 STRENGTM

OCTOBER 1920

Wrestling

Athletic Versatility

2
Strength:
Natural vs. Trained

Energy and
Its Development
$\overline{\text { Price, Fifteen Cents }}$

Vol. V

## WHAT IS A BAR-BELL?



A bar-bell is simply a long handled dumb-bell, and is used for developing exercises. It can be made light enough to suit the needs of any beginner, and heavy enough to provide exercise for the strongest men. It is intended for home exercising, and can be used in your bedroom, no matter Low small it is.

To be of any advantage, a bar-bell must be adjustable, in order that you may begin exercising with a moderate weight, and gradually increase that weight as your strength increases. Used in connection with kettle bells and dumb-bells, it is the most efficient exercising apparatus ever devised, and produces real health and strength in a remarkably short time. The bar-bell is used by men in every walk of life as a means of keeping in good health, and it has developed all the professional strong met of the country.

## A REAL STRENGTH BUILDER

Why is it that the man who exercises with bar-bells can perform feats of strength far beyond the combined power of two or three ordinary men? Not alone because his arms are twice as strong, but because his back, hips and legs are four to five times as strong as those of the average man who uses a system of light exercise. Just having strong arms will not keep you in perfect health. You must be strong in all paris of the body.

Bar-bell exercises bring into play all the muscles of the body. That is why bar-hells users develop perfect health and phenomenal strength. They devote less time to exercises than the average physical culturist, but they get real results.

## REBUILD YOURSELF

A bar-bell will help you to become the man you ought to be, the man you want to be. The reason so many people are weak and sickly is because they do not exercise all parts of the body, regularly. If you are troubled with indigestion, constipation, etc., it will not help you any to merely exercise your arms. You must exercise the entire body with sufficient muscular resistance, gradually increasing the resistance as your strength increases.

We are interested in you and can help you.
Send for our Free Illustrated Catalog describing our bar-bells and courses of instructions.

## The Milo Bar Bell Co.

physical culture specialists and the largest manufacturers and distributors of bar-bells, dumbbells and telic bells in the world. Publishers of Strong th:

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## EDITORIAL

It is hardly necessary to call to your attention the changes that have taken place in the magazine during the past year. When we began to republish Strength in November, 1919, it had twentyfour pages, including the covers, and was published every other month. The readers welcomed Strengti back from its wartime exile, and were so warm in their praises that we were forced first to increase the size, and then to publish it every month, instead of every other month. Each succeeding issue has been a little better than its predecessors, and we hope to continue this progression indefinitely.

But please don't tell us that it is the best magazine ever published. Perfection is that vague, intangible state of being earnestly sought after by all, but never achieved by anyone. As soon as a man imagines that he has reached that state, someone knocks him loose from his pinnacle. Witness Kaiser Bill, Ponzi and numerous other celebrities. Motion is the keynote of our entire existence. Mentally and physically, we must always keep moving. If this movement is not forward, it must necessarily be backwards. There is no balf-way house or resting place. When a man imagines that he has reached perfection he is due for a terrific slump or an awakening.

In this connection, I was very much interested in a newspaper account of an interview with Jack Dempsey prior to his encounter with Miske. Jack stated that all his life he had wanted to be the heavy-weight champion of the world. He was aiming high, and thought that if he won the fistic crown he would have all that he could wish for in this world. But he found that when he had won the highest honors possible in the squared circle, he could not hope for more. For how higher could he go in this line than the heavyweight championship of the world? The best he can hope to do is to successfully defend his title for a number of years. Now, like Alexander, of olden times, he sighs for other worlds to conquer. Don't laugh at Jack. His trouble is not very serious, but, nevertheless, it is a real one. Most of us would give almost anything to swap places with him, but, after all, no one likes to admit that he has reached the end of his string. Let's hope that Dempsey will prove to be a real fighting champion, and that some day when a husky newcomer comes along and knocks Jack loose from the championship belt,
which must happen sooner or later if he does not retire, that he will find new worlds to conquer and will win fresh laurels. We can all appreciate his predicament.
And, speaking of Dempsey, the fact that it pays to exercise was proved conclusively by the newspaper reports emanating from the Miske-Dempsey training camps prior to the big bout. Thousands of people paid real money every day to see the champion and the chatlenger put on the finishing touches to their training. Thousands of dollars were realized from this source. Now, the average man cannot hope to attract cash customers to see him exercise-the returns are not so immediate and not quite so tangible. But any man who is run down physically and begins to exercise regularly for a couple of months would not swap the cash returns of the champion for the results he has obtained-not if he were forced to return to his former state of living and be content with it. Not that the cash returns are never there. Anything that builds you up physically will also increase your efficiency, and through that, your earning power. Yes, it pays to exercise. The fact is conceded even by the man who is too lazy or too indifferent to do it. Is he a friend of yours? Lend him your copy of Strength, and help to snap him out of it.
So let us hope that Strength will continue to grow, but may it never reach that stage of perfection where further improvement is impossible. I am purposely aiming high with Strength, in order that it may never reach that stage of perfection which is synonymous with stagnation.
There will be a very little change in the policy of Strength. It will alvays be primarily a man's magazine, and we are going to try to make it of real interest to every red-blooded man in the country. It will always be devoted to weight lifting-the best form of exercise ever devised for the male of the species,-but will also have articles from time to time dealing with wrestling, boxing and other forms of sport appealing to red-blooded men. And by that term 1 mean not only those who are already in good physical condition, but also those who are interested in bettering their physical condition. I think that the best and most important work that Strencth can ever do is to interest men in bettering their physical condition, and showing them the best methods of body building. But this does not mean that the more advanced readers will be neglected. We will always have something of interest to the oldtimers.

## The Goar~

# Athlletice Versatilility <br> By HARRY B. PASCHALL 

Whenever I see an expert in any line of athletics or gymnastics perform, I invariably feel an "urge" within me to strike out for the back yard and practice his stunts, hoping thereby to eventually duplicate his performances. And I believe everyone with athletic inclinations feels the same way about it.

You remember, of course, the impression a circus used to make upon the kids in your neighborhood. For weeks afterwards you, and the rest of the gang used to get out behind the barn and endeavor to emulate the activities of the clowns and gymnasts. But-you'll also remember that very few succeeded! I recall most vividly one of my first efforts along this line -and that was the time I first attempted the "hand-spring." I kept at it for weeks but my feet steadily refused to go over first, and I usually landed on my back with a crash! I finally gave it up as a bad job-and it was well that I did, before any bones were broken. Years later I mastered the feat and quite a number of others -but more of this later on.

The reason most boys fail to accomplish much along gymnastic lines is because they lack the necessary poise and strength. They really should not attempt any difficult feat until they are well grown up. After their muscles are well-formed and they have good command of them, the ordinary tricks, such as the hand-spring, the somersault, snap-up, etc., will be easy for them.

Not very many boys, even after they are grown, ever acquire much ability along varied athletic lines. Of course most of them play baseball, football and the other common outdoor games, but these do not demonstrate the possession of any unusual strength or skill. As a usual thing the beginner makes a mistake in attempting strenuous stunts without the proper degree of strength and ability to back him.

You can't expect to clear more than five feet in the high jump, put the shot forty feet or any other really difficult feat without stronger back, leg and arm muscles than the average. If a man has the necessary strength and speed to perform the feats-all he needs is practice and coaching. So if you have athletic ambitions-don't overlook these two factors, because they are most important.

It is possible for every average young man to develop into a good allaround athlete by devoting a great deal of time to wrestling, tumbling and jumping and all out door exercisesand if practiced on the progressive plan and persisted in, a man can attain in time, a very well developed physique in this manner. However, few of us have the time to put in several hours daily in practice.

We may well be thankful then, that the highest possible degree of combined strength and agility may be obtained through moderate and progressive bar-bell exercise. This combination of power and speed spells allaround athletic efficiency-and the best part of it is-that only a few short hours a week are needed for practice.

Most lifters are capable of very good records in the broad and high jumpsboth speed events-yet there must be great strength as well as speed in the

lower back and leg muscles to make a creditable showing. Bar-bell men are also, as a class, very good at tumbling and hand balancing-sports which require the maximum of strength and a good sense of balance and judgment of distance. In fact, the weight lifter is the best all-around athlete known, in actual performance as well as in physical appearance.

And now, let's take up some of the ordinary stunts that make an allaround athlete, leaving out the common out-of-door games, such as football and baseball. These are feats which you can practice in your own back yard without any cumbersome apparatus. You should be able to do all of these stunts easily-if you can't, you'll find it worth your time to devote a little practice to them, as they will help you to cultivate quickness, poise and power.

First, we'll consider the standing broad jump. You have certainly been out with a group of friends and indulged in this form of exercise more than once in your life. It is almost the standard feat of leg power and agility. Usually the man who wins is possessed of a sturdier and springier pair of legs and a more powerful lower back than the rest of the contestants. A fair mark for an amateur in this feat is nine (9) feet, although a good man who has specialized in jumping can do from 10 to 12 feet. Try this stunt the next time you are outdoors and have noth-

ing else to do. If you succeed in beating nine feet you can be fairly well satisfied with your jumping ability.

