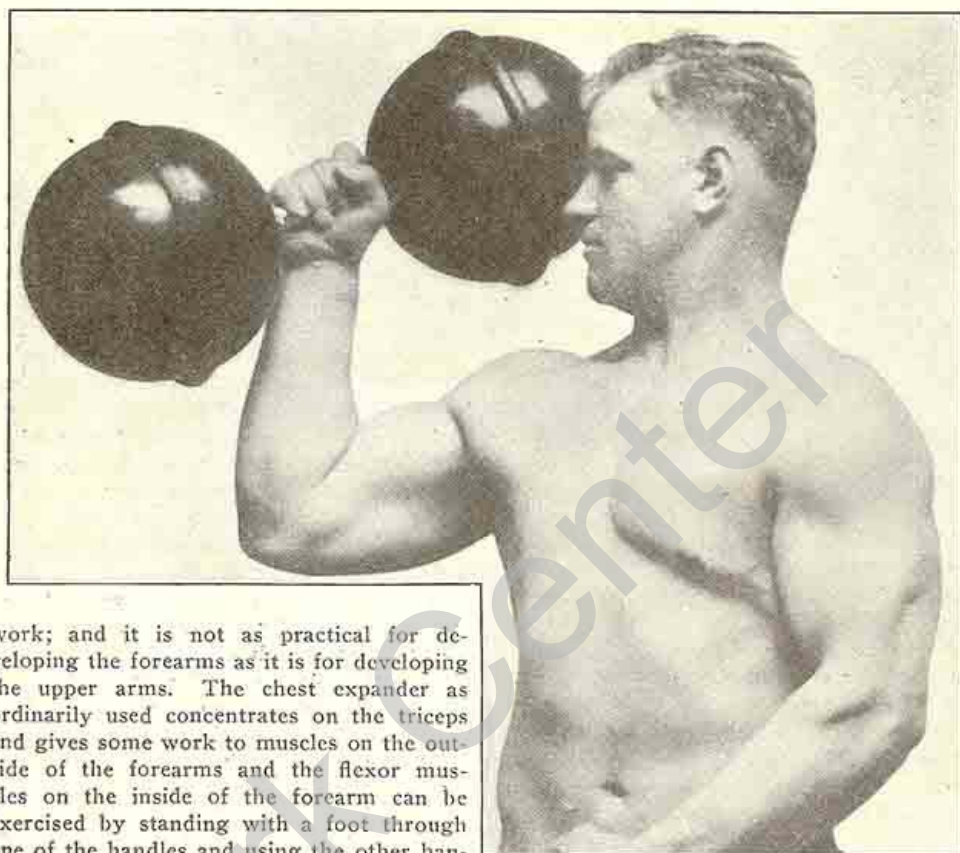
Perhaps some of you may have seen two men facing each other and placing their elbows on the table or bar, as the case may be, tightly clasp hands and each endeavor to force the other's hands down. This sport has been quite popular in some places. Henry Holtgrewe told me that he never

had any one to beat him at this test and one good look at his forearm would certainly give credit to his statement, as he had about the largest one I ever saw and he was then past his prime. Many other noted strong men have excelled at this sport. But, inasmuch as the most of these same men devoted more time to regular lifting training than they did to this competitive arm work, it is quite likely that their forearm development was more due to progressive weight work than to this arm test.

Another stunt sometimes practiced which involves the forearm and grip is what is known as finger pulling. This is a very popular sport in the Tyrol Mountain region of Europe and the accredited champion among these people at the stunt was Joseph Marchener, but it is doubtful if he was any better than Hans Steyer, Rottenfusser or some of the other lifters who did not specialize on this feat. In this country those who excel at this work, so far as I know, are all trained weight lifters.

Fencing has considerable reputation as a forearm and wrist developer. The hand is constantly gripping the foil or single stick as the case may be and the wrist and forearm are used in manifold positions, but remember that the work largely consists of forcing back the parries of the opponent and this is a pushing movement and the forearm cannot be developed to its limit without resistance brought to bear on the forearm in the position of pulling the hand towards the shoulder. Such a movement would spell defeat to a fencer. Few, if any fencers, use the left hand, so the left forearm receives no exercise. That fencing is not the best method for developing the forearm and wrist is proved by the fact that fencers as a class do not possess near as good forearms as hand balancers or gymnasts of the strength type.

In the October issue of this magazine I mentioned the use of the progressive chest expander as a developer of the upper arm, and showed in the same article that it was not as efficient for attaining size and strength of the upper arm as was progressive weight



JOE NORDQUEST

work; and it is not as practical for developing the forearms as it is for developing the upper arms. The chest expander as ordinarily used concentrates on the triceps and gives some work to muscles on the outside of the forearms and the flexor muscles on the inside of the forearm can be exercised by standing with a foot through one of the handles and using the other handle in the movement known as the dumbbell curl. To develop a forearm to its limit it must be developed to the limit of all its uses and no one can use a chest expander in proportion to the strength of the grip. But the most conclusive evidence of all is that there are few chest expander experts with forearms in proportion to chest or upper arms.

Hand balancing, as I stated in my discourse on the upper arm, is very vigorous triceps work and will develop the anconeus muscle of the forearm which assists the triceps, of which it is a continuation in extending the forearm. However, hand balancing, aside from hand to hand work, consists entirely of arm extension movement and naturally does not develop the forearm muscles used in flexing the forearm and wrist.

Hand to hand balancing affords an opportunity for forearm development unequalled, in my opinion, by any other form of exercise with the exception of progres-

sive weight work. In fact, this work necessitates very vigorous forearm and wrist work. Firmness of grip and steadiness of wrists are necessary to the accomplishment of the hand-to-hand stand, and when the work progresses to the point where the top mounter lies on his back with his knees doubled up towards his waist and the understander takes hold of the top mounter's hands, steps over him and swings him forwards and upwards, both turning the wrists simultaneously and both straightening their arms and ending the movement with a hand-to-hand stand, it can readily be seen that this involves very vigorous action of the pushing and pulling muscles of the forearm as well as those of the upper arm and the wrists of both top and bottom man must be steady enough so that the balance is retained from the time the top mounter passes above the hands until the finish of the feat.



Some forms of overhead apparatus work involve very vigorous forearm work. Rope climbing, as I stated in a previous issue, is exceedingly good biceps exercise, and any exercise that develops the biceps will exercise the muscles of the forearm that work in conjunction with it.

Roman rings are unexcelled among overhead apparatus for developing the lower arms. Personally, I consider them superior to rope climbing for this purpose, inasmuch as they afford an opportunity for developing the muscles of the forearm that work in conjunction with the triceps. The feat known as the "full mount," which was accurately described by Mr. Prada in his article in the July issue, is an exceedingly good forearm developer, but as I stated in my article on upper arm development, it is impossible for the untrained man to perform this movement.

We will now consider the most efficient method of developing the forearm, wrist and hands. I suppose nearly every reader of *Strength* has at some time or other witnessed some feats of strength involving the forearm and grip. No doubt you have seen at some time or other, some one bend a large spike, break a horseshoe, hold billiard cues out at arm's length by strength of the fingers, or tear a telephone directory. You have naturally been somewhat impressed with the forearm strength involved and quite likely have observed that in nearly every case that the exhibition was given by either an amateur or professional weight lifter. However, you may or may not know just how this exceptional forearm power can be developed. The best way to determine this would be to select a large number of men with exceptional forearm strength and development and ascertain just how they obtained their results. With this purpose in view I am going to select "Apollon," Pedley, Marx, Vansittart, "Cyclops" Bienkowski, Jules Parent, Joe and Adolph Nordquest, Von Boeckmann, Saxon, Norris Bull, Hackenschmidt, Jefferson, Holtgrewe, Cyr., Zottman, Travis and Caswell. These are but a few of the men that I have recalled to mind, but there are many, many others who are just as notable examples as some of these, for the men who have received magnificent forearm development through progressive weight work are very numerous, indeed.

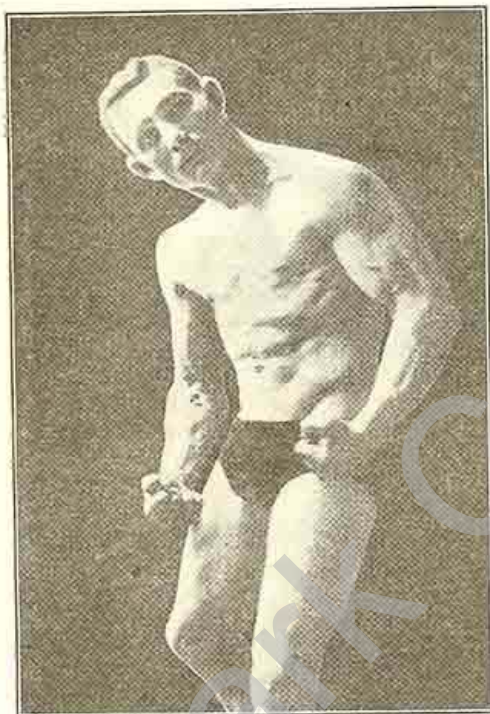
Now let us examine these representative specimens of magnificent forearm development and determine how they attained their results. "Apollon" is renowned throughout Europe for the size of his forearm. He has been a professional strong man for many years. His specialty is gripping on dynamometers and handling dumb-bells and barbells with exceedingly thick handles. Pedley learned weight lifting under Sandow, and, as previously stated in the last issue, is second to Apollon at the dynamometer test. Pedley was very adept at curling weights and all who have seen him have been impressed by his magnificent forearms. Marx, like "Apollon," is famous for his ability at lifting thick-handled bells. Few men could lift his bells from the ground, although he lifted them all the way to arms' length above the head. He was equally famous for breaking large horseshoes, but his grip for the most part was developed by the weights with which he trained before he began giving exhibitions of horseshoe breaking. Vansittart is an Englishman known as "the man with the grip of iron." He specialized on exhibition feats of grip, but he also used weights in his training and became so efficient that he not only could lift a "56-pounder" by grasping the eye to which the ring is fastened by only a thumb and one finger, but he could hold it out horizontal to the side by the same grip.

"Cyclops" Bienkowski is known in Europe as "the money breaker." Of course it is impossible to break coins with the fingers, but he really had a tremendous grip which was developed, for the most part, by the use of heavy dumb-bells. Like Marx he was exceedingly good at performing the two-arm jerk with two thick-handled bells. Jules Parent is a noted strong man of the north of France who is famed for his magnificent forearm and his ability to lift thick-handled dumb-bells from the ground with one hand. He has never practiced exhibition feats of grip, so it can be safely said that whatever he owes to training was received from his work with the weights.

Joe and Adolph Nordquest are better known to us than most of the others. Nearly all of the *Strength* readers know of Joe's exceptional forearm development and have heard of Adolph's world's record in the bar-bell lift from the floor, a feat which



is one of the greatest tests of grip possible. The most of us know that these two brothers were developed by progressive weight lifting. Von Boeckmann is an old-time athlete in New York city who acquired considerable reputation for his strength of



W. P. CASWELL

grip. In his book, "Physique," he advises weight lifting as the proper method of securing a powerful physique and in some of his literature mentions that his forearms were developed by progressive weight increase work. Saxon is best known to us as the greatest exponent of the bent press, but his forearms are exceptional and he is adept at using thick-handled bells. Perhaps some of you saw him perform with Ringling Brothers' Circus and remember how he lifted an immense plank by the edge and pulled it in clean to his shoulders by the same grip of his hands. Aside from a little wrestling and hand balancing Saxon has done no training except weight lifting since he was 17 years of age.

Norris Bull developed one of the most wonderful forearms ever seen on a middle-

weight. His training consisted of heavy gymnastics and weight lifting with a predomination of the latter. Hackenschmidt, I mentioned in earlier issues as an example of the possibilities of neck and upper arm development. His forearms are quite in keeping with the rest of his physique. He always advocates weight lifting as the proper method of training. In his book, "The Way to Live," he writes as follows: "It is my opinion that every one, man, woman or child without exception, will find exercise with a graduated and suitably adopted series of weights of the utmost benefit." "Hack" practiced what he preached and was one of the world's strongest men and he developed his forearm by all-around lifting. Jefferson was one of the "old timers." His specialties were lifting from the ground by the main grip of the hands and lifting a stick by one end while weights were suspended by the other end. By constant practice of work of this nature, interspersed with considerable heavy dumb-bell work, he developed exceptional strength of grip. Cyr and Holtgrewe were of the same general type and possessed enormous forearms. They both were all around lifters, being very good at both dumb-bells and dead weight lifting and in spite of all the talk about "natural" strong men, were both trained men and all that they received from practice was due to weight lifting, as bodily weight prevented them from doing any overhead apparatus, hand balancing or similar developing work.

Zottman is, in some respects, the "noblest Roman of them all." He has the most magnificent physique of any man of his age that it has been my pleasure to meet. Although he has done no regular training for many years and is considerable past his prime, his forearm is extraordinary. Zottman was one of the greatest lifters in the country. He was good at both dumb-bells and dead weight lifting and owes what strength and development he attained to their use. W. P. Caswell is an English middleweight noted for his enormous grip and his magnificent forearm, which was about twice the size of his wrist. The ordinary exhibition feats of holding out billiard cues were very easy for him. He was one of the best all-around bar-bell lifters of his day and developed his forearm strength by bar-bell work. He realized

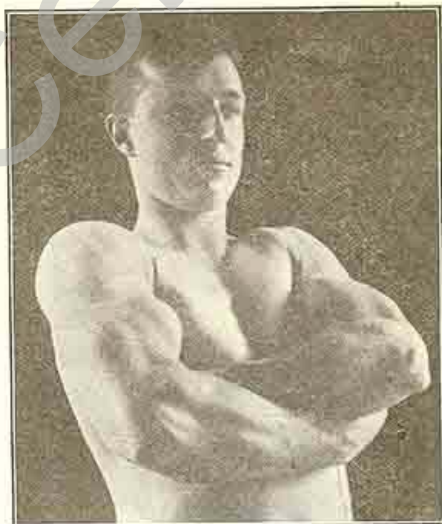


the possibilities afforded by the use of the bar-bell as a means towards developing extraordinary forearm and hand strength, and became so efficient that he could pull in clean to his shoulders a 200-lb. bar-bell by gripping the bar with only two fingers.