Right next to the broad jump is the running high jump as a test of leg power and speed. This feat is also pretty familiar to you-as we have all had considerable experience in jumping fences and other obstacles in the "days of real sport." The best college trained athletes clear from 5 ft .8 in . to 6 ft .6 in. in this event, but what you should be able to do is governed largely by your height and jumping "form." A man six feet tall naturally has quite an advantage over a man of average height because his legs are longer and he can simply "step" over the bar when placed at about four feet or four and one-half feet from the ground. If you are of average height a jump of five feet or better in this feat is quite a creditable performance.

The shot-put is an event where strength counts considerably, although form is very important. This feat consists of taking a 12 to 16 -pound ball in one hand and hurling it as far from you as possible without stepping or falling outside of a seven foot circle. You might get a round stone weighing around 12 or 16 pounds and try this stunt-but be sure to get far enough away from windows and sidewalks when you are practicing, as it might prove embarrassing to explain to an innocent passer-by how he came to be "beaned" from behind with a boulder. A throw of 35 feet or better is considered quite good in this event.

There are a number of other simple feats of strength and gymnastic ability which every athlete should know in order to demonstrate his ability-and the continued practice of them will also be very much worth your while, as they will give you good control of the various muscles and tend to make you supple. Here are a few of them:

Acrobatics-Can you "turn" a handspring? Can you do either the front or back somersault in the air? Can you do the snap-up? (lie down on your back, bring feet up over your head and with a quick snap of neck and should-


HARRY B. PASCHALL
ers bring yourself to a standing position). Can you do the dive and roll over a chair or table? (In this feat you take a short run and dive over the obstacle as if into water-but when your hands touch the ground you lower the head and roll over on neck and shoulders until you come up on your feet again.)

Strength feats-Can you chin yourself with one hand? Can you bend a fair-sized nail or spike with your hands? Can you grasp a pack of playing cards in your hands and twist them in half? Can you do a knee dip on one leg while supporting a weight of from 75 to 100 lbs . on your shoulders?

All of the above feats are simple and should be easy for the ordinary weight-lifter-but very few men without training, could do many of them. If you can't do all of them at first-keep after it and you'll be more than repaid for your efforts by the results. Remember that the difference between the ordinary man and the athlete is mainly a difference in strength and the knowledge of how to best apply it.

If you have tried to do some of these ordinary stunts and failed to succeed -you will do well to devote a few months training especially for strength. You can cultivate the necessary form and speed later if you have the keystone of strength to build upon.

Remember that there are always more difficult feats to be learned after you master these. There is no limit to the progressive system of training. But there is one thing which you should always keep in mind: Be sure that you master completely every stunt before going further-because these first simple feats are the base of nearly all subsequent ones, and a thorough knowledge of them will help you to master the harder feats with greater ease.

Sometime (if the Editor will allow me), I would like to take up some further feats and tests of strength and quickness; and at that time I will go more into detail as to just how they are performed.

Editor's Note-The readers of Strength are always interested in "good dope" from those who really know, we will certainly have Mr. Paschall with us again. He is an athlete of exceptional ability, and is well qualified to give advice and instructions in the various branches of athletics.

An artist and illustrator, Mr . Paschall is very much absorbed in his work, and for this reason has refused several interesting vaudeville and motion picture offers. Lack of time has prevented him from becoming a firstclass lifter, but some of his lifts are by no means bad.

In the one-arm jerk he does 160 lbs., one-arm press 165 lbs., and 125 lbs . in the onearm snatch. He does a one leg dip with 100 lbs . on his shoulders, and can lie on his stomach and pull up a small man who stands on his feet, with the strength of the under


HARRY B. PASCHALL thigh muscles. In addition to this, he can do all the stunts mentioned in his article, and a number of more advanced feats in tumbling, ring work, etc.

Mr . Paschall has always been interested in all-around work, and is thoroly familiar with all branches of athletics. While not rated as one of the strongest men in the country, his development is very pleasing to the eye, and he is noted as boing one of the most
perfectly developed athletes in the country.

His measurements are:
Height. 5 ft .7 in.
Weight. . . . . . . . . . . . . . . . . . . . 150 lbs .
Chest. . . . . . . . . . . . . . . . . . . . . . . 39 in.
Waist. . . . . . . . . . . . . . . . . . . . . . . 29 in.
Thigh. . . . . . . . . . . . . . . . . . . . . . 22 in.
Upper arm...................... $141 / 2$ in.
Fore $\operatorname{arm} . . . . . . . . . . . . . . . . .123 / 8$ in.
Wrist .......................... $67 / 8 \mathrm{in}$.


## ARM ACROSS THE BACK

A modified form of the hammer lock that does not punish, permissible in matches where the hammer lock is forbidden.

## ARM AND CROTCH LIFT

Lifting your man from a standing arm and eroteh hold.

## ARM DRAG

A wrestling chip that drags your opponent to the mat and a subsequent fall by an attack on his arm.

## ARM ROLL

Generally used as a counter when opponent gives you too much arm in a body bold or in taking nelsons.

## BACK BODY HOLD

Body hold taken from the rear,

## BACK HAMMER LOCK

A hammer lock applied while in back of your opponent.

## BAR HAMMER LOCK

Same as a braked back hammer lock.

## BAR LOCK

A hold in which you use your arm as a bar under opponent's arm and across his back. Popular bar lock combinations are chancery and bar lock, double bar lock, bar lock and front far arm hold, bar and hammer lock, head scissors and bar hold.

## BAR NELSON

Similar to a far side nelson, in which the back of your arm is across the back of opponent's neck, the hand of which hooks into your other hand over his neek and under his far shoulder. It avoids the tendency to be caught in a side roll, the weakness of a far side nelson.

## BLOCK

Same as a stop.

## BODY HOLD

Both your arms clasped around opponent's body at waist.

## BODY LIFT

Lifting your man bodily off his feet from a full waist hold preparatory to flooring him.

## BODY SCISSORS

A scissor hold around opponent's body at waist.

## BRAKED BACK HAMMER LOCK

Back hammer lock in which you slip your forearm under the back hammer lock and grasping his shoulder with your hand.

## BRAKE

Slipping forearm under and inside your opponent's near arm in such a manner as to give you a complete control of his arm.

## BREAK

To force an opponent to loosen, let go or abandon a hold.

## CATCH-AS-CATCH-CAN WRESTLING

The popular style of wrestling in America today. Undoubtedly the best of all styles. A knowiedge of all the various styles of wrestling is no handicap to the wrestler who aspires to be an expert at this style of
wrestling.
The contestants are allowed to use any fair hold in accordance with the rules and conditions of the match. Two shoulders must be pressed to the mat at the same time to constitute a fall. Rolling falls do not count. Clever ground wrestling or floor work is one of the principal characteristics of catch-as-catch-can wrestling.

## CHANCERY FROM DOUBLE BAR LOCK

Holding and punishing your opponent's head in chancery under your chest while you hold a double bar lock on him, instead of trying to turn him to a fall.

## CHANCERY OVER THE SHOULDER

A chancery hold in which your opponent's head is held in chancery over your arm
at shoulder. at shoulder.

## CLICK

A trip, in which opponent's feet are knocked from under him.

## CORNWALL AND DEVONSHIRE WRESTLING

Wrestlers wear strong linen jackets and catch hold above the waist or any portion of the jacket. Men compete in their stocking feet. Kicking, allowable at one time, is now forbidden. Two shoulders and a hip or
two hips and a shoulder must strike the ground at the same time to constitute the fall. However, the wrestler thrown must land fair on his back before any one portion of his body touches the ground ere a decision can be given against him.

This "fair back fall" of this style of wrestling makes it at times a difficult matter to judge a fall on an artiul and unfair wrestler, who, although thrown, can often quickly wriggle onto his side and demand a "wrestle over," whereas, had the conditions been "first down to lose," he would have stood no chance whatever.

Popular in the countics of Cornwall and Devon, which gave this style its name.

## COUNTER

Same as a "doubie."
CRADLE HOLD
An effective standing inside crotch and head hold, facing your opponent.

## CROSS BODY HOLD LIFT

Lifting your opponent with a cross bady hold so that his head is down while his feet are up.

## CROSS CLICK

Tripping your opponent's right leg with your right leg or tripping his left leg with your left leg.


- Pholograph from Western Newspapor Uwion JOE STECHER
Originator and exponent of the Scissors Hold
The present World Champion catch-as- catch can wrestler


## CROSS NELSON

A quarter nelson applied from the front, CROTCH AND DOUBLE WRIST HOLD

Both of opponent's wrists held tightly. Hold his wrists through crotch while you are standing in back of him.

## CROTCH HOLDS

Crotch holds in their various forms and combinations are important holds in catch-as-catch-can wrestling. They can be applied on your opponent be he on his feet or on "all fours," or whether you be in front or in back, above or below him. A few of the many crotch holds are as follows: Crotch and foot hold, half nelson and crotch hold, inside crotch hold and half nelson, half strangle and crotch hold from in front, crotch hold and hammer lock, standing reverse crotch hold lift, etc.

## CUMBERLAND AND WESTMORELAND STYLE

The wrestlers stand chest to chest, each placing his chin on his opponent's right shoulder and grasping each other around the body. Each places his left arm above his opponent's right. Any point down constitutes a fall. Any portion of the body on the ground, hand or knee or quitting hold beiore the throw is made, is a fall in this style of wrestling. The original hold must be retained throughout. Loosening the hold loses the fall, providing your opponent retains hold. Every legitimate means to throw each other is allowed, but if either wrestler breaks his hold, that is, leaves loose, the one so leaving loose shall be the loser, and if either man touches the ground with one knee only or any part of the body except his feet, though he may retain his hold, he shall not be allowed to recover himself, but be decided the loser.
If the wrestlers fall togther side by side or otherwise in such a manner that the referee cannot definitely decide which touched first on the ground, it shall be what is technically called a "dog fall," and must be wrestled over again, but if both fall to the ground the man who is first down or falls under the other shall be the loser.

## DOG FALL

When both wrestlers fall down together in such a manner that the referee cannot positively decide which of the two wrestlers touched the ground first.

## DOUBLE

A hold that nullifics your opponent's hold and gives yout the advantage. A defensiveoffensive chip that turns the tables on your opponent, giving you the superior hold and position.

DOUBLE ARM ROLL
A double in which you pin your opponent's arms tight to your side and roll him to his back.

## DOUBLE BRIDGE

Both wrestlers, while at grips, forming a bridge at the same time. An especially spectacular double bridge is the one in which you bridge on your opponent's bridge, your feet on his thighs just above his knees, after having "halched" him.

## DOUBLE CHANCERY

A front chancery hold in whiih your right arm acts as a bar across back of opponent's neck, your right hand at his chin, while your left arm goes under his head and neck, your left hand grasping your right forearm. A very punishing chancery hold.

## DOUBLE ELBOW

Same as a double arm lock.

## DOUBLE ELBOW ROLL

Same as a double arm roll.

## DOUBLE NELSON

A nelson hold in which both a near side nelson and a far side nelson are appfied at the same time. A punishing hold for a nar-row-shouldered wrestler to be caught in by a stronger and more superior opponent.

## DOUBLE TOE HOLD

An exceptionally punishing hold, a favorite of the late Frank A. Gotch, the past master of all toe holds.

## DOUBLE WRIST HOLDS

Holds in which you hold both wrists of your opponent, used in various effective combinations that lead to a fall.

## ENGLISH WRESTLING

Cumberland and Westmoreland wrestling. This style has been practiced in England almost ever since wrestling was first known and its English rules govern all contests of this kind in this country.

## ESCAPE

A defensive chip that nullifies your opponent's hold, but, unlike a "double," does not give you the advantage nor the superior position, nor leads your opponent directly to a fall.

## FAR NELSON

A half nelson taken on the far side of your opponent.

FAR LEG HOLD
A hold on opponent's far leg.
FINGER HOLD

Any holds on your opponent's finger or fingers. Usually a punishing hold to distract his attention or open the way to a better hold.

## FLYING ARM HOLDS

Arm locks that bring your opponent to his back on the mat from standing positions.

## FOOT STOP

A stop applied to your opponent's body with your foot.

## FRENCH STYLE WRESTLING

Graeco-Roman wrestling is so-called because France is the home of this style of wrestling. Prof, Miller, Clarence Whistler, Lucian Christol, Paul Pons, Antonio Pierri, Greek George, Tom Cannon, Ernest Roeber, etc., were brilliant stars in the Graeco-Roman wrestling world when this style was popular in America.

FRONT BODY HOLD
Body hold taken from in front.

## FRONT DOUBLE NELSON

A double nelson taken from in front of your opponent.

## FRONT FAR ARM HOLD

A hold on your opponent's far arm taken from in front of his arms, not with your arm under his chest.

## FRONT NELSON

A nelson taken from the front.

## FRONT QUARTER NELSON

A quarter nelson put on your opponent from in front.

## FULL BAR LOCK

Both your arms under opponent's both arms on each side and locked across his back. A bar lock on each side of opponent from the front.

## FULL FAR ARM HOLD

Both hands grasping your opponent's far arm, both your arms under his chest.

## FULL NELSON

Same as a double nelson.

## GRAECO-ROMAN WRESTLING

This style of wrestling is somewhat similar to catch-as-catch-can. However, all holds below the waist are foul. Catching hold of the legs and tripping is strictly forbidden. Both shoulder blades must touch the wrestling carpet at the same time to constitute a fall. Big men as a rule are champions at this style. The popular style of wrestling in this country when William Muldoon was champion Graeco-Roman wrestler of the world.

## GRAPEVINE AND HEAD HOLD

An effective combination in which you lift your opponent with a reverse for leg hold, then grapevine his body with your right leg, doubling him up with it, and a head hold that follows the grapevine to prevent him from bridging.

## HALCH

A spectacular flying head throw in which from a standing position you turn in quickly
and throw your hand or hands around opponent's head, stoop well forward and pull opponent bodily over your head and shoulders to the mat. A favorite hold of George Hackenschmidt when he was champion Graeco-Roman wrestler of the world.

## HALF NELSON

Slip your frce arm under your opponent's arm until it grasps the back of his head. Bear down on his head and twist his face toward you to give you more leverage. A favorite hold of catch-as-catch-can wrestlers. Not so much used by itself but almost invincible when used in combination with other effective holds. A few of the many near side nelson combinations are as follows: Half nelson and half body hold, half nelson and under body hold, half nelson and far arm hold, half nelson and near leg hold, half nelson and far leg hold, half nelson and crotch hold, half nelson and inside crotch hold. half nelson and toe hold, half nelson and back hammer lock.

## HALF NELSON AND FOOT HOLD

Locking the heel of your opponent's foot on his hip, his ankle at the bend of your elbow, in combination with a near side half nelson.

## HALF NELSON COMBINATIONS

Half Nelson and near leg hold.
Half Nelson and far leg hold.
Half Nelson and far arm hold.
Half Nelson and crotched far arm hold.
Half Nelson and crotched far wrist hold.
Half Nelson and half under body hold
Half Nelson and half body hold.
Half Nelson and crotch hold.
Half Nelson and inside crotch hold.
Half Nelson and hammer lock.
Half Nelson and toe hold.
Half Nelson and double toe hold.
Half Nelson and body scissors hold.
Half Nelson and half nelson with leg.
Half Nelson and leg grapevine.

## HALF STRANGLE

One hand or only one arm against front of opponent's neck.

## HALF STRANGLE AND CROTCH

An effective standing hold from the front on an opponent who neglects to crouch in his standing position.

## HAMMER LOCK

Getting your opponent's arm up his back and forcing it up between his shoulder blades. One of the most effective of all wrestling holds. In combination with some other assisting hold its effects are even still more intensified. Half nelson and hammer lock, crotch and hammer lock, hammer lock and near leg lock, in which you lock his bent leg in the bend of your elbow while your hand grasps his hip are just a few of the many effective hammer lock combinations.


- Pholograph by Whiern Newspaper Union STRANGLER LEWIS
Ed "Strangler" Lewis, manipulator of the Head Lock
HAMMING
A Cumberland and Westmoreland chip, somewhat similar to a back heel, the difference being that you pass your leg behind your opponent's knee instead of behind his heel.


## HAND HOLD

Any hold on opponent's hand. Generally more or less of a punishing hold.

## HANK

Turning one's side to an adversary, tripping him, pulling him back and then falling on him.

## HEAD AND HOCK LOCK

Doubling up your opponent with a hold on head with one arm and a near leg hold with your other arm, pulling his head and knee together, and hooking your hands to prevent him from bridging.

## HEAD HOLD

Any hold on your opponent's head.

## HEAD LIFT

A lift with your head when held in chancery. Generally used as a double when combined with a neck and crotch hold.

## HEAD SCISSOR

A punishing and effective hold applied ori opponent's head.

## HEAD SHOVE

A move in playing for a hold that shoves your opponent's head back to pave the way to a more effective hold that follows it.

## HEAD SPIN

To throw your feet straight up in the air like a head stand and turn around on your head, using the top of your head as a pivot.

HEAD TWIST
A standing head hold and twist when in front of your opponent.

## HEAVE

A heave in which you throw your man bodily over your head.

## HIP LOCK

Same as the Buttock Hold.

## HOCK KNOCK

A quick knock with the sole of your foot against his leg at back of knee, to bend his leg and weaken his position; then quickly pull him backward to a fall.

## HOLDING DOWN

Holds and positions used to keep your opponent on "all fours" or flat, face downward, towards or on the mat to prevent him from getting to his feet and rising up.

## INSIDE CLICK

To trip opponent's left inside with your right or trip his right with your left inside.

## LANCASHIRE STYLE

Catch-as-catch-can wrestling. So named because of the style in vogue in Lancashire, England, the home of catch-as-catch-can wrestling.

## LEG AND ARM HALF-NELSONS

A combination hold in which you hold both a near side half nelson taken with your arm and a near side half nelson taken with your leg, holding both the leg nelson and the arm nelson at the same time.

## LEG AND LEG LOCK

When each opponent has a lock on the other's leg.

## LEG AND SHOULDER LIFT

Lifting your opponent over your shoulder, his head beyond your back, from a single or double leg lift preparatory to dashing him bodily to the mat.

## LEG DIVE

Getting a leg hold or a double leg hold on your opponent by means of a dive for his leg or legs.

## LEG HOLD AND INSIDE BACK HEEL

A favorite leg hold, in which after securing a hold on his nearest leg you trip him off his standing leg with an inside back heel.