Travis is best known as a back lifter, but he also possesses exceptional strength of grip. He lifted 557 with his middle finger hooked through a plain iron ring and tears New York telephone directories with ease. He is quite adept at lifting heavy dumb-bells from the ground. I remember seeing his bells that he used for this and similar purposes. They were the largest solid dumb-bells I have ever seen. Travis has been lifting for years and developed his grip from work of this nature.

So we can readily see from the foregoing that the best forearms are produced by progressive weight lifting intermixed, in some cases, with practice on dynamometers and special exhibition grip feats. All-around bar-bell work uses the forearm in so many positions that it usually produces fine forearms, but the forearms are used so much in daily use and are so accustomed to ordinary contractions that in many cases nothing but intensive training with a resistance in proportion to the strength of these muscles will develop them efficiently. There is a great difference in mens' potentiality of development, but it is perhaps as much a matter of time as of size limitation and those who have not reached a proportionate forearm development from their training with the weights would do well to apply a little analysis to their work. The fault usually lies in the selection of the exercises. The common error is to practice almost exclusively pushes and jerks from the shoulders and such movements have little effect on the forearms aside from developing the auconeus muscle. The big flexor group is used when the hand is moved towards the shoulder, so to develop these muscles one should practice the two arms clean to shoulders, one arm clean pull in and the curls with both overhand and underhand grip.

I have never found anything equal to curling for developing the forearm, but the movements should be done slowly and completely, even flexing the wrist towards the forearm. To attain the maximum limit of forearm development, it must be trained to the limit of all its uses and in addition to the exercises just mentioned one should include the snatch, the swing, the two hands dead weight lift with a bar-bell for developing the grip especially, and also take a round stick, attach a cord to the middle, tie a weight to the lower end of the cord and wind it up by twisting the stick with the hands. It is also advisable to vary this by suspending a weight at one end of the stick and lifting it by grasping with one hand on the other end. Both of these exercises should be performed with the



NORRIS BULL

hands in various positions so as to bring all parts of the forearm into play. A diligent, systematic training, in accordance with the ideas advanced herewith, will develop the forearm, hand and wrist to the limit of its possibilities.



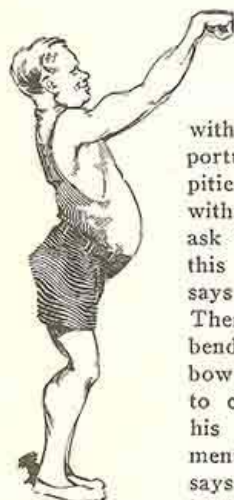
# Are You Physically Fit?

By WALTER MANN

Illustrations by C. G. Ousey

**Y**OU simply can not be physically fit without being symmetrically developed; nor can you be symmetrically developed without being physically fit. Quite simple, isn't it?

But are YOU physically fit? I suppose you would say "yes," as no one will admit that he is not



The advantage being in favor of the waist line.

absolutely fit except the occasional hypochondriac, who recounts his many ills

with gusto at every opportunity, hoping to be pitied and sympathized with. Usually, when you ask Tom, Dick or Harry this question, your friend says "just feel my arm." Then he closes his fist, bends his arm at the elbow and fully expects you to compliment him upon his wonderful development. While no one gainsays the desirability of having a good man-sized upper arm, yet be the arm ever so well developed, it is no indication of the person's physical condition.

To be and feel fit one must be tingling with health, and there is only one avenue open to feeling this way, and that is through systematic exercise, so as to develop every part of the body. Note that I say *every* part, because it is dangerous, though easy, to develop one set of muscles at the expense of others. "But," some one will ask, "why spend long hours exercising when I already feel fit? The answer to the first part is that if progressive weight lifting exercises are indulged in very little time is necessary for exercising and the answer to the second part of the question is that if you don't exercise regularly you simply cannot be fit, quite regardless of what you may fool yourself into believing. If the truth were known we would find that the majority of men don't know what it is to feel really fit. Because you can

eat three meals a day without suffering from indigestion, sleep fairly well at night without resorting to a sedative and get through the day's work without a collapse, these are not necessarily signs of fitness. Take the average man of your acquaintance and, or better still, let me tell you of a test made not long ago. One hundred men were picked out at random from the membership lists of athletic clubs. In the hundred almost every trade and vocation was represented. A letter was sent to each of these men and a question sheet was enclosed, asking the set of questions which follow:

Age	Height	Forearm
Occupation	Chest	Thigh
Weight	Waist	Calf
Upper arm	Neck	Wrist
When last ill?	Do you suffer from colds?	Often?
Suffer from headaches?		How often?
Indigestion?		How often?
Constipation?	Any other minor ills?	
Would you be interested in a system of proven merit, if it were supplied to you free of charge?		

The letter accompanying this question blank explained the reasons for desiring the information and as each question blank was numbered, those written to were advised that no names need be signed to the statements. A few less than 50 per cent answered the first request. Then each not already heard from was telephoned to, which brought the total to 68 per cent and a personal canvass of the balance made the returns 98 out of 100.

Now the interesting part of this investigation was that only one who said he did not exercise, claimed not to suffer any ills. He was found to be a blacksmith who boxed after working hours. Five others felt good all the time and exercised regularly. A number had "an occasional cold" or "a headache once in a while," a great many suffered from constipation, more than a few had attacks of "slight indigestion" and five were "neither sick nor well." While these men were of all ages the majority were well under the middle age mark.

This array of data was rather surprising, because only six out of ninety-eight feeling O. K. all the time was a mighty mean average. However, in most cases the measurements given showed why so many were not in the "O. K. No. 1" category. Most arms



were pretty well developed and most leg measurements were fair, but the difference between the size of the chest and that of the waist was hardly noticeable in many cases. The advantage, in point of size in a few instances being in favor of the waist line. Another point was the one-sided development of ninety-five of the ninety-eight. Even including those who exercised regularly the men, except three, were not what might be termed symmetrically developed; and strange and impossible as it may sound to the man who disapproves of heavy exercises, the only ones who showed proper proportions were those who reported using heavy weights. Several of the men who stated they were "not exercising at present" had tried out various systems of light exercise, but not having obtained the desired results, they discontinued exercising.

In answer to the question "Would you be interested in a system of proven merit, if it were supplied to you free of charge?" twelve replied in the affirmative. Four of these took up the offer and the results obtained in these cases I hope to make the subject of a future article. One young man, 5 ft. 9 in. tall, weighing 123 lbs. with a 33-in. chest and a 13½-in. neck, replied to this question that though he felt quite fit in every way, never suffering from anything but indigestion and headaches, and possibly caught cold easily—which most of his friends did also—notwithstanding his fitness he was interested in the free offer if the system was not too strenuous and provided it required the minimum of exertion! This young man was interviewed personally, and all the talk in the world would not have changed his attitude toward "violent exercise" as he termed anything that called for real work and honest effort. And it need hardly be remarked that he would never be chosen as the "perfect specimen" of the male species.

"That's all very well," someone will remark, "but we did pretty well when we were called upon to supply men for the war." To this I answer that we did wonderfully well, but if copies of the findings of the various medical boards who examined the young manhood of the country were carefully perused, it might surprise most people the number of exemptions which were granted for no other reason

than that the men were not physically fit. And we must not lose sight of the fact that the men who were graded as A-1 and fit for the firing line were not necessarily free from minor ailments. A friend of mine remarked, "The men who got to France were certainly fit enough and the army did not believe in heavy exercises, so that knocks your argument out about weight lifting." He wasn't in the army (I was) or he would not have made this statement, because while the P. T. work was of the light strenuous variety, no one ever kicked about the lightness of a sixty-pound pack on the back, with a rifle and several other "items" thrown in for good measure—when out on a route march—or even when lined up for inspection. Anyone who thinks there was no heavy exercise in the army training might try a few miles quick walking in "full marching order," of half an hour's bayonet fighting or go through a section of rifle drill. Why even so-called athletes had to drop out.

Let me ask a question. Did you ever hear of a boxer or wrestler with a rep. training entirely on "exertionless" exercises? You sure did not, because one's muscles outgrow these supposed-to-be developing methods. If it's not good enough for the boxer, it's not good enough for you. What you need is a system that reaches every muscle yet takes up as little of your time as possible.

There is only one system that will do this, and that is progressive weight lifting.



Not the perfect specimen of the male species.

The writer has tried out about fifteen systems. Every one was good (at least for the instructors' bank account) but for accomplishing satisfactory results in the way of developing the muscles of the body, most of them were practically useless; and those which might produce results needed more time than the ordinary business man has at his disposal to devote to the work. How would you like to exercise one hour every morning and every



evening, and follow a special diet as well? Senseless when you can get better results from progressive weight lifting and only spend thirty minutes every other day, without bothering about what you eat. Get away from the idea that graduated weights are too hard on the system. The writer was as great a skeptic as anyone on this point, but had to admit in the end that to make the muscles grow, you had to feed them with work. The argument is simple. If you were studying for a medical degree you would not stop at oral lectures; if you were training for perfection in the 100-yards dash you would not stop at 10-yard runs; and how soon do you think the baby would learn to walk if he were restricted to creeping only? 'Twould be nonsensical to do any of these things, wouldn't it? Yet too many of us try to develop the great muscles of the back, chest and thighs by exercises which are hardly strenuous enough to develop the muscles of the arms.

Don't ask the man who has never tried out progressive weight lifting, what he thinks about it, but be fair to yourself and the system and ask someone who has given weight lifting a real trial, under competent instructors. It is essential that the instructors be competent, as otherwise you may pay your good money and spend your time following instructions given you by someone who through lack of experience and study knows little or nothing about the human body, its development and its requirements. Competent and experienced instructors cannot be

too strongly emphasized, for apart altogether from the time and money which may be wasted, there is the possibility of doing yourself actual harm—if the exercises you perform are not suited to your needs. How can you know whether the instructors are competent? One of the surest and safest tests is to find out "How long the instructors have been *successfully* carrying on." Anyone can, by advertising, last out a year or so. Remember what Barnum is credited with saying about "one being born every minute." Pick the ones who have been in the work for a dozen or more years; find out how far they are willing to back up their statements; ascertain what they have accomplished with others; then use good, common sense and you can't go far wrong. When you hear or read of some system which claims to work wonders without any effort on your part, bear in mind that "what

you get for nothing is generally worth nothing" applies to the development of the body equally as well as to other things. For the development of the muscles sitting in an easy chair reading about strong men cannot compare with proper application to progressive weight lifting.

There is no doubt about you needing exercise—we all do. If you are not already at it, ask some friend whose physique you admire how he got it; then start in with progressive weight lifting.

Take as your motto, "The Lord helps the man who helps himself" — and be sure you keep your part of the contract.



Sitting in an armchair won't produce results.



# The Big Secret of Training

By NORMAN EVAN PRICE

**O**F COURSE you have noticed that it is the unusual athlete who can always be depended upon to be just right. An athlete varies in the matter of form as much as a singer. The tenor says, after his concert, "I was rotten tonight; I howled; it was fierce." And the athlete says, after the contest, "Somehow, I wasn't right; I was slow, stiff and I couldn't get out of my own way."

Which brings us to the question as to "why athletes go wrong?"

Not long ago Battling Levinsky, regarded as one of our most promising boxers in the heavyweight division, and with a creditable reputation behind him, had the honor of being the first American to box Georges Carpentier. But Levinsky made a very poor showing, being knocked out in the third round, much to the disgust of the crowd. It was thought that Levinsky would at least put up a good fight, but he did not seem to show his usual form. Some of the fans said that he did not try; others said that he did not train sufficiently. It was reported as a miserable exhibition of boxing.

Now, what was wrong? Stung by the criticisms, Levinsky wrote to the sporting editors of the papers and indignantly protested that he had done his best, that this particular fight meant more to him than any he had ever had, because it might put him in line for a match with Jack Dempsey and that he had actually *trained harder for this fight than ever before*. All right, perhaps the trouble lay just there. Let us see.

Why is it not possible for one to determine exactly his physical condition at any particular time and to be in just the right condition? Well, it is possible. Occasionally we find an athlete who seems to know how, who possesses that gem, *consistency*. It is simply a matter of understanding training principles. And they are simple enough.

The average athlete is prone to forget that there are two main factors in training. Of course everybody knows that effort is the first essential. Through effort one de-

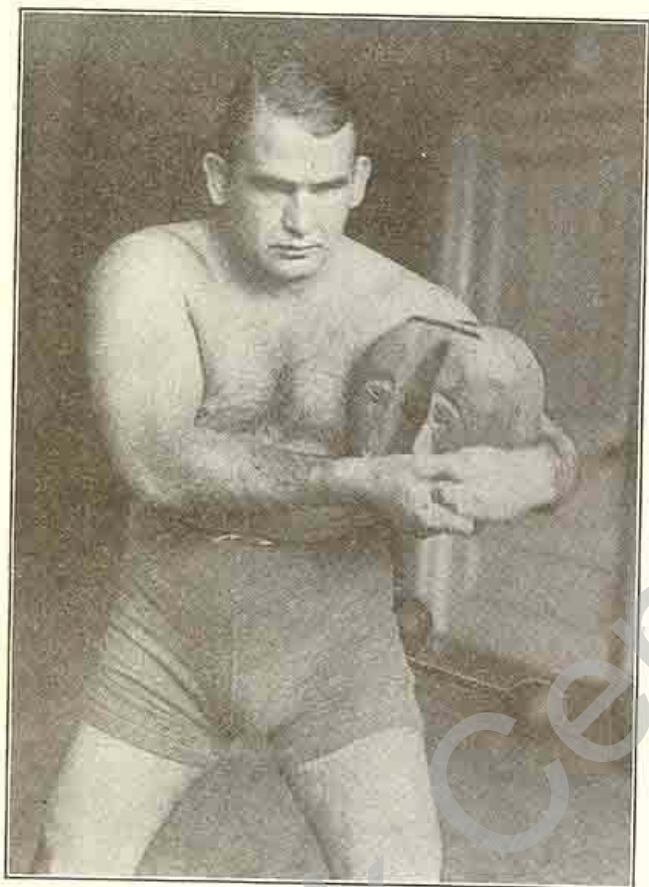
velops the power to exert himself. But the other factor of recuperation—that is still a profound secret so far as many athletes are concerned. And that is why we may call it the big secret of training.