## LEG NELSON

Using your leg instead of your arm in taking a nelson.

## LEG STRANGLE

A strangle hold held with the legs.

## LEWIS'S HEAD LOCK

An exceptionally punishing head lock invented and made famous by "Strangler" Ed, Lewis.

## NEAR NELSON

A half nelson taken on the near side of your opponent.

## NECK AND ARM HOLD

One of several common preliminary holds used by wrestlers in taking hold when time is first called.

## NECK BEND

Bending your opponent's neck backwards.

## NECK BEND AND BACK HEEL

Back heeling your opponent from a neck bend hold under his arms and around to his forehead.

## OFF-SIDE HALF NELSON

A far side half nelson.
OPPOSITE ARM HOLD
Same as a far arm hold.

## PRELIMINARY HOLDS

Holds more or less mutually taken by contestants on catching hold at beginning of a bout. Wrist and neck hold, neek and arm hold and the referee's hold are common forms of preliminary holds. They give a slight advantage in position to the wrestler that holds them, but are as fair for one as the other if held by both.

## PUNISHING HOLDS

Grips, holds and locks taken more for the purpose of weakening, crippling, or hurting your opponent, rather than give you an advantage or prevent a throw or fall. Holds in which a wrestler voluntarily lets his shoulders touch the mat to save himself from further punishment.

Punishment holds may result in an actual bonafide fall, however among novices they more often result in your opponent conceding the fall to avoid any possible serious physical strain or injury that might result unless hold is released and freedom of movement is permitted.

## PUTTING ON THE BRAKE

Slipping your forearm under and inside an opponent's near arm in a back hammer lock, so you have complete control of his arm.

## QUARTER NELSON

A sort of near side nelson in which you lock your near hand on your other forearm that is across the back of your opponent's neck.


Given by the referce when contestants fail to take hold. Generally taken by placing left hand around back of opponent's neck while your right hand grasps his left upper arm at the elbow or vice versa.
Don't stand upright. Bend forward from the hips. Play safe with your legs by keeping them apart and well away to avoid being tripped or reached with a leg hold.

## RINGING HOLD

A preliminary hold in which each takes the other's right arm above the elbow and puts his left arm over and across opponent's back.

## SADDLE HOLD

A top position in which you are seated astride your opponent's back while holding
him with your knees, keeping him from getting to his feet while you play for a hold on his arms, head or upper part of his body.

## SCISSOR HOLD

Locking your legs around opponent's body. Even if you fail to press opponent's shoulders to the mat he may be forced to concede the fall to escape from pain and punishment. A favorite hold of Joe Stecher, the present world's champion catch-as-catchcan wrestler.

## SET UP

A double in which you escape from opponent's back body hold in floor work.

## SHOULDER STOP

Stopping your opponent's further approach by a straight arm stop with your hand at his shoulder.

## SHOULDER TWIST

Twisting opponent's shoulder by grasping his right arm with your left hand under his elbow, while the right hand grasps his wrist. Twist his arms and shoulder by pressing his bent arm inward with your left hand and his wrist outward with your right.

## SIDE HOLD WRESTLING

Wrestlers wear strong leather harness, reaching from neck to elbow and from shoulder to waist. As the contestant having the "under hold" has a decided advantage, choice of holds is decided by toss. The "right and over" or "left and under" are at the disposal of the winner.
"Right and over" means to grasp opponent's harness back of right shoulder with right hand, seizing opponent's right hand with the left.
"Left and under" means to seize opponent's harness at the left side of the waist with the left hand and his left hand with the right. Contestants stand side by side. The original grips must be held. To break or change a hold means the loss of a fall. The holds must not be broken until a fall is served. Opponent must be thrown fair on his back; two shoulders must touch the ground at the same time to constitute a fall.
Never much in vogue in this country, but at one time the popular style of wrestling in Canada.

## SIT

A ground wrestling position in which the wrestler, instead of being on "all fours," sits on the mat with his feet astride and his back towards his opponent.

## SIT BACK

A chip in which you sit back and down while pulling your opponent towards and over your head to a fall.

## Stremguth: Naturrall vs. Traimedl

The attainment of a perfect physical condition together with the acquirement of great strength, has been the goal of mankind from ancient to modern times. Even some of the exercises used at the present time, have been handed down to us from the ancient Greeks, Indications have been found that some of these exercises, such as the "floor dips" were especially in favor in Greece. But, whatever system is used, the fact remains that there is something about the possession of extraordinary physical power which incites in its possessor the call and desire for further achievement along the same lines. Perhaps, it is parallel somewhat with the principle which seems to incite the possessor of great wealth for more. However, the desire for physical achievement is not usually the case with the so-called "naturally" strong man who "does not need to exercise;" it always seems to have the most pertinent application to those athletes whose intensive cultivation has resulted in a high standard of perfection from a prior weakened condition.
It certainly means a lot to be in a strong, healthy condition, and those who appreciate it most are they who have earned it. One cannot become phenomenally strong by merely watching others exercise, or by devising ways and means of exercising without the crystallization of such thought into action. It is always necessary to do and practice and experiment, in order to bring out the latent possibilities that exist in every one of us.
The man who possesses a naturally strong body is prone to neglect it, never appearing to realize that even in a rugged constitution there must necessarily exist some defects which are capable by proper exercises of correction in a scientific manner.

Among those men who perform laborious work in the quarries, in the mines, on the docks, etc., there are undoubtedly some phenomenal specimens possessing a marvelous degree of strength and development, but a true analysis of their condition will, in all cases, show; 1 , that they are only strong in the performance of a few feats; 2 , that such strength as they do possess has been

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the result of their work. In other words, such men have developed and trained along certain lines; 3, that such men are rarely karmoniously developed.

Work of a certain character will, of course, develop certain muscles. Take, for instance, the blacksmith: he will develop a huge upper arm, forearm and perhaps some good back muscles. The quarryman may develop strong back and leg muscles, and the expressman strong back and shoulder muscles. But, interested as everyone is in harmonious achievement as a whole, the ques-
tion remains: How will these men stack up in all around strength, development and athletic ability?

It is very easy to understand that development of any one or two parts of the body made at the expense of the rest of the muscular system is entirely too expensive a proposition to consider. If the time should come when the muscles that are themselves able to bear the burden, shift more of the work upon others which are not nearly so well developed and consequently too weak to stand the attendant strain, the result will be disastrous to the man who is not strong all over. That is exactly the reason why so many "strong" workmen have suffered scvere disablement. This shifting of the burden, resulting in injury, is generally caused by getting into wrong or awkward positions, or by a desire to ease off on tired muscles.

Another thing to be considered is the question of agility. It is possible for an all around strong man to be very agile. In fact, the man who is equally developed is much more agile in every possible way than the non-athiete. The workman, however, who is strong in ane or two parts only, is not necessarily active or agile-on the contrary, he is almost invariably very slow in most movements. This is but a natural consequence of failure to acquire the all around development which permits and induces the most perfect co-ordination, thus securing the utmost from the effort made.

No man is really strong who is not strong all over. Eyery chain is as strong as its weakest link, and each muscle or group of muscles, constitute a link in the human chain. If a man with powerful arms and shoulders has weak legs, his performance of a feat of strength requiring co-ordination in high degree will be as effectual only as his legs, in combination (or co-ordination) with the other muscles will be capable of rendering; the same holds true of a man with strong legs and weak arms or shoulders. Each muscle or group of muscles is severally capable of development, and when all are equally developed the result is a condition which represents trained strength and coordination in its finest and highest degree.
Now, there is necessarily a great difference in the inherited physiques and constitutions of different men; some are born with better material, so to speak, than others-
and already possess many of the qualifications or requirements that go to make up a strong man. Natural strength being inherent, however, it generally represents an unknown quantity because it is clearly impossible to estimate the capabilities of any man until an effort is made in a particular way for the express purpose of noting results. Even then, the results obtained will not always be accurate, for the non-athlete (even though possessing phenomenal strength in some things) is bound to be lacking in scientific performance so that the greater proportion of his efforts will be wasted by power being applied in the wrong manner. The total result is:
The trained man is scientific, thus securing the most from his efforts, while the untrained man wastes his strength on account of lack of training, thus rendering his athletic performance negligible in comparison.

Other things being equal, the "natural" strong man with correct training should develop into a phenomenon, but it is most always the other way around; that is to say, there are numerous athletes, examples of phenomenal strength, agility and science, who were weaklings when they commenced training. Perhaps the results attained has been due to the fact that the inherently or "natural" strong man has an aversion for intensive training-he does not usually possess the ambition, determination or facility for adaptation to physical requirements that a weaker man with desire for physical betterment has. In other words, the INCENTIVE and ENTHUSIASM appears to be lacking in a "natural" strong man at the beginning of his training period. At any rate, the man who began with a weakened condition deserves great credit for results accomplished by him after reaching a high state of physical perfection.

Incentive and enthusiasm are at the bottom of every successful performance; without these qualities, there can be no success, either in athletics or anything else. It is always the man who does not permit his incentive to lag or his enthusiasm to dwindle, who is able to overcome obstacles.