Conditioning is not a mere matter of consuming strength. It is rather a matter of *building strength* and of exerting strength only for the sake of making a demand upon nature to build more strength. The emphasis should be placed upon the building of strength, and this requires that it shall not be consumed faster than it can be built. And that is why recuperation is so vitally important in the scheme of training. It is involved in the question as to how much exercise one shall take each day in order that in twenty-four hours he can regain the energy that he has expended and a little extra besides, so that in time he will have a great deal more strength than when he started training. It is all wrapped up in the gentle art of knowing when to stop. But sometimes it is also a matter of knowing how often to train.

There comes to mind the case of a young man of our acquaintance who had strength to burn, but who had enthusiasm even in excess of his strength. He was interested in an athletic tournament which was to be held and which included an all-around competition apparently well suited to the all-around ability of my young friend. On form, the week before the contest he looked like a sure winner. He felt fit to tackle his own weight in hungry wildcats. But when the tournament arrived you never saw a more lifeless looking figure. All his energy and "pep" seemed to have evaporated. He felt weak, his stomach was not right, he did not sleep well and he could not understand what had come over him. He was game and he went through the contests on sheer grit, but he could not do himself justice and his score of points was very disappointing.

Later he told the writer of his wonderful condition prior to the contest and of his system of training. Here is about what he did: Instead of lying in bed in the morn-

(Continued on page 27)



Copyright by Underwood and Underwood.

**ED (STRANGLER) LEWIS**  
World's Champion Wrestler



**"AL" BEVAN**—A husky athlete of the Los Angeles Athletic Club.

Lewis wrested the world's crown from Joe Stecher on December 11, 1911.

Lewis won after 1 hr. 41 min., the longest wrestling ever witnessed in America.

This match, to a great extent, was a contest of each wrestler's respective special legs, with this time the "head lock" being the key.

Owing to the effectiveness of Lewis' famous head lock, first of all, he gained a temporary advantage.

This stubbornly fought contest was won by Lewis' general head locks in succession and his famous head lock and hip lock hold.



**JOE**  
Who succumbed to the famous head lock. The Nebraskan showing his favorite scissors hold in pinning his man. Stecher unquestionably holds the record for the longest wrestling match in history.

A feature of Lewis' training was the use of a wooden block. This block is made of wood and is set on the bottom by hinges. The two sides are held together by springs. Few professional wrestlers could stand together.

Lewis would viciously leap at the block, landing it under his powerful arms. Then he begins to squeeze and squeeze until the effectiveness of this bone-crushing spring block was your own head.



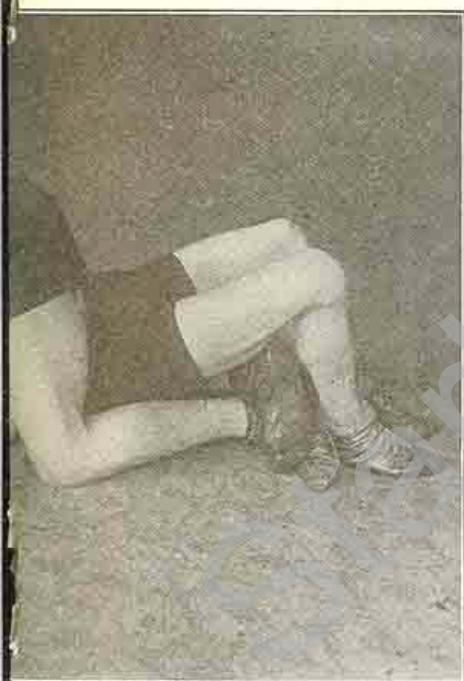
# L SECTION

as-catch-can wrestling championship  
in New York.

and 56 sec. of the most spectacular  
again put to the test the merits of  
Practically a case of arms versus  
victorious.

Stecher's dreaded body scissors and  
and then the other wrestler had a

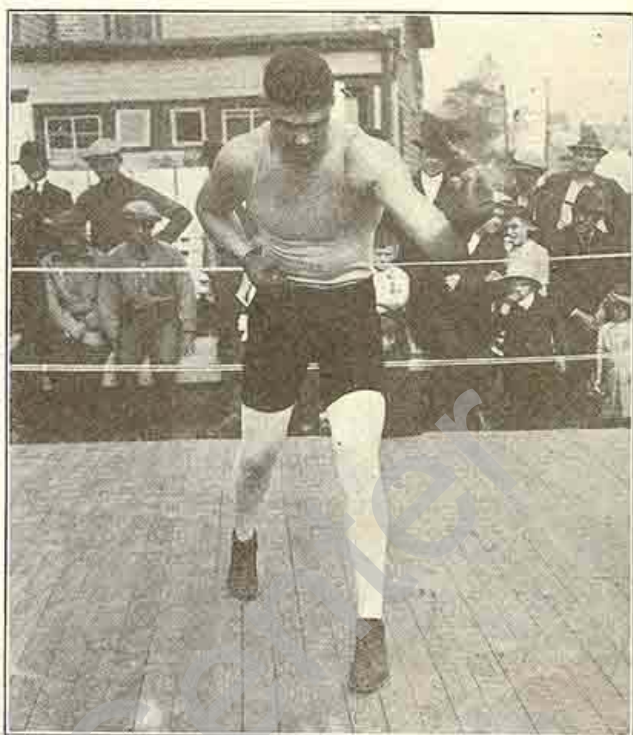
culminated in Lewis securing sev-  
erally the fall itself with a combination



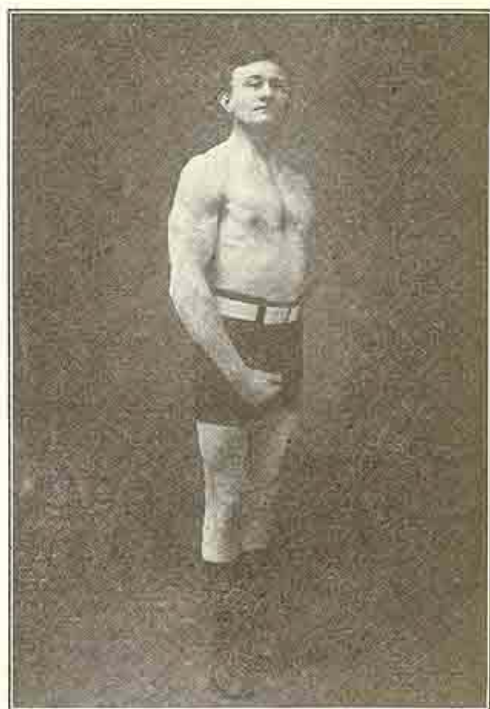
TECHER *Copyright by Underwood and Underwood.*  
lock that brought Lewis titular honors.  
As a rule he follows it it up with a double wrist hold  
most powerful "scissors" of any wrestler in the world.

was his practice on a head-shaped  
in two halves and held together at  
halves are kept apart by four power-  
men could squeeze these two halves

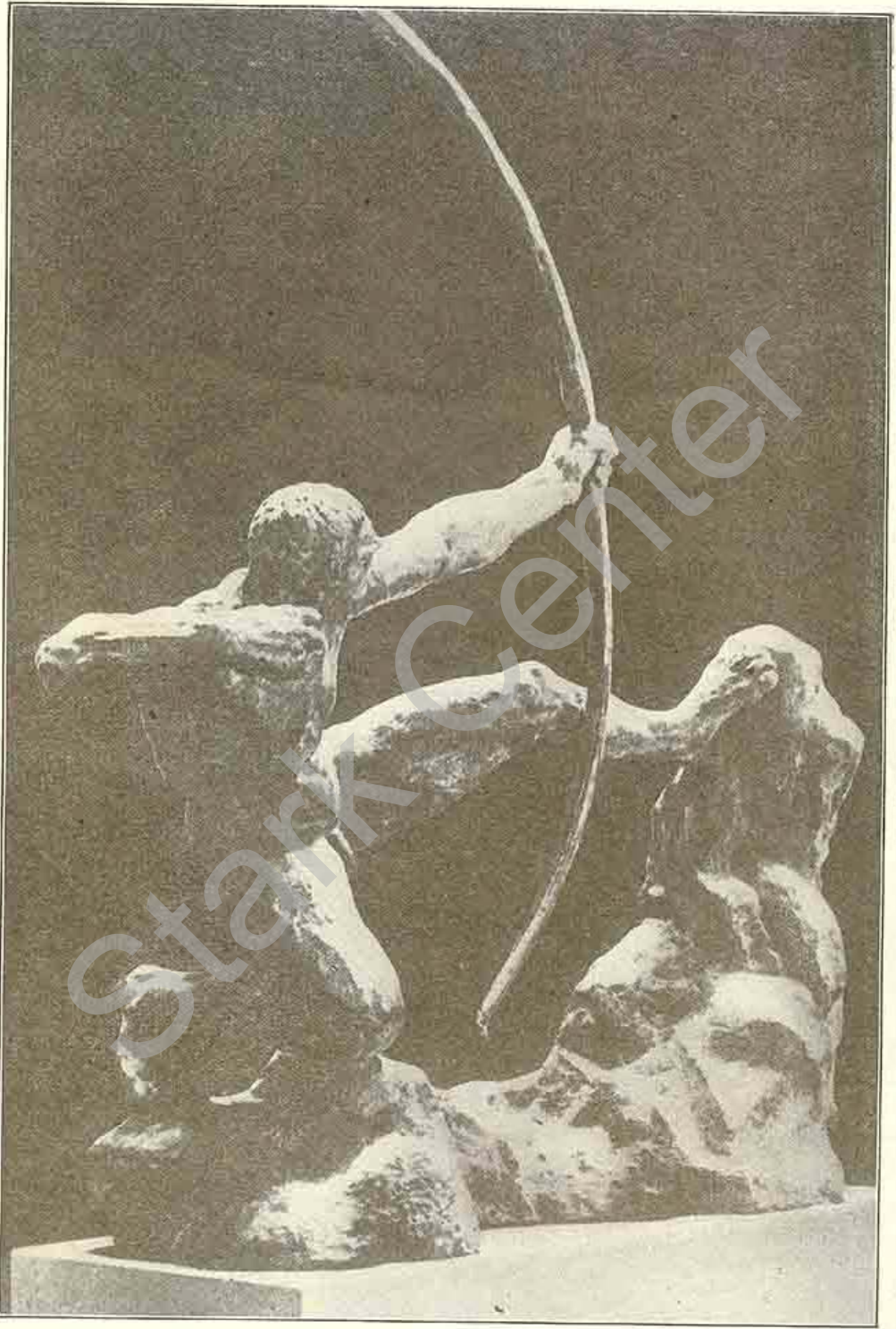
is head—which is on a dummy. Get-  
the head lock he made famous, he  
and squeeze. You can imagine the  
unishing hold by supposing that this



**JACK DEMPSEY**  
Heavy weight champion, shadow boxing in preparation for  
his bout with Carpenter.



**CARL APPOLO**  
of the Worlds Famous Show, a professional weight lifter  
and hand balancer.



*Copyright by Underwood and Underwood.*

**"HERCULES," BY BOURDELLE, OF FRANCE**

Bourdelle, one of the most interesting of the modern French Sculptors, has put tremendous vigor and life into his "Hercules", shown here.



(Continued from page 23)

ing to get a little extra sleep, which he could very well have used to good advantage, he would be up bright and early to start the day with a five-mile run. And it was great, the fine, strenuous life. Then a shower, and, a little later, breakfast. Along about 11 in the morning our friend put in an hour more of body building exercises, chest weights, abdominal exercises on the floor and other work of that type. In the afternoon he conducted his real preparations for the coming tournament in the form of athletic training, running, weight throwing and the like. And then in the evening he eased off the day's work with a good walk of several miles. Some strenuous life! Soon he felt as strong as a lion. Being a healthy young man his reserve of nerve force held out for a time and he got away with it. But when the date of the contest came along he was more like a lamb than a lion. He had burned himself out.

He was not training. He was just finding out how much he could stand and how long he could last at it.

A "historic" instance of the same kind, dating back ten years, was the physical condition of "Jim" Jeffries at the time that he fought "Jack" Johnson. The affair is vividly remembered by all followers of sport at the time. Jeffries, who had been in retirement for several years, and who was dragged out of it by the public demand that he should defend the world's championship title for the white race, told himself that he would need a long time to get in condition. He allowed himself about a year and a half altogether, being about fifteen months of preparatory conditioning and finally some three or four months of hard training. And what was the result? Jeffries was not himself; scarcely more than a shadow of the real champion of the old days. Reports of the fight said that he approached the contest like a man in a daze. Photographs of the contestants taken just after the men entered the ring showed Jeffries standing with feet wide apart, as if just about able to stand—an attitude of weakness. Critics said that Jeffries must have been drugged or "doped." This is all vividly remembered. The truth, simply enough, is that the big fellow was stale. He was overtrained. Had the contest taken place

a month previously he might have given a real account of himself.

Now let us note a case of the opposite type. When Freddie Welsh, who later became the lightweight champion, was training for his fight with Phil Brock in Los Angeles, back in 1907 or was it 1908?—he suffered an injury to one of his feet which put an end to his training for a week before the bout. When the time came they bandaged the "game" foot as well as possible and his seconds half carried him to the center of the ring and stood him up there so that he could pivot around on his one good foot. Freddie said that although he was of course handicapped in the matter of footwork yet he was surprised to discover how much strength and energy he had. It was a twenty-five round bout and he went through to the finish as fresh as a daisy, winning on points. Why? Because during the rest of one whole week he had acquired a surplus of energy.

This reminds us of an experience of our own during the time of participation in track and field athletics some seventeen years ago. Training one Sunday morning at the old Pastime Athletic Club grounds we were foolish enough to experiment with high jumping and succeeding in spraining an ankle. It was not a bad sprain, but enough to keep one off his feet for a couple of days and temporarily off the track. There was an athletic meet to be held the following Saturday. Thursday and Friday the game ankle mended sufficiently to walk, gently and carefully, and on Saturday it felt so much better that we wondered if we might not take a chance on running the hundred, being careful. It worked out. We ran both the 100 and the 220 with so much energy that we hardly knew ourselves. We didn't know it was in us. It was that rest of five days that did the trick. Our good old friend, recuperation, had stored up in us an amount of ginger that we had never before enjoyed in a race. If Battling Levinsky had hurt his foot just enough to stop his training a week before the Carpenter fight and he had still gone through with it he would have made a creditable showing.

Perhaps I am giving this talk too much of the flavor of the prize ring. Not be-

(Continued on page 42)





## Wrestling

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

**EDITOR'S NOTE.**—The line cuts illustrating these wrestling lessons were made from drawings sketched from life by *Strength's* artist. Einer Johanson, of Norway, the light heavy-weight wrestling champion of America; Charles Olson, of Sweden, the well known professional heavy-weight wrestler; Cyclone Green, of Philadelphia, champion light-weight, and William J. Herrmann (himself) have posed for the drawings which illustrate this course. They also will collaborate with William J. Herrmann in presenting these lessons.

### QUARTER NELSON.

Another form of nelson used on the near-side of your opponent. Sometimes called a cross nelson. You can secure this hold when working with your opponent on your right by clasping your left hand on your



Quarter Nelson

opponent's head while you slip your right hand under opponent's left shoulder; your right hand firmly grasping top of your left wrist.

An effective yet comparatively easy hold to secure and to apply. Besides it does not particularly expose its holder to many counter-moves. It is also useful in trying to



Quarter Nelson

get your man "out of position" and in order to pave the way to secure, if possible, a more effective hold.

Practice this quarter nelson from both sides, not only when working as above with

your opponent on your right side, but also when working on your opponent when he is on your left.

Another method preferred by some professionals in placing the feet when taking a quarter nelson. In this method, if you are working with your opponent on your right side, you bring your left foot and knee up



Standing Quarter Nelson

close to your opponent to enable you to bring more weight to bear on his head and neck in using this hold.

### STANDING QUARTER NELSON.

Professionals are partial to this hold. Precisely the same hold as the foregoing quarter nelson with the exception that it is applied on your opponent while both wrestlers are up and on their feet. Practice this standing quarter nelson not only when wrestling with your opponent when he is on



your right side, but also when wrestling with your opponent when he is on your left.

#### FRONT QUARTER NELSON.

A quarter nelson applied on your opponent while working on him directly from in front. Otherwise exactly the same as the standing quarter nelson. Practice this standing front quarter nelson from both your right and your left-hand sides while working in front of your opponent.

Do not confuse the standing front quarter nelson with a somewhat similar hold, the standing front nelson. Study both holds thoroughly in order to avoid any possible confusion that may arise due to the apparent similarity of the holds.



Front Quarter Nelson

#### QUARTER NELSON ON FACE

Of course it is understood that this hold is not secured when down on all fours or in any of the approved preliminary mat positions. However, an opportunity to effectively take this hold may readily present itself during the change of positions incident to a phrase of moves and counter-moves.

In such instances, slip your left arm under your opponent's upper left arm and grasp your right wrist. Your right hand is placed across his face between opponent's right ear and right shoulder. Grasp your right wrist firmly with your left hand that passed under his left upper arm. Put all your weight on your opponent's face to help pin his shoulders to the mat.

#### THREE-QUARTER NELSON.

A nelson hold that is a combination of a near-side half nelson with one hand and half

of a head lock with the other. You can secure this hold when you are working with your opponent while he is on your right side by taking a near-side half nelson with your left hand and lock it with your right

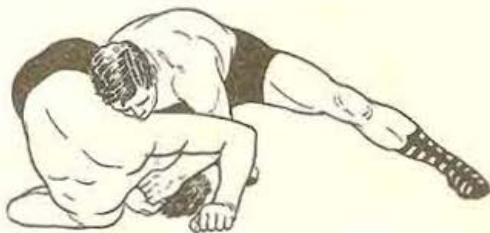


Quarter Nelson Across Face

slipped under his chest from the near-side and from below. Slip the right hand under and across his chest, locking your right hand with your left hand, which is on the back of his head and neck, holding the near side half nelson.

Several methods of locking your hands in this hold are in vogue. As combat conditions may warrant or as difference in length or arm reach may permit, or as the more or less wide spread of opponent's shoulder width may allow, you can either interlace the fingers of your two hands, or clasp one hand firmly on top of your other, or grasp tight the wrist of your other arm, or you can hook your hands together which will help foil any attempt on the part of your opponent to attack your fingers.

As professional wrestling permits attacks on fingers the latter "finger-foil" method of hooking the hands and protecting the fingers is preferred by most professionals in locking their hands to more safely hold a hold. Under amateur rulings, attacks on a single finger are not permissible.



Three Quarter Nelson

Practice this hold from both sides, not only while working as above with your opponent on your right side, but also when working with your opponent when he is on your left. A powerful member of the nel-

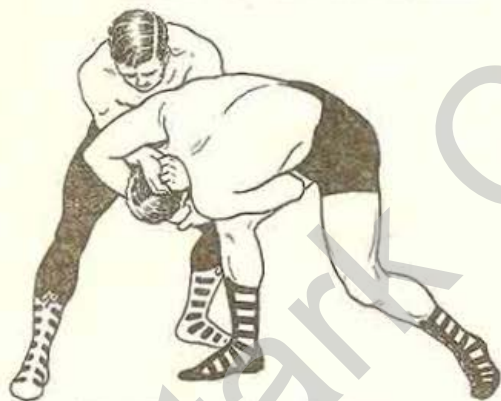
son family. If properly applied will lead directly to an immediate fall.

### STANDING THREE-QUARTER NELSON.

Precisely the same hold as the three-quarter nelson described above with the exception that it is applied when wrestlers are both up and on their feet, with the attacking wrestler on the right or the left side of his opponent. Practice this hold from both sides.

### LOCKED THREE QUARTER NELSON.

Used at times to enable you to apply more power to help force your opponent's head under. Useful in case your quarter nelson is not strong enough to pull opponent's head under, preparatory to turning him over to a fall. Use your head to assist



Three Quarter Nelson—Standing

in pulling his head under. After adversary's head is pulled under, follow up in the same manner as a regular three-quarter nelson.

### FULL NELSON.

A full, or, as sometimes called, a double nelson, is a hold in which both a near-side half nelson and a far-side half nelson are held on your opponent at the same time. A dangerous chip and a punishing hold for a narrow-shouldered opponent to be locked in by a stronger and superior wrestler. It can be used from either side when working in back of your opponent.

As a rule it is somewhat safer to first take a near-side half nelson in preference to a far-side half nelson, in your efforts to secure this hold. This method offers less chance of getting caught in a side roll or

any other counter-move on the part of your opponent.

Several methods of locking the hands in this hold are in vogue. As combat conditions may warrant, or as difference in length



Locked Three-quarter Nelson

of arm reach may permit, or as the more or less wide spread of opponent's shoulders may allow, you can either interlace the fingers of your two hands or clasp one hand firmly on top of the other, or grasp tight the wrist of your other arm, or you can hook your hands together which will help foil any attempt on the part of your opponent to attack your fingers.

As professional wrestling permits attacks on fingers the latter "finger-foil" method of hooking the hands and protecting the fingers is preferred by most professionals in locking their hands to more safely hold a hold. Under amateur rulings attacks on a single finger are not permissible.

Nowadays this hold is resorted to by professionals more for the purpose of forcing an opponent's head down, in order to enable them to secure a better half-nelson than an attempt to gain a bona-fide fall by its direct use. However, it can and often does result in an actual bona-fide fall.



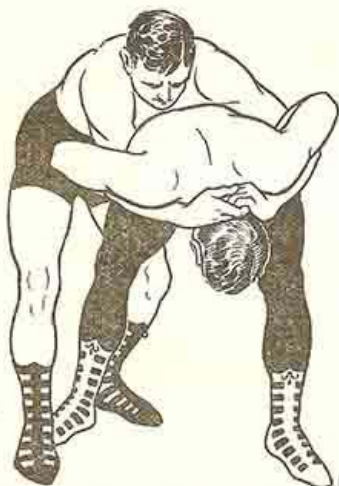
Full Nelson

Amongst novices it more often results in your opponent conceding the fall in order to avoid any possible serious physical strain or injury that might result unless the hold



be released and freedom of movement permitted.

It also at times is used as a more or less of a so-called resting hold, the holder enjoying a comparative rest and an opportunity to normalize his embarrassed breath-



Standing Double Nelson

ing, while punishing, weakening, crippling and neck-straining his opponent, yet making no attempt whatever to gain a bona-fide fall from the direct use of this hold. However, look out for a side roll or counter-move that may suddenly turn the tables.

A favorite hold some forty years ago. It remained in great favor for many years later. However, on account of the many serious strains, accidents and even fatalities caused by the injudicious use of this dangerous hold it was forbidden and barred es-



Front Nelson

pecially among novices and in amateur wrestling contests. It met the same fate that befell the strangle hold as well as the hammerlock, both popular holds in those palmy wrestling days.

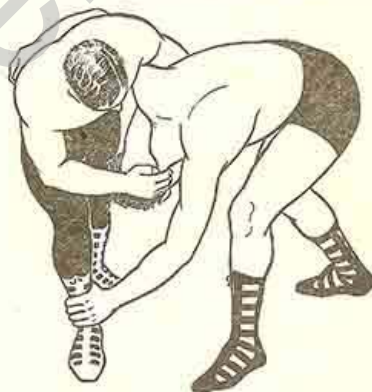
### FULL NELSON-STANDING.

Precisely the same hold as the foregoing full nelson just described with the exception that it is applied when wrestlers are both up and on their feet with the attacking wrestler either in back of his opponent or working either on the right or on the left side of his adversary.

### FRONT NELSON.

A front half-nelson. Sometimes called a reverse nelson. So-called because applied when working in front of your opponent. A strong and punishing hold in the hands of a good wrestler. Although, as a rule, it does not lead directly to an immediate fall, it nevertheless will if properly used take considerable "pep" out of a rough and determined opponent.

To secure this hold when working in front of your opponent your attack is made



Front Nelson—Standing

from your left side. Slip your left arm under his right shoulder. Put the left hand well over and across the back of his neck and head to his left ear. Lock your right hand firmly on top of your left hand which is holding the nelson in order to double the efficiency of the hold.

Don't confuse the front nelson with the front-quarter nelson. In the front-quarter nelson, providing the hold be taken from your left side, the left hand that slipped under opponent's right shoulder does not take hold on back of opponent's neck, but grasps instead the top of your right wrist, the right hand of which is on the back of your opponent's neck and head.

If the front nelson is taken from your own left side the left hand that slipped un-

der your opponent's right shoulder grasps your opponent's neck, head and far ear while your right hand is clasped firmly on top of the left hand that is actually holding the nelson.

Be sure and practice this hold from both your left-hand and your right-hand sides when working on your opponent directly from in front.

#### FRONT NELSON—STANDING.

Precisely the same hold as the front nelson just described with the exception that it is applied when wrestlers are both up and on their feet, with the attacking wrestler working in front of his opponent. Practice it from both your right and your left-hand sides when in front of your opponent.

In taking a standing front nelson you slip your right arm under his left or your left arm under his right arm, whereas in taking a regular nelson when behind your



Front Double Nelson

man standing up, you slip your left arm under his left arm or your right arm under his right arm.

In taking a standing front nelson when working on your left, you slip your left arm under his right arm. The left hand that slipped under your opponent's right arm actually takes the nelson hold on your opponent's neck, whereas in a front quarter nelson the left hand that slipped under your opponent's right arm grasps the top of your right wrist.

In a front quarter nelson your right hand, not the left, is in direct contact with your opponent's neck, whereas in a front nelson direct contact with opponent's neck is taken with your left hand. In a front quarter nelson the left hand grasps the top of your right wrist to form the quarter nelson, whereas in a front nelson your right hand is merely placed on top of the left front nelson hand to re-enforce the front nelson.

The front nelson can be used with the

right hand holding some other assisting hold, whereas in a quarter nelson both hands must be used in order to form the hold itself.

#### FULL FRONT NELSON.

A double front nelson, also called a reverse double nelson. As its name implies



Half Nelson

it is a front half nelson applied from each side while working in front of your opponent. In this hold the re-enforcing hand used in locking a single front nelson takes another front nelson from the other side instead.

Practice the hold from both your left as well as your right sides. Don't confuse it with the double nelson which is not applied from the front.

Several methods of locking your hands are in vogue. As combat conditions may warrant, or as difference in length of arm reach may permit, or as the more or less wide spread of opponent's shoulder width may allow, you can either interlace the fingers of your two hands, or clasp one hand firmly on top of your other, or grasp tight



Leg Nelson

the wrist of your other arm, or you can hook your hands together which will help foil any attempt on the part of your opponent to attack your fingers.

As professional wrestling permits attacks on fingers the latter "finger-foil" method of



hooking the hands and protecting the fingers is preferred by most professionals in locking their hands to more safely secure a hold. Under amateur rulings attacks on a single finger are not permissible.