The writer has frequently met some of these "natural" strong men, whose boast usually consists of the following: "Why, what do I want to exercise for? I have more strength now than I need!" But when

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it comes to a test or showdown, they fall down in their endeavors and a comparison between them and the physical condition or efforts of a trained athlete is negligible and ludicrous.
It is true that some of these "natural" (socalled) strong men are able to shoulder large weights, or perhaps even do a certain feat that might be difficult for the trained athlete, but when they have finished with their one or two feats, they are through! They have neither the strength, endurance, science (or co-ordination) to do more. On the other hand, the trained man who has strength, science and agility at his command will perform any number of feats requiring the very highest degree of all-around athletic ability. In fact, the writer has often seen a trained athlete work out with the heaviest kind of weights, doing stunt after stunt, and exercise after exercise, for a period of four hours-whereas ten or fifteen minutes of the same kind of work would exhaust entirely the energies of the strongest of these "natural" strong men!

The strongest men of the world today are not those who claim to be "natural athletes," but men who have worked, and worked hard for what they have-men who do not underestimate the value and importance of scientific training.

The writer belieyes that, regardless of claims to the contrary, no untrained man can bent press even 200 lbs ,, two-hand press the same weight, jerk 250 or so, snatch 150 lbs ., or one-arm jerk 185 lbs . without preparation, But the average man of medium height, who is organically sound who has undergone a course of proper training, can easily perform these feats, generally better them, and do many others in addition thereto.

Slowness is purely the lack of co-ordination of some of the necessary faculties, and the failure and stiffness which is so predominant a feature in the efforts of an untrained man results from a lack of preparation or education. This co-ordination is a faculty itself which may be developed by the practice of exercises using all of the muscles of the body. In its last analysis, the entire theory of slowness is a condition of the mind and not of the body. The performance of certain laborious movements, with no thought of the result, may ofttimes be the
cause of slowness. When intelligent exercises are taken upon the proper lines, rapid improvement is invariably noticeable. The mental attitude, too. of the athlete towards his exercises and in his performance is a tremendous factor in the production of results. If the brain is accustomed to quick thinking, and the impulses sent out to the muscles from the nerve centers by medium of the brain are in concordance with the conditions sought to be overcome, there is bound to be a reactive principle set in motion which, in its final development, means co-ordination. On the other hand, if no particular thought is given to a movement which is, of necessity, performed during the daily work, the ability with which the brain and nerve centers and muscles can act along the lines suggested is nullified, because there remains too much resistance in the paths of the nerves (through which the mental stimulus from the brain flows); in such a case, the nerve force has not been particularly directed (or trained) along these grooves by any particular thought, attention, concentration, or whatever else it might be called.

Beneficial exercises may always be deviscd, according to the requirement of each individual; it all depends upon what the individual is after. If he desires to excel in outdoor sports, then he must practice them; the best practice for the ambitious athlete is along the lines he is best fitted for and every athlete finds his level in athletics. For the young man, high school athletics are very good when not overdone. A noted authority on physical culture once remarked to the writer that the average high school athlete indulged, not in physical training, but "in physical straining!" However, whatever branch of sport is selected, moderation for the individual is good. This term, however, is entirely one of degree-for what might be a fairly good workout for one man, would be "physical straining" for another, depending upon the ability of the respective individuals to co-ordinate their forces and the endurance at their command. The determination of what is moderate, therefore, must be left to the judgment of the athlete who will discover by the experience that alone comes from practice just what is best for him in this respect.
It may be interesting to observe that the
public is commencing to appreciate the trained athlete and his efforts, and to note the difference that exists between him and the so-called "natural" strong man. As an instance, various motion picture companies have at times featured actors purporting to be strong men or perfect athletes in action in pictures requiring this characterization, and the public have been deluded in the belief that they were to witness phenomenal feats performed by a prodigy of the forest, a well-developed athlete. Great disappointment has been voiced, however, through the medium of the press and other sources, after a review of such pictures, owing to the fact that the men playing the parts calling for strength and agility were fat men and nonathletic types, utterly unfitted and unable to characterize their parts in a reliable wayoffending the artistic and realistic sense of the audience by a greater display of "fake" than that which ever dodged the decayed vegetables of an infuriated gallery crowd in the bygone days of the sixth rate melodrama. In reviewing these pictures, a critic has said: "Are there no more strong men left in the world-did they all live in ancient times? If there are any living now, where are they?" So even these picture companies have now come to realize that what they really need for such characterizations is strong men of the type of Milo pupils, who are in a position to display their muscular development to the highest advantage, and who can produce the results in a manner to reffect great credit to the author of the story.

The Olympic Games which will be held in Antwerp this year are a great incentive toward physical culture. The tryouts throughout the United States have necessarily brought out the best talent we have in the way of athletes, and there is little room to
doubt that Americans will make a most creditable showing. More enthusiasm has been displayed at the present time than ever before, and it is needless to add that athletics in general will win popularity the world over. It is understood that a tremendous stadium is to be built in Los Angeles for the next series of the Olympic Games which will be held in 1924. Now is the time for all of you amateur weight lifters to get busy, because you can easily reach the top notch in four years with diligent practice.
To conclude: All the strong men of this or any other age have been DEVELOPED through their efforts to excel, and these efforts (even under the most lax of training methods) constitute preparation for the ultimate result. While some men naturally possess more inherent strength than others, the really strong man is the trained one, because the trained man is strong all over. No other exists. The tracing of the source of strength in all other types of men will bring the matter down to the work they are doing. Work, development, training, or whatever else you may choose to call it, is what has made them strong. No man can simply grow up to be a phenomenon in strength, agility and science without action of some sort. Work is always necessary in order to accomplish results. It is true that after a man has reached the top notch of accomplishment or development, it is not necessary for him to exercise so much in order to retain that condition; but the writer believes that no athlete will ever admit that he has yet reached the pinnacle of success. It is likewise true that some men need less work than others in order to attain the same results; but, in order to reach any degree of success it is always necessary to first solve the problem by-WORK!


Above-
Allen J. Johnson; of Bridgeton, N, J. Showing remarkable back development

Below-
A strong and sturdy figure. Knud Olsen Headquarters Troop, First Cavalry, Douglas, Arizona.


A weakling at 30 , a strong man at 32 ! C. F, Dilks, of Bridgeton, N. J., pulling $71 / 2$ tons with teeth. In this feat Mr. Dilks dis. penses with the usual mouthpiece, and uses a flat strap held between the teeth. Does it look easy? Just try it!

At right-Louis J. Nouross, of San Antonia, Texas. A good example of deltoid and bicep development, The forearm development would have shown to better advantage had the back of the wrist been turned toward the camera,

At left-
Frank E. Bayer, of New York City. At right-

Addison Range, of New York City, A pleasing pose showing strength and symmetrical development.



Below-G. M. Strain, of Kansas City, Mo, A coming strong man-watch for him.


# The $\mathbb{D}$ evelopment of the Upper Armm <br> \author{ BY O. R. COULTER 

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(Continued from last month)

Last month I showed the folly of developing the upper arms at the expense of the rest of the body and explained that they could not be developed to the limit of their size and power by light exercise.
Now let us consider some methods that will develop an arm, not only in size, but also in contour and strength, and after all, this is only the kind really worth while. Men who do vigorous all around arm work usually have well developed upper arms, I have seen far more well developed arms on laborers, who never gave development a thought, than I ever did among followers of light training who trained for the purpose of increasing the size of their arms.

Some exerciscs on horizontal and parallel bars are very effective arm developers. The exercises of chinning and rope climbing are perhaps the best exercises for developing the biceps with the exception of lifting weights in the curling position. William Bankier, the well known Scotch strong man, in his book "The Ideal Athlete" writes about a young man who trained with light weights and specialized on his biceps three times each day, using ten minutes each time. Bankier asked him how far he thought he could climb the rope. He replied that he thought he could go to the top easily although he had never tried it before. He struggled up hand over head for about ten feet and could go no further. His explanation of this fiasco was that he thought his biceps were too big, but as Bankier's were larger and his legs and body much heavier, he had to acknowledge there was something else the matter. Bankier had got much better results from climbing a rope which required a few minutes each day, to the other's thirty minutes devoted to light exercise.

The roman rings are even better for arm development than the bars. In fact, the work on rings is all arm and upper
body work. No doubt the reader has noticed the very impressive arm and upper body development of the ring performers who appear in vaudeville and circus. The largest arm in proportion to bodily weight that I have ever seen was that of Joe Prada, who was an expert ring performer. He had nearly a 16 inch upper arm and weighed 124. He carried arm development to the limit. As we trained together for some little time, I am quite familiar with the way he attained this exceptional arm. He did all slow work on rings and tied extra weights to his feet for some exercises and he also did considerable lifting, but used only slow movements with the weights. He practiced the bent press, one arm military press, two arm press, two arm curls and holding weights out at the side. He did much of this style of work while seated in a chair. He could curl more in proportion to his weight than anyone I know of. He made no attempt to develop his legs, so was never able to get the full measure of his arm power.
Victor Marcantoni is considered one of the greatest of the roman ring artists, and although much larger and heavier than the average ring performer, does feats that few if any of his lighter rivals have ever been able to accomplish. When I saw him and his two partners in their act, I found that they also did hand to hand work, and as one of the leading French athletic papers credits him with a two arm press of 220 , he has undoubtedly devoted some time to weight lifting training also. His arms are among the finest that I have seen.
Hand balancing is exceedingly good arm work and is one of the most effective means of developing the triceps. Even the movement known as floor dipping is very good for this muscle, and most of those who practice this exercise regularly have fairly good triceps development. The exercise of dipping with
the hands on the backs of two chairs is a more vigorous arm exercise than dipping on the floor and gives better results, but is not so good as all around hand balancing. James Findlay, the top mounter of "The Gladiators," has a marvelous triceps and Otto "Arco's" arms are the equal of any man his weight. However, both of these men are lifters also. Findlay weighs 154 and bent presses his partner, Alfred Siegel, who weighs 188. "Arco" thinks there is nothing equal to hand balancing and weight, lifting for strength and muscle development and his own physique and lifts are so well known that they require no further mention.

Men who practice with progressive chest expanders usually attain a good arm development. Belvidere Del Monte, the strong man from Argentine, has a wonderful arm; and not more than a half dozen men in the world could stretch his expanders, but he had only a $211 / 2$-inch thigh and was of mediocre ability at handling heavy weights. Seguinel, a famous European expander specialist, has a simply magnificent triceps and his entire upper body development is exceptional, but he does not have the proper strength for handling heavy objects. Joseph Vanderzanden, known as "the strong Belgian," was perhaps the strongest chest expander puller in his day, and even Prof, Desbonnet considered Vanderzanden's arm development exceptional. However, Vanderzanden also trained daily with weights and was one of the most noted lifters at that time. Fred Rollon is considered by many European authorities to be the most marvelously developed man in the world. He trained for years with the expander and became the recognized champion at expander stretching, but this did not give him much ability at lifting weights and not until he had devoted some little time at lifting did he develop the strength necessary to become a successful lifter.

Wrestling is a very vigorous form of exercise and a great all around developer, and a man who practices it with the soie idea of becoming proficient in the sport will attain more strength and develop-
ment than the light weight advocate with all his intense concentration on the individual muscles. Wrestling is certainly a good arm developer for it exercises the arm in so many varied positions, and nearly all the first class wrestlers have good arms, but the biggest and also the best developed arms among wrestlers are nearly always found among those who practice the Graeco-Romari style of wrestling and nearly all of these men are also weight lifters. Zbys\%ko has the largest arm among this class. It is said to measure over 22 inches but it should be understood that only a man of natural ability to attain bulk could ever develop an arm of this size, and Zbyszko trained at both lifting and wrestling and was a good lifter in his earlier days. Hackenschmidt's triceps are perhaps unequalled among wrestlers and the most conservative measurement of his upper arm that I ever saw stated it to be 17.6 inches. "Hack" performed world's records before he did much of any wrestling and he always considered lifting the best method to attain strength and development.

Of all effective methods of arm development, progressive work with bar bells is the most practical to apply and gives the best results. No matter how weak a man's arms may be, he can always adjust a bar bell in proportion to his strength. while ring work and hand balancing require a certain amount of strength and skill to start. A man of average strength could chin on the rings and exercise the biceps but he would have to be able to perform what is known as the full mount before he could train his triceps as they are not brought into play until the arms change from a pulling to a pushing position. It takes quite a little time for the average man to learn to throw up to a hand stand and retain a balance, and merely balancing on the hands does not develop the arms to any appreciable extent. It is a tremendously big step from a throw up balance to a push up hand stand, and but little development can be attained until the slow push up is mastered. On the other hand, men who work with the weights soon acquire sufficient
strength to do the slow push up on the hands and to raise the body above the sings.

That weight lifters as a class have the largest and best developed arms is quite well known by all who have made a close study of the physical characteristics of those who follow the various methods of training. Among what other class of athletes could you find so many men with such enormous arms as those of Peter Coutaliano, Cyr, Miller, Holtgrewe, Stohe, Maier and many others? Where else except among lifters is there another group that could equal in either size or contour those of Jim Pedley, Fristensky, George Stange)mier, "Rasso." Temeli, Elliot, Vansittart, Nordquest, and John Marx? No other method of training has ever produced an arm equal in both strength and beauty to Sandow's, but there are many lifters with arms nearly equal of his in beatty and many more that have arms larger and stronger. Among athletes of light poundage, the
superiority of the lifters' arms is just as noticeable. The upper arms of Mogyorossy, Sick, Saldo and Vickers are little if any better than those of many other lifters of their weight, but could you find another group outside of the lifters with as well developed arms as these men have? Nearly all the men I have mentioned as examples of the merits of progressive weight training for arm development have never used any special exercise and many of these have never practiced any movements except what are known as the standard lifts. Now, if so many men obtained such specialization to that effect, is it not all the more reasonable that others by the practice of this same all around lifting and, in addition, doing a little specialization such as the curls for the biceps and raising a bar-bell straight behind the back for the inner head of the triceps will be all the more likely to develop an arm to the limit of its strength and size.


JAMES FINDLAY

# The Importamee of Lower Development <br> By J. C. EGAN 

Photographs Posed by Tony Massimo

The development of the lower part of the body is of prime importance to every one who is interested in having a symmetrical figure. It is that factor which distinguishes an athlete from a gymnast. Speak of an athlete, and you picture a sturdy, well-built chap who is proficient in such sports as football, jumping, running, etc., all of which call for considerable leg strength. The gymnast, however, gives the immediate impression of top-hcaviness-his arms and shoulders are developed out of proportion to the rest of his body. Not that they are too big, but because his legs, hips and waist have been neglected. A man with well-developed calves, thighs, hips and waist, and only a fair upper development presents a much better appearance than the man who has developed his arms and shoulders to a greater extent, but who has neglected his lower development.
You can verify this statement by paying particular attention to all the muscular poses you see. You have probably admired the pictures of those showing marked lower development without knowing just what made the pieture attractive. You will find that where the entire figure is shown, that the shape and size of the muscles of the lower part of the body go further to making the pose attractive than does the development of the arms and shoulders.

And the development of the lower part of the body is of just as much importance to the man who exercises for better health only as it is to the one who is working for great strength and a perfectly symmetrical figure. Take gymnastic apparatus, such as the rings and bars, for instance. By exercising on these intelligently, a man can devclop a deep chest and large shapely muscles on arms and shoulders, but he will be doing absolutely nothing to develop the lower part of the body. And if he doesn't put in a little time on vigorous leg work, the lower part of his chest and back, and the hips and
legs, will look weak and they will be weak. For when you exercise the muscles of the arm and shoulders, you are doing just that and nothing more. You cannot develop the waist muscles by exercising the arms, but you get a wonderful amount of development in the waist and lower back by practicing the right leg exercises. And too much stress cannot be placed on the importance of the muscles of the waist and sides. Some instructors will tell you to pay particular attention to the muscles of the arms and chest, another to the back, and still others to the legs alone. The last-named come

nearer to being right than the others. For, as I said before, when you develop the muscles of the legs you are also helping the muscles of the waist region. The abdominal muscles are comparatively easy to develop, but the muscles of the sides call for special exercises.

These side muscles are known as the extornal oblique, and are situated on the side of the waist just above the hip bones. Their function is to rotate the upper part of the body, and to control bending movements of the body from side to side. These miscles, however, cannot be developed by leg exercises alone. They can be developed by carrying weights on one shoulder, by carrying heavy weights in one hand, by bending over to the side and rising to an erect position with a heavy dumbbell in one hand, by movements that cause twisting of the trunk, and by hopping on one leg. And one of the best exercises possible for waist and side development is the bent press, in which most of the work is done by the side and shoulder muscles,

You will always find that the lifter who has specialized in the bent press has enormously strong side muscles. It is hardly necessary to explain to the readers of Strength that a man is just as healthy as he is strong and that if you want to be really healthy you must be strong in all parts of the body. Hence the importance of the muscles of the waist and sides.

Weight-lifters as a class have very good lower developments, but beginners are very apt either to overlook its importance or are at a loss to know the best methods. And the point on which they ustally get stuck is on the development of the calf, hips and thigh. It can readily be seen that you cannot develop any part of the body by exercising it independently. For instance, curling a bar-bell with palms up will develop the inside of the forearm, and with palms down, the outside of the forearm, but it will also develop the biceps. Wrist exercises alone will not develop the forearm, it must be exercised in conjunction with the muscles with which it co-ordinates. The same is true of the muscles of the

legs. The calves of the legs cannot be exercised independently. They work in concert with the thigh muscles, and must be exercised accordingly.

Some physical culturists are apt to become sarcastic when you ask them why they don't try to develop their legs, and will tell you that they don't want to become kangaroos, the strength of whose legs are second only to that of the famous Missouri mule. They may be right, but the matter of personal appearance should also be taken into consideration. Can you imagine how Massimo would look with tooth-pick legs? In a recent issue of Strength, I have told you that while Massimo was in the army during the war he gave an unique exhibition at Camp Gordon, going through the manual of arms using a $150-\mathrm{lb}$. man instead of
the regulation rifle. Could he have done it without leg development? You can bet your last dollar he couldn't!

Although the legs usually present the hardest problem for the beginner, they are not hard to develop when you know how. Roughly speaking, there are three sets of muscles on the calf of the leg. The first lies over the shin, and will not be considered in this article. The other two muscles are on the back of the calf of the leg. One of them can be developed by rising on the toes, but in order to develop the other muscles you

have to perform exercises which involve the use of the muscles of the calf of the leg, the muscles of the under side of the thigh, and occasionally the muscles of the buttocks. These three muscles constitute part of the chain which might be called the muscles of progression, that is, the muscles which carry the body forward in walking, or hurl it forward in running or jumping.