Three-quarter Leg Nelson

Its value as an effective hold to secure an immediate fall from its direct use is almost nil. However, as a punishing hold it is practically in the same class as the full nelson.

#### FULL FRONT NELSON—STANDING.

Precisely the same hold as the full front nelson just described with the exception that it is applied when wrestlers are both up and on their feet, with the attacking wrestler in front of his opponent. Practice it from both your right and your left-hand sides when in front of your opponent.

This hold is purely a punishing hold and does not lead to a successful fall as does the front nelson itself. The single front half nelson is far more effective than a double front nelson as far as gaining an immediate fall from its direct use is concerned.

#### LEG NELSONS.

Don't under-estimate the value of leg work. Leg work is equally useful whether you are on all fours or up standing on your feet. The wrestler who can use his legs



Reverse Leg Nelson

has a decided advantage. The surprising manner in which clever wrestlers use their legs and the variety of ways in which they do use them, is a revelation to those who

have not given leg work the attention it deserves.

Any number of holds and counters can be taken with the legs. Even should you be unlucky enough to be almost defeated, some clever and effective leg work may still be your salvation and turn the tables on your opponent.

If when on top of your opponent a leg half nelson or some other clever leg hold is likely to be more effective than a half nelson taken with your arm. Greater leverage is secured by it, besides it can't be as easily countered.

Don't neglect your leg work. Practice all leg nelsons diligently. Master them in every detail. It will be well worth your while. Use your mind as well as your muscles, your wits as well as your strength, your head as well as your body and your legs as well as your arms.

#### NEAR-SIDE LEG NELSON.

When working with your man when he is on your right and you wish to secure a



Reverse Double Leg Nelson

near-side leg nelson with your left leg, slip your left leg under his left shoulder to the back of his neck and head, in the same manner as when you take a near-side half nelson with your left arm. Also practice this hold when working on your opponent when he is on your left.

This leg half nelson taken with your leg on his neck is often used in combination with the near-side half nelson applied with your arm. In this combination while holding a half nelson with your left leg you are also at the same time using on him a half nelson on his neck, held with your arm. A good hold that also paves the way to a head scissor.

#### THREE-QUARTER LEG NELSON.

To secure a three-quarter leg nelson first slip a near-side leg nelson on your opponent, then follow it up by hooking the instep and ankle of your left leg on the outside of your right leg and ankle in order to



lock the hold more securely. Practice this hold also when working with your opponent when he is on your left.

#### REVERSE LEG NELSON.

A half nelson taken with your leg when working on your man when your feet are near his head and shoulders. Throw your left leg over his body and slip your left leg under his right shoulder to the back of his head and back. A strong and effective hold that paves the way to a fall. Easy to secure on your opponent in case he failed in his dive for a double leg hold on you.

In a leg nelson, when working with your man on your right, your left leg takes the leg nelson under your opponent's left arm. When working with your man on your left your right leg takes the leg nelson under your opponent's right arm.

In a reverse leg nelson your left leg goes under his right arm or your right leg un-



Nelson and Leg Nelson

der his left arm. In a regular leg nelson contact on your opponent's head and neck is with the back of your lower leg, ankle and heel. In a reverse leg nelson contact with your opponent's neck is made with the front part of your lower leg, ankle and instep.

#### REVERSE DOUBLE LEG NELSON.

When your position for the moment places you on top of your opponent with your head toward his heels you can secure a double leg nelson with your legs by slipping a leg nelson with each leg, one under the right and one under the left shoulder of your opponent. Your right leg will pass under his left shoulder while your left leg passes under his right shoulder. Cross your ankles firmly to lock the hold more securely. A powerful punishing hold.

#### HALF NELSON ON LEG.

If working with your opponent when he is on your right and you want to put a half nelson on his leg instead of on his neck slip your right arm under the ankle of his bent left leg. Continue slipping the hand around and between his ankle and back of his left thigh until you reach and firmly grasp his outside upper left thigh with the palm of your right hand. A punishing as well as an effective leg hold. Also practice it when working on your opponent when he is on your left.



Half Nelson on Leg

This hold, "a half nelson on leg," is taken with your arm, not your leg. Don't confuse it with a leg nelson. Leg nelsons are holds which are taken with your leg or legs, not with your arm or arms.

A useful hold against an opponent who lies face downward flat on the mat. If you can succeed in trapping his foot and secure a half nelson on his leg, you should be able to follow it up with a half nelson,



Nelson and Nelson on Leg

arm or other effective assisting hold to help gain a fall.

A punishing hold if you throw your weight down and against him. Often used in combination with a half nelson or other assisting effective hold. One hand, your left, holding a near-side half nelson on his neck while at the same time you are holding a half nelson on his left leg with your right arm as illustrated above.



## Occupation and Health

By L. E. EUBANK

**M**OST of us spend from six to ten hours each day, excepting Sunday, making our living. It is only natural that occupation, demanding as it does something like a third of our time, should leave its imprint, good or bad, upon our health and physique.

Physicians and statisticians who have delved into the records of occupational diseases present some interesting comparisons. Mortality from respiratory troubles is from two to four times as great among factory workers as among farmers, and according to one authority the death rate among cutlery grinders is twice as great as with men generally of the same age. Pottery workers, too, die at an appalling rate.

It is the dust that plays such havoc with the lungs of factory workers, and, of course, when the mainspring of the body is injured physical decline is inevitable. Professor Thompson mentions five ways in which dust affects the bodily organism: By mechanically obstructing the air passages. By lacerating the delicate mucous epithelium. By conveying soluble toxic materials into the system. By conveying germs. By acting as an irritant upon the skin, choking the sweat and sebaceous gland ducts. It seems that dust can go anywhere. Coal miners often have particles of carbon in their bronchial glands, and even in the liver! The best way to deal with dust is to have none, and I am happy to say that owners of modern factories are working on that plan.

Of course, inhalation of foreign matter is not the only cause of ill health among factory employees. Ventilation, light, cleanliness of the workroom and of the worker's person, all have a direct bearing. Much is being done of recent years to improve conditions; but at best, factory work is generally unhealthful and necessitates the intelligent co-operation of worker and employer in maintaining the highest sanitary standards.

Ventilation must be constant; hot, damp air is a great enemy to the indoor worker. In hot dry air the body can relieve itself by perspiration, but when the air is damp as well as hot the heat is extremely oppres-

sive. Better have the work room too cold than too hot. The temperature should not go above 70 degrees.

But all that sanitary laws and considerate employers can do will be only partially effective if the worker himself is ignorant of the requirements of health and careless in his daily life. Workers should know the truth regarding the effect of their occupation; many are ill and do not know why. Such work as glass-blowing is said by some to be healthful, such use of the lungs being thought to strengthen them. Quite the contrary; blowing violently or against any considerable resistance is detrimental and may bring on emphysema, a chronic inflation of the tissue. Professional divers if healthy are so in spite of the diving, not because of it; any work or exercise necessitating suspension of respiration is injurious to the lungs and the entire system. These mistaken notions and such old fallacies as the advice to painters and lead-workers that the use of alcoholic beverages prevent plumbism and other diseases characteristic of their work, must all be discarded by the modern worker.

One of the worst features about the dusty trades is that they discourage full breathing. The knowledge that the air contains injurious matter, and sometimes its offensiveness to the olfactory sense, lead the worker to breathe as lightly as he can. In many cases the dangers justify this, but the habit of shallow respiration finally becomes fixed. Reduction in the depth of habitual breathing always lowers the tone of the general health. Barbers, dentists, and such other workers have to hold their faces close to those of their customers, are in danger, if they are sensitive, of contracting the habit of suspended or shallow respiration. One man of my acquaintance worked himself serious injury through this curtailment of air. His breath was chronically offensive because of stomach trouble. Doubtless there are many similar cases. No person should let sensitiveness, pride, business considerations or anything else force him into such a health-destroying practice as shallow respiration.



On the contrary, all factory employees, all indoor workers, should make a specialty of breathing gymnastics. At all times when out of the bad air of their workplace they should absorb all the oxygen possible. Five minutes in the morning and the same in the evening given to deep rhythmic breathing will aerate the neglected cells of the lungs and cleanse and tone up the entire respiratory tract. One need not adopt an elaborate system. Stand on the porch or before a widely opened window and fill the lungs to your utmost. Inhale slowly, hold only a few seconds, and exhale thoroughly. Do not forget the latter half of the exercise; expel all the air you can without painful effort. Keep your mind on the exercise.

Every person who is forced to breathe impure air during the day should sleep outdoors if he or she can possibly manage it. Nothing else will go so far toward offsetting the injuries of your work-environment. For eight hours or so you breathe the purest of air, and that too, at a time when the reconstructive bodily processes are going on most effectively. Compared to open air sleeping, a few moments' breathing exercise fades to insignificance. There is nothing like it for the indoor worker, or for anyone who has a tendency to respiratory weakness. I have often thought that miner's consumption would cease to be the dread of underground workers if they could only appreciate and avail themselves of outdoor sleeping.

Next to the harmful effect on his respiration, the occupation victim has to consider the injury of his working posture. The time will come when all employers will be forced to provide for periodic changes in their workers' posture. But until that glad day arrives the individual must do the best he can for himself. One of the most practicable ways of meeting this one-position problem is to make oneself of use in some other department. I appreciate that this is not always feasible; but it is in some lines. In a candy factory, for instance, the girls who dip chocolates sit constantly, while the ones who pack boxes almost never sit. If a dipper will pick up a fair knowledge of packing, or vice versa, there will be frequent chances to change work. In such cases the change is almost as agreeable as it is physically.

Constant standing will "warp" the bodies of all but the most vigilant. The inclination

to hump over is almost irresistible; but you must strive not to do so. Bend at the waist, keeping the spine at its straightest; try to picture your upper back as straight and flat, and when you "sag" this image in your sub-conscious mind will prick your attention to conditions. To keep the spine in normal shape and the chest free of all cramp and constriction should be your determination. You must do it; and after you once get the habit you will not only possess a healthier and more comely body but will finish the day's work with less fatigue.

Exercises at home—all those that draw the shoulders back and expand the chest—will help you. If you are always too tired for vigorous effort, try this "passive" movement: Stand with back to the wall, just as we do when having our height measured. Straighten your arms down at sides and place palms of hands against the wall. Now carry the arms out to the front (still straight) and upward till backs of hands are against the wall above your head. Your waist will swing outward a bit; prevent this all you can, and hold shoulders to wall. Retain the position a few seconds, then repeat the movement several times.

Lying on your back on a table and gradually extending more and more of the body over the edge is another good "passive" exercise. Unless you are quite strong, however, do not carry this very far, as it can be made extremely severe. If your work table is low, requiring a "dropped chin" carriage of the head for several hours a day, I would suggest your sleeping without a pillow.

The average worker who is confined almost exclusively to one bodily posture reasons that constant sitting may hurt the health, but constant standing "hurts the feelings" also. For some reason most of us figure that there is a certain amount of dignity in a job that allows us to sit; the fact that "office men" spend most of their time in a "swivel," while laborers spend theirs on their feet, probably explains this attitude. There is really nothing in it; some decidedly undignified labor, as well as some of the most wearing on health, is done by sitting workers.

From the physical viewpoint, the only one we are to consider here, the sitter—though in some cases unfortunate enough—has two



# START THE NEW YEAR RIGHT

## Will 1921 Bring Success or Failure?

It is up to you right now to decide. If you had started right one year ago you would be on the high road to success this minute. Don't let another year pass by. It is within your power to make yourself what you will. Let this be the beginning of a new life and a better one.

## I Will Give You Wealth—Health and Happiness

I will take that body of yours and make it physically perfect. I will make a new man of you. I will fill out your chest so that every breath means increased life, purifying your blood and sending vim and vitality throughout your entire system. I will broaden your shoulders, and give you the large muscular arms and legs of an athlete. I will strengthen your back and every vital organ within you. You will be bubbling over with life, having the keen, alert, brain, the bright flashing eyes and the spring and step of youth. Passersby will stop and admire you for your physical make-up; and you will be the favorite in both the business and social world—you will be a leader of men, and the good things in life will naturally come your way.

## I Challenge the World

If a man stood on the housetops and shouted to the people that he was the strongest man on earth, it would avail him nothing. Someone would make him come down and prove it. But records speak for themselves. I will gladly show anyone personal letters from the leading strong men in the world today that my course is absolutely the best and the quickest to acquire physical perfection. Come on then and make me prove it—I like it. I have the means of making you a perfect physical specimen of manhood, of making you a successful leader of men. You will be a credit to your community. I have done this for thousands of others. What I have done for them I will do for you. I don't care what your present condition is. The weaker you are, the more noticeable the results. Come on then, **START THE NEW YEAR RIGHT.**

Don't miss this opportunity. Sit right down now and fill in the coupon. The sooner you get started on the road to health the easier it will be to reach perfect manhood. Don't drag along one day longer—mail the coupon today.



Latest Photograph of Earle E. Liederman  
Taken October 10, 1920

Send for my New Book

**"Muscular Development"** - It is **Free!**

It tells the secret. Handsomely illustrated with 25 full-page photographs of myself and some of the world's best athletes whom I have trained. Also contains full particulars of my splendid offer to you. The valuable book and special offer will be sent on receipt of only 10c, stamps or coin, to cover cost of wrapping and mailing.

## EARLE E. LIEDERMAN

Dept. 4001, 305 Broadway, New York

EARLE E. LIEDERMAN,

Dept. 4001, 305 Broadway, N. Y. 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 .....

Address .....

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



big advantages over the worker who stands all the time: His feet give him little or no trouble, and secondly, he feels more like taking exercise after the day's work. And this is true whether the exercise is remedial and local or general, like walking, such as we all need. This, to my mind, is no less serious than one's actual suffering—this condition of being unable to do anything for oneself after standing all day.

But duty to self must not be forgotten; we must not give up. As I have already suggested, it is well to study your work, with a view to making it easier by widening your range of usefulness, so that you may be called into other departments. This is not unfair to your employer; it will in the end be to his advantage.