A man can practice squatting and rising on his toes, and thereby develop good muscles on the front of his thighs, and equally good muscles in part of the calf of his leg, but his whole leg will never present the athletic appearance of a leg that has been developed by running or jumping or by practicing exercises which involve the use of the whole leg, especially the muscles of the under side of the thigh. These muscles referred to are part of the chain which holds the body upright. If you bend over and pick up a heavy weight, you will notice that the muscles on the under side of the thigh and the back of the calf of the leg are in a state of high contraction, that is, they are working vigorously.

These muscles are not developed by picking up an enormous weight once or twice, but by picking up a moderate weight a number of times. Whenever you can find a man who can lean over in this way and pick up a heavy weight, you will also find that man has splendid un-der-leg development, and is capable of not only lifting heavy weights from the ground, but also of running at a very fast pace, and jumping for a great height and distance.

The muscles on the front of the thigh are important, of course, but not any more important, if as important, as the muscles we are discussing. The pose of Massimo on page 29 is a notable example of this. Also the picture of Adolph Nordquist, making the hands alone lift, page 51, February, 1920, issue of Strength.

There are many ways of developing the muscles in question. Short distance running, jumping of any kind, or, best of all, hopping on one foot, but the easiest and simplest way is to use a bar-bell of

moderate weight and lift it of the floor a great many times in succession while standing with the legs rigidly stiff. The men who can lift tremendous weights off the ground are also noted for the size of the calves of the legs. Whenever you get a splendidly developed calf you will find it accompanied with an equally good development on the under side of the thighs. The man who practices only the exercise of rising on the toes will, in the course of time, develop a calf that is wide from side to side, but has little depth from front to back. Therefore, in order to get a well-rounded calf of the leg, you must practice exercises that develop simultaneously the under side of the thigh and the back of the calf of the leg, and exercises for the muscles of the shin.

Many laborers, porters, longshoremen and men whose work consists of lifting and carrying very heavy objects, have
splendid under-leg development, and this development is the result of leaning over and picking up heavy weights, or else of pushing or carrying heavy objects.

These poses of Massimo present an interesting study in the development of the lower part of the body, and they also throw some light on the muscle-bound bugaboo. There are lots of well-meaning (?) persons who are always willing and anxious to warn you that weightlifting will make you muscle-bound, although they are unable to produce a particle of proof in defense of this mythical condition, which exists only in their own minds.

Massimo has practiced weight-lifting for years, and has developed proportionate but enormous muscles. If there were anything in this muscle-bound theory, Massimo would surely be "it." Let's look at the pictures on the pre-

ceding pages, showing every muscle tensed and contracted. They show unusual muscle control, which is not at all in keeping with the muscle-bound theory. If any further proof is needed, just look at the sitting pose, the direct opposite. All the muscles are relaxed, and the pose
gives the impression of smoothness and grace, which is again incompatible with the muscle-bound bugaboo. And still the theory persists. And I suppose it always will, for knockers can never be convinced of anything. If they could, they would cease to be knockers.
[Continued from page 14]

## SIT OUT

An escape from a half nelson that brings you to a sit.

## SITTING SHOULDER CHANCERY

Getting a chancery over your shoulder while in the sit.

## SMOTHER

A hold that covers your opponent's mouth and nostrils with hand. Hands, forearm or legs interfering with, checking or preventing his breathing.

## SPIN CUT

To get out of a hold by spinning.

## STANDING ROLL

Same as flying arm roll.

## SWISS STYLE

Competitors wear a strongly belted pair of short wrestling pants that are rolled up tight over the hips. They grip each other alike on the belt or waist band and the rolled up leg pieces of the short wrestling pants. To obtain a fall it is necessary to have at least one hand firmly grasping either belt or pants. Two points down constitute a fall. They are expert in what is termed the "Swiss Swing," in which they swing each other around until one is swung off his feet when he is quickly reversed and dashed to the ground to a fall. Quite a pretty style to look at from the spectators' standpoint.

## TAKING HOLD

The taking of preliminary holds or closing in of both opponents at the commencement of a bout.

## THREE-QUARTER NELSON

A near side half nelson locked with your
other hand of the arm that is under his chest.

## TOE HOLD

A punishing hold on opponent's toe and foot. A favorite hold of the late Frank A. Gotch.

## TO GET OUT OF POSITION

Prying, pushing, pulling and shoving your opponent about to put him oft his balance or get him out of position.

## UNDER WORK

Grips, locks and doubles used by the under man to improve his position or lead to a fall. Defensive-offensive chips.

## UP END

Up ending your man in holds like half nelson and crotch, in which you lift his hips up and keep them up over his shoulders to prevent him from saving himself from a fall by bridging.

## WAIST AND NECK HOLD

An under half body hold and hold on back of neck. Hold his head down with your hand and arm, that is, on the back of his neck, while you lift his hips up and over with your under half body hold on his waist.

## WEIGHTS

Bantam-weight, 105 lbs , and under. Feather-weight, 115 lbs . and under. Light-weight, 135 lbs . and under. Welter-weight, 145 lbs . and under. Middle-weight, 158 lbs . and under. Light heavy-weight, 175 lbs . and under. Heavy-weight, over 175 lbs .

## WRIST HOLD

A hold on opponent's wrist.


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Adherence to the princip'es laid down in it will add to the characteristics that insure splendid achicvements. They will increase the power of your body and mind and soul. They will help each human entity to become

[^0]a live personality. They will enable you to live fully, joyously. They will help you to feel and enjoy every moment of each day.

Hidden forces, sometimes marvellous and mysterious, lie within nearly every human soul. Develop, expand and bring out these latent powers. Make your body splendid, your mind supreme, for then you become your real self, you possess all your attainable powers. And men thus developed possess a capital that can not be financially measured. It is worth infinitely more than money. Within the pages of this volume the pathway leading to these gratifying rewards is clearly described. Adhere to the principles set forth and a munificent harvest of physical, mental and spiritual attainments will surely be yours.
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# Energy andl.Its Development <br> By L. E. EUBANKS 

Energy, the ability to do and to endure, to try and keep on trying, is one of the most valuable of human assets. Health itself, we might say, is but a manifestation of energy, and good, bad or indifferent according as our energy supply is great or small. The time-worn comparison of the body to a machine will always express many physiological laws, -we run on "fuel," have our "capacity," "safety limit," etc., we have a "gage," in our feelings (though we often ignore its indications) ; and even "blow up," like a boiler-break down when the demands exceed the capacity, when our expenditures get too far ahead of our income (of bodily energy.)

In all lines of work energy wins, for it is the measure of fitness. The thoughtful person who keeps himself in trim, studies his constitution and so lives as always to have buoyant energy for his work will, other things equal, outstrip a competitor in business, sport or anything else, who constantly overdraws on his physical accounts.

If for no other reason, every worker should be a physical culturist to the extent of studying the laws of energy and the methods of its development. No other capital can be of such practical value to him. I care not what your actual ability is, if you have no "spirit" to put through your projects, where are you? Of what avail is it to start the day with a flare of colors and a blare of trumpets, and finish three-fourths dead?
The man whose vitality carries him through with strength to spare will outwit you in a transaction or game; perhaps he may even purposely wait till your head is on your hand along in the late afternoon and you are counting the minutes till "quitting time." There are such men-"I'll say" there are-and the best insurance against their cunning is superior strength, nerve, poise.

Energy is invaluable in any line of en-deavor-indispensable to success as conditions exist today; but I purpose in
this article to discuss the quality as affecting athletes in particular. One of the first things noted by the beginning physical culurist is the seemingly inexplicable differences between men of his acquaintance or between himself and other athletes. Certainly, we expect to find various degrees of ability, but I refer to those differences that seem to reverse the natural order of things.

Among the athletes training for Field Day sports in my home town a number of years back was a 200 -pound star footballer whom we called "Tubs." The coach selected him as good material for the shot-put, and spent a lot of time teaching him the form. "Tubs" was a powerful fellow, and his sheer strength made it possible for him to do quite well with the "ball;" he could stand still and put it farther than most of the fellows could with all the run allowed them. But "Tubs" quickly reached his limit; the shot would go no farther than his unaided muscle would push it. I noticed from the first that he was too lethargic, too lazy in a way, for the shot-put.

We had another dandy athlete in "Billy," the shortstop. The coach had put him on the running broad jump, and Billy was making good. But he could'nt keep his eyes off "Tubs" and that shot.
"I can throw that thing clear down town," he told me one day.

I promised to use my influence to get him a trial. The coach admitted that he did not think much of Billy as a prospective shot-putter. "He strips only about 145 ," he reminded me, "and there won't be a man in that event lighter than 170."

But later on he did give Billy a trial, and he never regretted it. It was the little short-stop that represented us in the shot-put that year, and though he did not win the event, he scored higher than "Tubs" ever would have done.
It was a matter of nervous energy. The big fellow possessed stronger muscles,
(Continued on page 36 )

## Who Wants These Boxing Lessons?



If someone said to you, "Come on, I'll put on the gloves with you," could you accept the challenge and hold your own? Or if you were caught in a free-for-all fight, would weight and strength alone protect you?