If, however, yours is a job that will not permit of any reduction of the strain on your body—and it must be admitted there are such jobs—then you are up against a tough proposition. But do not give up. Not one person in one hundred is as strong as he or she might be, and if you cannot reduce the strain on your power, perhaps the power can be increased, so that the same work can be done more easily. Of course, it is advisable in any case to build up your strength, but particularly so if you cannot make any ameliorative changes in your work. But, you ask, how am I to exercise when I use up every ounce of my strength in the day's grind? My answer is, that exercise is only one of the builders of strength; in such a case as yours conservation of your power is of more importance than anything else—until you have created a small reserve upon which safely to draw.

Sleep is the big thing for you; the more and harder you work the more you should sleep. Do every possible thing to make that sleep perfect; ventilation, quiet, exclusion of light, bed and bedding—look to all these, with the aim of getting all the benefit obtainable from your time in bed.

Review your eating habits. Many people waste much valuable energy, strength that otherwise would be available for work, digesting food they do not need. As I have remarked in other articles, I believe many of us live on one-half of what we eat in spite of the other half. Eating for strength is a study that will repay you for all the time you give it. You will find by experi-

ment that you feel better and more energetic on just what your stomach can handle without undue effort; gorging never pays, for ultimately it brings weakness instead of strength.

You can take gentle breathing exercises even when very tired. Lie on your back with every muscle excepting those used in breathing thoroughly relaxed, and breathe in about three-fourths of your chest capacity twelve or fifteen times. Rest a while, then spend a few moments at diaphragmatic respiration. This daily deep breathing will keep the lung tissue in good order and help to tone up your general health without imposing too much muscular fatigue. What you want is to get ahead of your occupational demands, so that you have a margin of strength, something to play on—literally.

Right here I would call attention to one of the main reasons for discouragement in many persons who work hard and take up systematic exercise in order to have greater strength. They appreciate that exercise should be progressive, and they make the mistake of basing the increase on quantity of work. This method not only fails to make them more able to stand their work, but actually makes them weaker—that is, when they stubbornly keep on adding to the exercise period in spite of the body's remonstrance. They should make the exercise gradually a little *harder* instead of lengthening its duration.

I do not need to point out the injuries of a lopsided position in sitting, where one shoulder is high, as results when a school child writes on a too high desk, with the other shoulder low. It is equally detrimental to throw all the weight on one hip, as we do when standing altogether on one leg with the other bent at the knee. This "tired cart-horse attitude," as the artist Newman calls it, distorts the spine and throws the entire body out of plumb. It is indicative of insufficient vitality; many employers look for it in applicants for position, and turn away those in whom they note this lack of energy.

Standing on one leg, first on one then on the other, as many of us do, does not really rest us; the sum total of strain on each limb in a given time is not reduced, and we are even more tired in the back and

[Continued on page 41]



# NERVE EXHAUSTION

*How We Become Shell-Shocked in Everyday Life*

By PAUL VON BOECKMANN

*Lecturer and Author of numerous books and treatises on Mental and Physical Energy, Respiration, Psychology and Nerve Culture*

**T**HERE is but one malady more terrible than Nerve Exhaustion, and that is its kin, Insanity. Only those who have passed through a siege of Nerve Exhaustion can understand the true meaning of this statement. At first, the victim is afraid he will die, and as it grips him deeper, he is afraid he will not die, so great is his mental torture. He becomes panic-stricken and irresolute. A sickening sensation of weakness and helplessness overcomes him. He becomes obsessed with the thought of self-destruction.

Nerve Exhaustion means Nerve Bankruptcy. The wonderful organ we term the Nervous System consists of countless millions of cells. These cells are reservoirs which store a mysterious energy we term Nerve Force. The amount stored represents our Nerve Capital. Every organ works with all its might to keep the supply of Nerve Force in these cells at a high level, for Life itself depends more upon Nerve Force than on the food we eat or even the air we breathe.

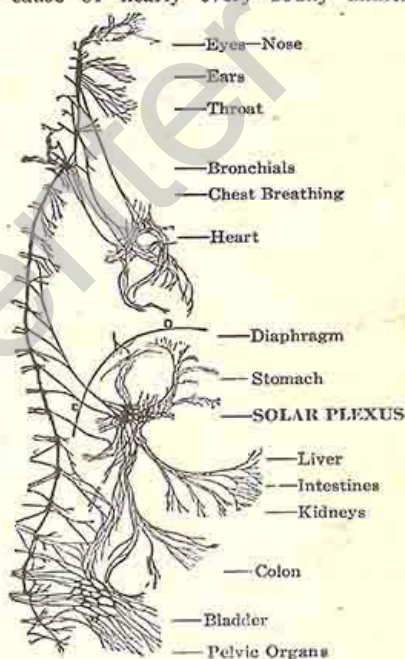
If we unduly tax the nerves through overwork, worry, excitement or grief, or if we subject the muscular system to excessive strain, we consume more Nerve Force than the organs produce, and the natural result must be Nerve Exhaustion.

Nerve Exhaustion is not a malady that comes suddenly. It may be years in developing, and the decline is accompanied by unmistakable symptoms, which, unfortunately, cannot be readily recognized. The average person thinks that when his hands do not tremble and his muscles do not twitch, he cannot possibly be nervous. This is a dangerous assumption, for people with hands as solid as a rock and who appear to be in perfect health may be dangerously near Nerve Collapse.

One of the first symptoms of Nerve Exhaustion is the derangement of the Sympathetic Nervous System, the nerve branch which governs the vital organ (see diagram). In other words, the vital organs become sluggish because of insufficient supply of Nerve Energy. This is manifested by a cycle of weaknesses and disturbances in digestion, constipation, poor blood circulation and general muscular lassitude usually being the first to be noticed.

I have for more than thirty years studied the health problem from every angle. My

investigations and deductions always brought me back to the immutable truth that Nerve Derangement and Nerve Weakness is the basic cause of nearly every bodily ailment,



**The Sympathetic Nervous System**

*Showing how Every Vital Organ is governed by the Nervous System, and how the Solar Plexus, commonly known as the Abdominal Brain, is the great Central Station for the distribution of Nerve Force.*

pain and disorder. I agree with the noted British authority on the nerves, Alfred T. Schofield, M. D., the author of numerous works on the subject, who says: "It is my belief that the greatest single factor in the maintenance of health is that the nerves be in order."

The great war has taught us how frail the nervous system is, and how sensitive it is to strain, especially mental and emotional strain. Shell Shock, it was proved, does not injure the nerve fibers in themselves. The effect is entirely mental. Thousands lost their reason thereby, over 135 cases from New York alone being in asylums for the insane. Many more



thousands became nervous wrecks. The strongest men became paralyzed so that they could not stand, eat or even speak. One-third of all the hospital cases were "nerve cases," all due to excessive strain of the Sympathetic Nervous System.

The mile-a-minute life of today, with its worry, hurry, grief and mental tension is exactly the same as Shell Shock, except that the shock is less forcible, but more prolonged, and in the end just as disastrous. Our crowded insane asylums bear witness to the truth of this statement. Nine people out of ten you meet have "frazzled nerves."

Perhaps you have chased from doctor to doctor seeking relief for a mysterious "something the matter with you." Each doctor tells you that there is nothing the matter with you; that every organ is perfect. But you know there is something the matter. You feel it, and you act it. You are tired, dizzy, cannot sleep, cannot digest your food and you have pains here and there. You are told you are "run down" and need a rest. Or the doctor may give you a tonic. Leave nerve tonics alone. It is like making a tired horse run by

towing him behind an automobile.

Our Health, Happiness and Success in life demands that we face these facts understandingly. I have written a 64-page book on this subject which teaches how to protect the nerves from every day Shell Shock. It teaches how to soothe, calm and care for the nerves; how to nourish them through proper breathing and other

means. The cost of the book is only 25 cents. Bound in durable Leatherette Cover, 50 cents. Remit in coin or stamps. See address at the bottom of page. If the book does not meet your fullest expectations, your money will be refunded, plus your outlay of postage.

The book "Nerve Force" solves the problem for you and will enable you to diagnose your troubles understandingly. The facts presented will prove a revelation to you, and the advice given will be of incalculable value to you.

You should send for this book today. It is for you, whether you have had trouble with your nerves or not. Your nerves are the most precious possession you have. Through them you experience all that makes life worth living, for to be dull nerved means to be dull brained, insensible to the higher phases of life—love, moral courage, ambition and temperament. The finer your brain is, the finer and more delicate is your nervous system, and the more imperative it is that you care for your nerves. The book is especially important to those who have "high strung" nerves and those who must tax their nerves to the limit.

The following are extracts from letters from people who have read the book and were

greatly benefited by the teachings set forth therein:

"I have gained 12 pounds since reading your book, and I feel so energetic. I had about given up hope of ever finding the cause of my low weight."

"I have been treated by a number of nerve specialists, and have traveled from country to country in an endeavor to restore my nerves to normal. Your little book has done more for me than all other methods combined."

"Your book did more for me for indigestion than two courses in dieting."

"My heart is now regular again and my nerves are fine. I thought I had heart trouble, but it was simply a case of abused nerves. I have re-read your book at least ten times."

A woman writes: "Your book has helped my nerves wonderfully. I am sleeping so well and in the morning I feel so rested."

"The advice given in your book on relaxation and calming of nerves has cleared my brain. Before I was half dizzy all the time."

A physician says: "Your book shows you have a scientific and profound knowledge of the nerves and nervous people. I am recommending your book to my patients."

A prominent lawyer of Ansonia, Conn., says: "Your book saved me from a nervous collapse, such as I had three years ago. I now sleep soundly and I am gaining weight. I can again do a real day's work."

## The Prevention of Colds

Of the various books, pamphlets and treatises which I have written on the subject of health and efficiency, none has attracted more favorable comment than my sixteen page booklet entitled "The Prevention of Colds."

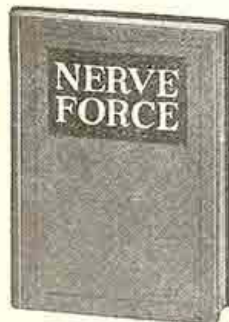
There is no human being absolutely immune to Colds. However, people who breathe correctly and deeply are not easily susceptible to Colds. This is clearly explained in my book NERVE FORCE. Other important factors, nevertheless, play an important part in the prevention of Colds,—factors that concern the matter of ventilation, clothing, humidity, temperature, etc. These factors are fully discussed in the booklet, "Prevention of Colds."

No ailment is of greater danger than an "ordinary cold," as it may lead to Influenza, Grippe, Pneumonia or Tuberculosis. More deaths resulted during the recent "FLU" epidemic than were killed during the entire war, over 6,000,000 people dying in India alone.

A Copy of the Booklet, "Prevention of Colds," will be sent *Free* with either the 25c or 50c book, "Nerve Force." You will agree that the booklet on colds alone is worth many times the price asked for both books.

**PAUL VON BOECKMANN**

Studio 299, 110 West 40th Street, New York





[Continued from page 38]

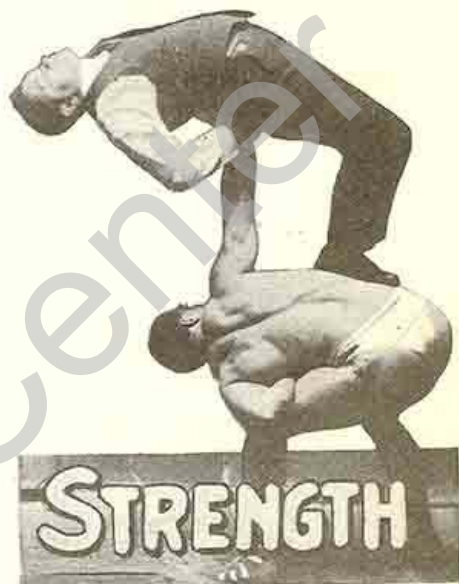
chest because of the twist thus given the spine and body muscles. It is habit, usually started through working too long at a time or when in a particularly weak condition, while convalescing, etc. Not infrequently, if there is much difference in the strength of the legs, the person who begins this practice will end by standing almost constantly on one leg, the stronger one; and this is bound to bring weakness and deformity. So here is the rule: Stand on both legs, with weight equally divided and legs straight. The straighter a limb is the easier it can bear a weight; the feats of "strong men" show us that straight bones will support weights that the muscles could not lift into position.

Do not tense your legs or feet; when the latter hurt from long standing there is a strong tendency to kink the toes and twist the feet into various unnatural positions. Doing so effects more harm than good. Watch your inclination to set the knees rigidly; overdoing this effort to keep the limbs straight will tire the knee-joints and the extensor muscles above them, and throw the whole limb into a state of fatiguing tension. The best exercise to strengthen the knee-joints for standing is the knee-bend—doubling up the legs by squatting clear down, then straightening to standing position. But remember, you must feel that you have a little energy for the exercise, or it will not help you much. I would hesitate to advise "stalling on the job," but you must somehow get a little time and energy for your health, or you will eventually be of no use to your employer or anyone else.

When I was a lad of eighteen or twenty I worked one summer and fall at lathing houses. It is not extremely hard work, but it keeps a man up and going every minute, and my feet were tired and sore at night. My mother hung a hammock on the porch, and I formed the habit of reading in it every evening. After that my feet bothered me less, and, of course, I supposed it simply a result of resting them. But there was another point involved, for when the autumn coolness came and I lay on the bed to read, my foot troubles returned. I did not analyze the puzzle then; but today it is as simple as the proverbial problem of two-and-two. In the hammock the middle of my

## Matysek's Special Course

in Feats of Strength teaches many  
**HERCULEAN**  
stunts that will create a sensation  
among your friends.



This course contains the most scientific data ever offered on many feats, among which are the

- Famous One-arm Bent Press (3 stages)
- Two-arm Clean to Chest, using a bar-bell or man
- One-arm Clean to Chest
- One-arm Jerk
- One-arm swing
- Two-arm Continental to Chest, then to arm's length, and includes 18 large poses of myself showing every detail as to positions, grips, dips.

If you are normally strong, I

### GUARANTEE

its great strength secrets will enable you to lift a man "over the head" in less than five days!

KNOW as much as the stage strong man. For a limited time I am offering YOU the complete course for but \$2.00 Order NOW. It's a mighty good investment.

**PROF. MATYSEK**

Dept. 777

523 N. Charles St.,

Baltimore, Md.



body sagged and my feet were considerably elevated, so that the pressure of blood to them was relieved. Form the practice of getting your feet above the level of your hips when resting.

Anatomically, our feet could well be stronger, though few, even among physical culturists, devote much time to strengthening them. As I have said, build a margin of

energy by some exertion-free plan first; afterward you may start in to strengthen the foot ligaments. Practice rising first on your toes, then on the heels. Do a little skating or dancing. Fancy dancing particularly, when not overdone, will prevent most of the foot troubles resulting from weak ligaments. Bathe the feet often in cool salt water to harden them.

### The Big Secret of Training

(Continued from page 27)

cause boxing especially interests me, but because these instances happen to come to mind, and because the ordinary boxer is such a conspicuous example of the athlete who particularly needs conditioning and yet knows so very, very little about it. The average boxer, after a rest in which he takes on fifteen or twenty pounds of fat, commences a period of training during which he hopes, in three or four weeks, to take off that much fat and get in fighting trim. And so he feels that he must work like a fiend. It is lucky for him that he has a manager who signs him up in such a way that his time is limited. If the training period is short enough, two or three weeks, he may arrive at the date of the bout before he has gone stale. If he had to train a little while longer he would be burned up, as sometimes he is. However, knowing that he must train hard he sets for himself a program which calls for "road work" in the morning, from six to ten miles and sometimes running most of the distance and then a thorough workout in the afternoon. This usually includes the use of chest weights, floor exercises and other development work, then bag punching, rope skipping and shadow sparring, and finally, after he has done enough work to make him stiff and slow, he goes through a session of actual boxing for six to ten rounds. And he continues this program up to the very day before the fight, so as to be as slow and stiff and tired as possible when he enters the ring to fight.

Coming back to Freddie Welsh, there was one instance in which he did not train the very day before the fight. This was the occasion of his second bout with Bennie Leonard. In their first bout at Madison Square Garden Leonard had the best of

it, as he did also in the third, when he defeated the little Welshman and won the lightweight title. This second bout was held one summer evening in a Brooklyn ball park, Ebbet's field, I think, on a Friday night. On Wednesday evening, after training, Welsh felt so tired, slow and out of sorts that he told his friends not to bet on him. On Thursday he continued to feel so tired and depressed that he did not have the energy to get out and do any training at all. Discouraged, he rested completely. And what was the result? Our old friend recuperation came along and filled him with so much energy during this two days of rest that when he entered the ring on Friday evening he felt fresh and confident. He said afterward that Leonard looked smaller to him than usual. Welsh outboxed his rival so completely and showed so much of his very best form that "Tad," the sporting writer, the next day headed his column with the line, "Welsh Conquers Both Leonard and Old Man Time." Freddie was then 31 years old, after twelve years of the most active and strenuous competitive life that any boxer ever knew. He was himself surprised at the outcome. However, he had merely put into practice, unconsciously, the important principle that we are considering.

It might be interesting for you, reader, to look back over your own athletic experience and that of others, and note how it tallies with all this. I could give any number of similar instances, and, so, probably, can you.

Now it may be that an occasional physical director, or any one else well informed in matters of training, will say on reading this that there is nothing new about it. Nothing here but what any one ought to know. But sometimes an idea is so very simple that it is overlooked. Physical training, as a rule, is either pursued with en-



# MATYSEK means more LIFE and— more JOY in life.



Antonie Matysek, the muscular phenomenon, the man who is offering to place you on the energetic strong man map. When you find your place on this map, you will always be full of pep, ambition and joy. You will be a real man!

**You Cannot Become a Pride To Your Sex Without Effort! Become a Matysek and Be the Man You Should Be.**

Because I want YOU to enjoy every benefit you can still get Matysek's

**MUSCLE CONTROL COURSE**

for but \$2.00 which is an

**Amazing Opportunity for Greater Strength.**

It is a scientific system of control of all the physical functions. You can cure yourself of any functional disorder. It makes for independence of medicines or drugs, which you know cannot bring health and are always debilitating. Doctors suggest my exercises when they know they are the only real cure.

### Matysek's Muscle Control Course Consists of

Two handsomely finished charts containing twenty-one beautifully produced pictures of myself, all several times larger than the above specimen, showing every detail as to how to perform the movements with absolute correctness. The instructions are "straight from the shoulder," such as only an expert who went through the mill himself could ever possibly produce. Some subjects of the course are:

How to quickly make respond the inactive bowels; easily correct the rounded shoulders; in no time expel the bothering gas out of the stomach; promptly chase away the staleness of the body; strengthen the nerves and internal organs; control every muscle of your body—make them roll like the waves; store up energy for feats of strength.

Also complete relaxation and contraction—Effective breathing—The best way to arouse your inactive nerves—Creation of better blood circulation—Easiest way to increase your chest circumference—The famous shoulder blade control—How to thicken the shoulders—How to learn the art of making your shoulders supple from only three days' practice—Development and control of the neck muscles—Spreading of the back—Depression of the abdominal muscles and wall—Control of the Pectoralis (chest muscles) the biceps, triceps, thighs, calf and all other muscles—How to train the abdominal regions to be immune from rupture—How to master correct posture—Simple yet positive cure for insomnia—How to pose for good pictures—Advantages of perfect co-ordination of muscles and mind thru concentration which brings success and all the good things that go with it, and many other vital pointers you need every day too numerous to mention.

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

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

**It is My Sincere Wish to Assist Every Reader of "Strength" to Get Really Strong**

For this reason, this Muscle Control Course is being offered you now at such a trifling price that YOU CAN WELL AFFORD IT. Costs but \$2.00. I GUARANTEE QUICK RESULTS AND ABSOLUTE SATISFACTION OR MONEY BACK. MY HONEST REPUTATION PROVES THAT I AM NO QUACK. COME THEN, MY FRIEND, WHEN I AM REACHING OUT TO HELP YOU! I will place you on the real road; I will show you the main secret that helped me to get what I longed for, and now certainly possess. In addition to this Muscle Control Course, you have the privilege to ask any questions pertaining to your physical training; to these I will gladly reply, giving you personal attention. This favor alone is worth the \$2.00 I ask. Matysek's Muscle Control will do wonders for you. You will be the envy of your friends. Learn how to get the most out of yourself. It is easy. GET STARTED RIGHT NOW! Simply tear off the coupon below, mail with but \$2.00 (Canadian orders \$2.30), and leave the rest to me.

Prof. Matysek

Dept. 203, 523 North Charles Street,

Baltimore, Maryland

Detach and mail NOW while it is on your mind

**PROF. MATYSEK**

**MUSCLE CONTROL DEPT. 203**

523 North Charles St., Baltimore, Md.

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

Write name and address plainly.....

City .....State.....Strength, Jan. '21



thiasm or neglected altogether. And as a rule enthusiasm needs to be curbed. There are many phases of life in which restraint is the most important quality that one can possess. Training seems to be one of them. And even when you know all this it is well to be reminded occasionally.

Of course men differ greatly in temperament and in the capacity for hard work. Athletic trainers recognize this, finding that men of phlegmatic temperament, especially big men, require a lot of work to put them on edge, while the wiry men, of nervous temperament, need comparatively little and will more easily overtrain. Every one should make a study of himself in this connection. You may be doing fairly well right now, but ask yourself whether you might not be better by giving thought to the advantages of more recuperation. You must determine for yourself how much work or rather how little work will suit you best and also how much time is required in your case for complete recuperation. And don't think that complete recuperation is anything less than that surplus of energy that enables one to *excel himself*.

The business man who does a little exercise to keep himself fit will, of course, do best by taking his exercise daily. But in athletics, where one extends himself to his limits, I believe that in more cases than otherwise he will do better to train or practice two or three times a week. Whether he is interested in long distance running, training for a boat race which is about as hard as anything in the world, wrestling for a couple of hours or even a fast game like tennis or hand ball he will find himself stronger if he will give himself the longer period of recuperation and he will build more strength. He will be stronger and faster.

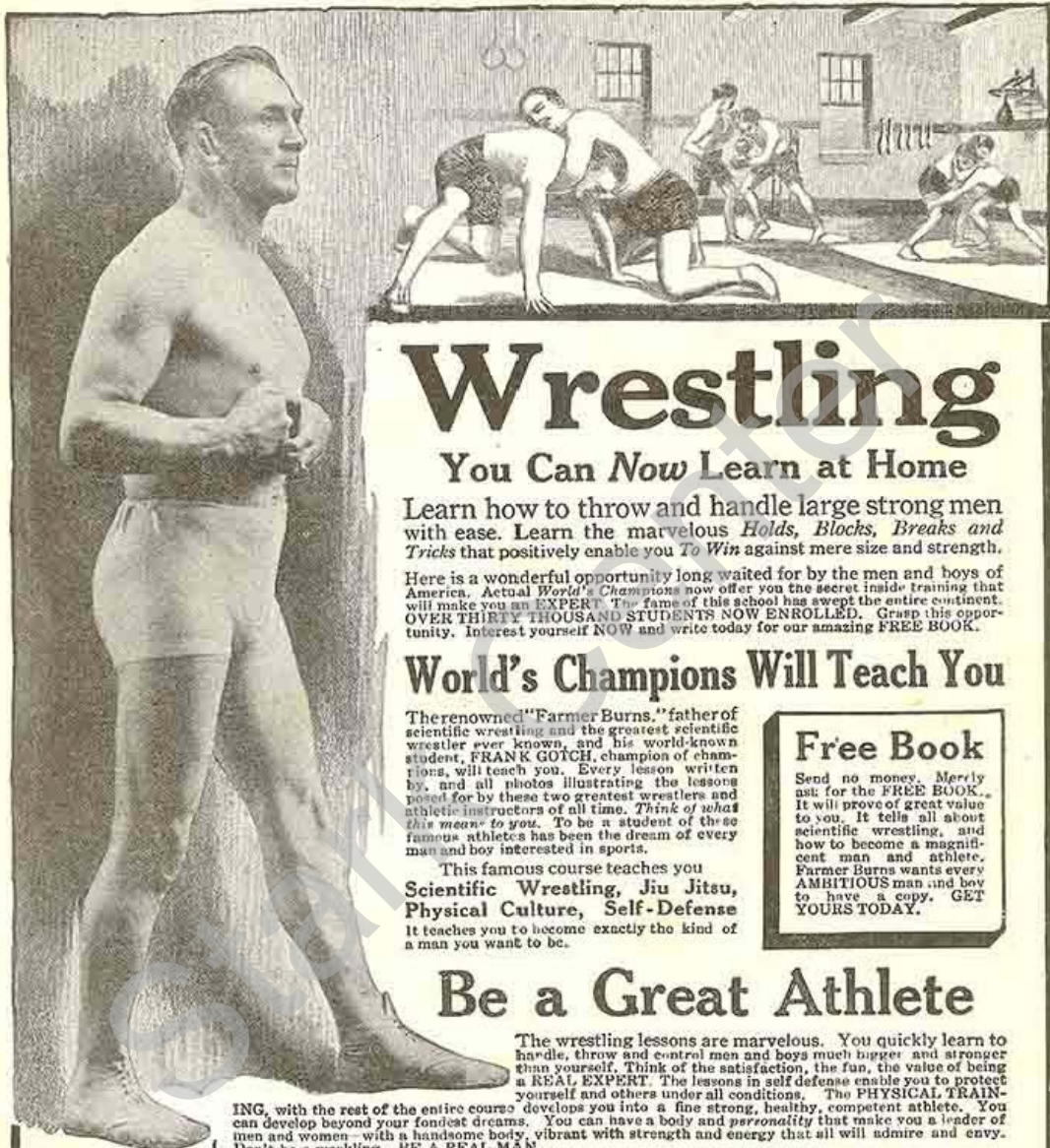
At the bicycle races at Newark, N. J., not long ago there was pointed out to me a rider for whom professional cycle racing is only a side line. He is really a business man and does no training as such, finding that he keeps in condition the year round

simply by racing once a week, usually every Sunday. A hard weekly workout, with six days' recuperation, does the trick. It is usually held that no athlete can stand the strain of keeping in condition continuously, but if it is possible and some have proved that it is possible, it may be learned through mastering this secret of training, that of keeping within the limits of one's powers of recuperation. By balancing one's expenditure of energy with a sufficient period for building up a new supply of energy. It's as simple as two plus two.

All this applies to physical training in the ordinary sense as well as to athletic training. If you are striving for maximum strength, as for a contest, you will progress faster by making haste slowly. Try a really hard workout two or three times a week. You will not need to stint yourself or save yourself if you do that. It is like the plan of eating one meal a day—you can go as far as you like at that one meal. On the other hand, take the case of the man who is in poor condition, lacking strength and trying to get strong. He must restrain himself, taking only a little exercise at a time and taking it daily, or even twice daily and making sure of easy recuperation by being stingy in the matter of spending his energy. However you manipulate the formula, you must abide by it. Recuperation must balance expenditure. The reason why some people do not get results in physical training is just here, simple and obvious as it seems. The beginner, in his enthusiasm, too often tries to do as much work as a seasoned athlete. For the beginner, ten minutes in the "gym" is better than an hour.

What do you know about your own case? Have you ever figured it out from this angle? For when you understand this principle and know yourself sufficiently well, you will be able not only to place yourself but to keep yourself in the "pink of condition" at will. And you need never enter the "alibi" championships by saying: "Oh, well, I sure was in bum form that day."





# Wrestling

You Can Now Learn at Home

Learn how to throw and handle large strong men with ease. Learn the marvelous Holds, Blocks, Breaks and Tricks that positively enable you To Win against mere size and strength.

Here is a wonderful opportunity long waited for by the men and boys of America. Actual World's Champions now offer you the secret inside training that will make you an EXPERT. The fame of this school has swept the entire continent. OVER THIRTY THOUSAND STUDENTS NOW ENROLLED. Grasp this opportunity. Interest yourself NOW and write today for our amazing FREE BOOK.

## World's Champions Will Teach You

The renowned "Farmer Burns," father of scientific wrestling and the greatest scientific wrestler ever known, and his world-known student, FRANK GOTCH, champion of champions, will teach you. Every lesson written by, and all photos illustrating the lessons posed for by these two greatest wrestlers and athletic instructors of all time. Think of what this means to you. To be a student of these famous athletes has been the dream of every man and boy interested in sports.

This famous course teaches you Scientific Wrestling, Jiu Jitsu, Physical Culture, Self-Defense. It teaches you to become exactly the kind of a man you want to be.

### Free Book

Send no money. Merely ask for the FREE BOOK. It will prove of great value to you. It tells all about scientific wrestling, and how to become a magnificent man and athlete. Farmer Burns wants every AMBITIOUS man and boy to have a copy. GET YOURS TODAY.

## Be a Great Athlete

The wrestling lessons are marvelous. You quickly learn to handle, throw and control men and boys much bigger and stronger than yourself. Think of the satisfaction, the fun, the value of being a REAL EXPERT. The lessons in self defense enable you to protect yourself and others under all conditions. The PHYSICAL TRAINING develops you into a fine strong, healthy, competent athlete. You can develop beyond your fondest dreams. You can have a body and personality that make you a leader of men and women—with a handsome body, vibrant with strength and energy that all will admire and envy. Don't be a weakling. BE A REAL MAN.

ING, with the rest of the entire course, is a real sensation. His school is a real sensation. His students are tremendously enthusiastic and secure results beyond their fondest dreams. You can become the student of this famous man and of the peerless FRANK GOTCH. If you are a man or boy with red blood, and ambitious to become a real man and to SUCCEED, then by all means do not lay this magazine aside until you have written the school for full particulars.

### Farmer Burns

The world's greatest wrestler and athletic instructor. His school is a real sensation. His students are tremendously enthusiastic and secure results beyond their fondest dreams. You can become the student of this famous man and of the peerless FRANK GOTCH. If you are a man or boy with red blood, and ambitious to become a real man and to SUCCEED, then by all means do not lay this magazine aside until you have written the school for full particulars.

# WIN

## Write Today!

Get our new FREE BOOK, brimful of interest and fascination. It tells you how to learn right in your own home in spare time to be A SKILLED EXPERT WRESTLER, wonderful at self defense, and how to WIN all games and physical contests. It will open to you the road to success in everything you undertake. You OWE it to yourself to INVESTIGATE. May we send the FREE BOOK? Ask today.

**Farmer Burns School**  
2221 Railway Exchange, Omaha, Neb.

A weak, undeveloped body means failure. A splendid athletic physique spells SUCCESS IN EVERYTHING. You can win in games, in contests, in business, in social affairs if you have the wonderful personality and popularity that an upright handsome athletic body brings to you. If you are already strong we can still help you immensely. If you are a weakling THIS IS YOUR REAL OPPORTUNITY.

### FREE Book Coupon

FARMER BURNS SCHOOL  
2221 Railway Exchange, Omaha, Neb.

Please send at once without obligation on my part, your FREE BOOK on Scientific Wrestling, Physical Culture, Self-Defense and How to Win.

Name.....

Address.....

Age.....



# Matysek Is The Re



Simply wishing will not develop you. Prof. Matysek's instructions will show you the safest way.

To prove to every reader of this magazine that **MATYSEK'S METHODS MAKE 100% MEN**, for a limited time, I am making you an offer for a course of personal instruction that will literally pull you from the mediocre health class and transform you into a man full of life, which means everlasting pep, plenty of strength, a well moulded body, stronger will power, all of which make for success in any endeavor.

In the eradication of complaints Matysek is pre-eminent, simply because the trouble is attacked directly at the source.

Every man, no matter how limited his financial standing, has the same opportunity because, knowing myself the tremendous joy of perfect health and strength, I want to pass the good word along to my fellowmen at the most reasonable charge.

## Three Dollars (\$3.00) Places You on the True Road to Perfect Health and Strength

### Double Your Strength

in half the time than through the many "experts" who are ashamed to exhibit their inefficient exercising device they would burden on YOU. Look at the accompanying picture. I will show you the **SHORTEST, SUREST and SAFEST PATH to HEALTH, STRENGTH and DEVELOPMENT.**

### Guarantees Increases

4 inches to chest, 2 inches to thighs, 2 inches to arms, from three or four months' practice, but most pupils exceed this scale. To the normal man I produce such a high degree of development that satisfies his highest aims! No matter what you are now, your progress will be so generous that you will boost my methods. My honest reputation proves that I am no quack.

### My Pupils Fall in Love With Their Admirable Development

The above arrangements and offer given below have been made because my pupils tell me that I have the **MOST COMPLETE METHOD**, because I want to show you that the course I will lay out for you is **EVERYTHING I CLAIM IT TO BE**, and because I want every "STRENGTH" reader to **BECOME MY PUPIL**. Men who have trained for years on well advertised methods, and failed miserably, write me that I have succeeded where others fail. Day after day I receive letters to this effect. **I WISH IT WERE POSSIBLE FOR ME TO SHOW YOU THESE ORIGINAL LETTERS. IN A MINUTE YOU WOULD BECOME MY FRIEND.**

Fill out the coupon below—NOW. Don't delay a moment; enclose with \$3.00 (check, money order, or if cash register the letter to insure against loss) in envelope addressed to me personally and start on your **GUARANTEED** development within the next few days.

**Prof. Matysek, Dept. 1200, 523 N. Charles St., Baltimore, Md.**



# al Way to Strength

## FIVEPLEX—THE MODERATE WEIGHT EXERCISER

which you can purchase at the very low price of \$5.00 and use thruout the entire course, thus securing maximum results, is designed on the same principle as the exercisers used by the world's strongest men. It increases in weight only as your strength increases, so no harm can come to you whatever. Not bulky or cumbersome, but can be easily used in a small room or carried with little trouble. I am the only physical culture instructor featuring my exerciser and you cannot purchase this exerciser from anyone else because I am the patentee.

I have just completed arrangements whereby I will furnish every pupil with a sufficient quantity of filling for increasing weight of Fiveplex absolutely without charge. You positively do not have any expense for extras.

### Your Payment Is But a Deposit

I may add this lesson, which is a complete course in itself, would be difficult to conceive to the average trainer. You will also be mailed an exercising chart with twelve illustrations of myself, and, in addition to this, with the lesson you will be mailed a copy of my 7½ x 9 in. book (not a vest pocket booklet), "The Way to Success," and 13 x 19 in. chart, together containing 39 fine pictures of myself and star pupils. Literary experts proclaim this work to be the "greatest little inspirational book" ever written on Success and Physical Training. Don't you think the lesson, the greatest little inspirational book, the exercise chart and the personal coaching are worth much more than the small sum of \$3.00 I ask. Remember that it is but a deposit and will be refunded if you are not entirely satisfied.

The Matysek Physique Exercise Course is Entirely Separate from the Muscle Control Course

PROF. MATYSEK,  
523 N. Charles Street (Dept. 1200), Baltimore, Maryland.

### INFORMATION FORM

Dear Sir:

Entirely at your risk, send me your lesson of Matysek Physique Exercises laid out by you personally to suit my particular requirements as given below. This lesson consists of one chart containing twelve illustrations of yourself indicating the proper movements, three pages of instructions and diet if case requires it.

Send me also, without extra charge, your exhaustively produced 7½"x9" book entitled "The Way To Success" and 13"x19" picture chart, together containing 39 fine photos of yourself and star pupils, which explains all details of your systematic course.

The \$3.00 enclosed herewith is sent you merely as a deposit and if I find, after truthfully carrying out your instructions for a period of 10 days, the benefits derived are not absolutely satisfactory and worth at least twice the amount charged for the lesson, my money will be refunded. You will at once value the benefits to be attained, but you are allowed 10 days to see proof of my statements.

Name .....

Address .....

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

Occupation ..... Married? .....

Condition of general health.....

Are you weak, medium or strong?.....

Do you feel rested when arising?.....

How is your appetite?.....

Condition of digestion..... Any disease?.....

Do you use tobacco?..... State how much.....

Ever undergo a medical examination?.....

State Result.....

Height..... Wrist..... Condition of heart..... Lungs.....

Weight..... Forearm..... Shortwinded?..... Subject to cold?.....

Age ..... Upperarm.....

Neck..... Hips..... What are you most anxious to correct?.....

Chest normal?..... Thigh .....

Chest full?..... Calf..... } How many pounds do you wish to.....

Waist..... Ankle..... } Increase..... Or reduce .....

If necessary, give short particulars of additional information that may be of aid to me in understanding your case for outlining your amount of exercises in accompanying letter.

Strength, Jan. '21





HOOT  
the Substi-  
TOOT

WRAPPED  
IN  
BOTTLES



SOLD  
EVERYWHERE



HOOT  
the Substi-  
TOOT

In  
Every  
Clime

**WHISTLE**

At  
Any  
Time



HOOT  
the Substi-  
TOOT

SPELLS

SUGAR

ENERGY



HOOT  
the Substi-  
TOOT



## "Mizpah" Jock Supporter No. 44

Note the Patented Flap  
Feature "A"



Note the Perfect  
Pouch "B"

We invite your attention to a few points of advantage in the  
"Mizpah" Jock Strap over all others, which are:—

- 1st The narrow understrap;
- 2d The small amount of material between the thighs;
- 3d The extra heavy webbing thruout;
- 4th The welt edges, making the webbing stronger;
- 5th Self-adjusting and perfect anatomical fit;
- 6th No buttons, buckles, hooks, snap fasteners or metal of any kind to corrode or hurt the flesh;
- 7th *Can be boiled to cleanse without injury to the rubber;*  
Summing up, *the very best jock* that can be produced.  
Ask for the "Mizpah" Jock Strap and take no other.

If you are unable to procure the No. 44 "Mizpah" of your dealer, send us \$1.50 with your waist measurement, and we will supply you with the same direct.

---

*Small*, to fit a person with a waist measure - 22 to 28 in.

*Medium*, to fit a person with a waist measure - 28 to 34 in.

*Large*, to fit a person with a waist measure - 34 to 40 in.

---

*Note the Perfect Conformity and Comfortable Fit*

---

### THE WALTER F. WARE CO.

Dept. J.

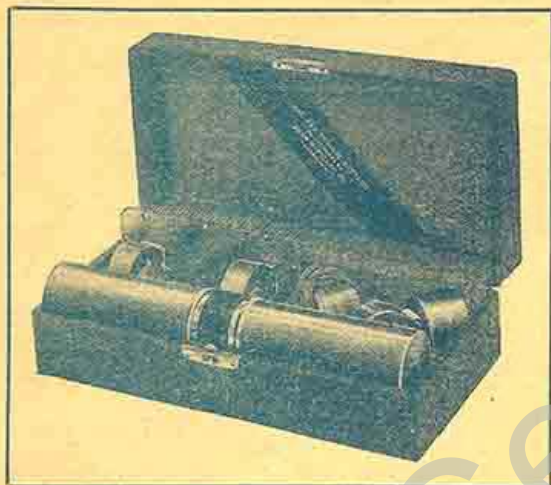
1036 Spring Street

Philadelphia, Pa.



# THE GAL-FAR BATTERY

A New Department of  
THE MILO BAR BELL CO.



We wish to announce to the readers of Strength that the Milo Bar Bell Co. has organized a new and separate department for handling the Gal-Far Battery—the only battery that develops both galvanic and faradic currents.

Galvanic current is largely beneficial to the nerves. It is of most value in cases of neuritis, neuralgia, hysteria, insomnia and kindred ills.

Faradic current's most valuable effect is upon the blood and muscles. It is particularly effective in cases of infantile paralysis and paralysis, diseases of the skin and blood, loss of hair and similar ailments.

You have only to ask your doctor to find out just what this battery will do, and what it will not do. The field of electro therapeutics is pretty well defined. Most physicians will agree that a battery, such as the Gal-Far, is of inestimable value in treating disorders of the class mentioned above. For several years it has been used and recommended by a considerable number of practicing physicians, and is used by nurses and in hospitals.

This battery generates its own power—absolutely no wires or currents needed. Recharges can be had at a very reasonable price, and it will last you a life time. It is particularly effective in treating the following:

Acne	Deafness	Glands (Swollen)	Neuritis
Ague	Debility	Goiter	Paralysis
Anaemia	Dyspepsia	Headache	Pimples
Asthma	Earache	Hysteria	Rheumatism
Boils	Eczema	Infantile Paralysis	Sprains
Biliousness	Eye Strain	Insomnia	Sciatica
Bronchitis	Felons	Lumbago	Varicose Veins
Cramps	Flatulence	Melancholia	Wrinkles
Dandruff	Drowning	Neuralgia	

A book of instructions, showing the proper use of the battery in treating the above diseases, is sent free with each Gal-Far Battery.

Naturally, we do not claim that this battery will enable you to develop great strength and big muscles. But just as the Milo Body Building Courses have won an enviable position in the physical culture field, the Gal-Far Battery also holds an undisputed place in the field of electro-therapeutics.

The Battery is guaranteed to be absolutely as represented. We are so confident that it will please you that we are willing to send it to you on approval. Try it for five days. If at the end of five days you are satisfied with it, send us Ten Dollars. If you feel that it is not what we claim it to be, simply return it to us. You are to be the judge.

## The Milo Bar Bell Co.

Gal-Far Battery Department

Third & Diamond Sts.

Philadelphia, Pa.