A powerful blow, accurately timed and properly delivered, can defeat the biggest man, With a Jlu-Jitsu or wrestling hold a small man can make a giant powerless. Size and strength don't count; it's science. That's why every man. no matter how big and strong he is, should know boxing and self-defense.
Here is your opportunity to learn this valuable art at half the cost of the usual term of lessons-and learn it right in your own home.
Mardinh Sthlman is the first man to When you face your first opponent, you'th sucecssfully teach hoxing by mail, and know what blows to uso, whica to use hts pupita now number 10.000 . Many them, and tow to kuard against tho hlows havo written saying that, after the first fow lessons, they've putboxed blazer and heavier opponents. The proof of tho pudding for sou is that the now and onlarged course (G books) is sent on freo 10 -day approval. If you keep it yeu vay \$5: othorwise you return tho course, and that settles the matter. But you'll keep it all right, when you see how good it is.
The tessons are practised before your mirror. You start with simpie movements such as holding out your hand for a coin. the breast stroke in swimming. ete., and before you know ft, you aro ktriking heary blows, guarding, ducking: feliting, slde-stapping, just as it you had a real opponent before you. Every move is intustrated with largo pletures, and the type is large enough so that sou can practise while you reid
After sou've thoroughly mastered the fundammatals you take ep shadow boxing, Hero you are taught to so dirough lively rounds comblining such scientife hows as dee Bennto Teonard Tripto Blow, the Fitestmmons Shith. tho Jack Dempsey Triple Blow. ete.
Then follows the book on "Boxing Blows and Guatits," Kvery worth-while blow used in the ring is fulty doseribed and posed for by two experts. Following each lilow is the guard for that blow.

## Read These Letters

"A few days aso I was attacked by a bully wolghing 232 pounds is weigh 168. but zave him the thrashing of his the I luow that I wouldn't have had the norve to face a bully like him without the koowledge of boxing which Course, and think that course stillman Course, and think that course would be
cicap at four times tho price you ask Walter Fore, Landale, Texas,
"'I have sequiret sreater conffilence grut mif-reltance and I have had my salary ralsed $\$ 10$ within four wecks. I fool that all of thls I owe to the course, as erergnte 100 s won ne with more ithopot than previously.
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Book contains: 32 illustrations. Thaches bow to hit strafght blows, swinging blows and corkscrew blows, guard. auck, feint, ellinch and lyow to uso Nootwork, Mass Boxing, illustratod, for use in teaching boxing to large
masses of men.
masses of mon.
Book 11 contains: 35 illustrations, posed for by two oxperts, Contains evory worth-white blow used in the ring. The description of each blow is followed by the guard for that blow. Also gives tho fine polnts on feinting, ducking, elinching, broaking sround, judging distance and timing.
Book 111 contains: 35 illustrations. Shadow boxing, combintng such blows as
the Bennie Teponard Tripie, The FItsthe Bennie Leomard Trlple, The Eltzsimmons khift, The Miske Twist, The Jack Dempsey Triple, Tha Mike Donovan Double Blow, etc Complete instructions on how to train, with questoons and answers, The Intornational Sporting Clubs's rules of boxing.

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Pascholosy, and a list of the hoaryPascholoky, and a list of the frosyy-
welght champfons from 1790 until now.

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## (Continued from page 34)

but he was deficient in snap, did not have the "pep" that made Billy successful in most everything he tried.

Nervous energy is that ability to gather and concentrate all one's powers simultancously and throw them into the effort - jump, lift, blow, or whatever it may be. It is among the athlete's most valuable assets, just as important as muscular strength or speed; in fact, energy is strength and speed nicely combined, and governed by quick wit, strong will and a sense of co-ordination in movements.

Just another illustration: Two fellows may be equally fast on the 100 -yard dash -that is, after they are under headway; perhaps they run the second fifty in exactly the same time. But the better starter wins regularly, getting his lead right on the first lunge. Nervous energy does it: maybe he knows the form no better than his opponent, but he can gather himself better-and this mentally as much as physically-and as it were, jerks himself into the race quicker. Learn to do this, whatever game you choose.

I have hinted that this desirable quality is partially mental. To explain, you could not possibly put a high degree of energy in a sport you dislike. You must be interested. Cultivate a love for your specialty, and study out the very best methods in its performance. Then when you have the correct form, smooth it down just as much as you can. Then speed up; put just every ounce of pep you can into it.

In a physical sense, nervous energy depends more on sound health than on special muscular strength; people who are remarkable for it are usually distinguished for the harmony of their development and their unusual vitality. Health is the foundation, the thing you want first of all. Any action, habit, etc., that affects your general health will immediately react on your store of energy.

Perhaps the very greatest builder of nervous energy, "pep," is sleep. Many a contest has been lost for no other reason than the athlete's failure to sleep well and long the night preceding the match.

There is nothing else that will so quickly take all the ambition and snap out of a fellow as loss of sleep; your muscles seem logy, your eye is slow, you feel like you'd been "doped," and can't seem to "get into the game." Then, presto! one or two nights of good sleep makes a new man of you!

Over-eating tends to lessen your energy. Of course, day after day of undereating will weaken you all-round; you must study yourself and ascertain what amounts, and what foods, bring you best results; eating is always an individual problem.

Of course exercise itself develops energy, that is, when the kind and amount are correct. Light, fast work like bagpunching, tennis and sprinting when not over done, will increase your "pep." As I have said, one of the main things for those lacking in this quality is to train with it in mind, striving at each practice period to inject more and still more ginger.

Exercising for energy is a phase of physical culture that puzzles a good many people. If they countenance the idea at all, they are very liable to select the wrong exercises. I have spoken of bagpunching and kindred sports as beneficial; but these must not be taken as endurance tests. Their chief value as energizers lies in their being speed-developers; in most of the athletic uses for energy we have this quality blended with speed.

Endurance exercises will not develop energy, the kind we are discussing; generally its tendency is in the opposite direction. For some reason the devotee of light exercises nearly always favors endurance stunts, and I believe that many of these fellows actually lessen their energy. I have seen long distance runners whose faces, particularly the eyes, indicated exhausted vitality. They could run many miles, the muscles seeming to act automatically; but betrayed their real condition on other tests wherein there was no special habituation to support them.

Concentrated exercise, rather vigor-
(Continued on paze 40)


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## Are You Satisfied

## With Your Appearance?

Are you as strong and healthy as you wish to be? Do you feel the fire and vim of youth surging through your veins?
Do you have a well-developed, powerful physique, a pleasing appearance and a strong personality?
Ask yourself frankly, "Am I a Real Man?"
Look in the mirror this very night and see what it telis you. Would you be proud to have your picture produced in this bookiet? How does it compare with the illustration and measurements shown herewith? Your outward physical appearance reflects your internal condition. If you do not show a daily improvement outwardly, you must not be deceived. Your body is being consumed and you are clogging up like the stagnant pool. Stop then where you are. Get a grip on yourself this very minute. Let this be the start of new life and physical perfection, for it is yours if you will accept it.

You can easily obtain these proportions and perhaps better them if you really set your mind to it. Many of my pupils are stronger and have larger measurements than I have. Why not give me a chance to help you make the most of yourself? I have developed thousands of boys and men, taken many of them when they were physical wrecks-more dead than alive-and trained them into powerful athletes. Wouldn't you like me to do the same for you? No matter what your condition is at present, I CAN DO IT-now it is up to you to let me.

## You are judged by your appearance

Look strong and feel strong and have a strong personality. Be a man of power! Broaden your shoulders, deepen your chest, make your arms thick and muscular, straighten your neck, develop your legs and obtain the energy and "pep" that only an athlete knows.

Why put things off? Every day you put off is a day wasted which could be spent in beautifying your body.

## The 7th edition of my latest book "MUSCULAR DEVELOPMENT"

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## Continued from page 36

ous and of comparatively short duration, is preferable in the cultivation of energy. It answers all the building-up requirements of a muscular exercise without the strain on nerves and organs which long-drawn-out tests involve. The person who is chronically tired has no energy, as I understand the term, and most of those persons who exercise for hours each day are in exactly that condition; they do not get rested from one workout till the grind is due again. That is not physical training, it is just plain out-and-out work, hard work utterly destitute of fascination and recreation.

Practically everyone wastes energy. To the beginner in physical culture it seems illogical to advise exercising for energy, then talk of saying it. Exercise builds energy because it builds health and strength, just as food or any other salutary agency does. Like money wisely invested, energy when healthfully spent, comes back with interest. But, again like money, "it is what we waste that keeps us poor."

Look for the leak; if you have the least suspicion that your relish for work and your "pep" in its performance are not all they should be, analyze your daily life-and nightly life; and do some experimenting if necessary to find out which of your time-and-energy investments is "taking more out of you than it restores."

Be particular to sleep enough; that is the main thing, as I said above. Next, keep your sex life normal; bad habits or excesses in this soon bring disaster to the would-be athlete. Avoid gluttony; it requires a surprising amount of energy to digest a big meal, and if the amount eaten is in excess of that required we are giving up "steam" needlessly.

Do not worry about your progress in your training-or about anything else. Worry wastes nervous energy in a very direct and simple way; just as a muscle under prolonged contraction will weaken and begin to tremble, so the nerves when tensed for long periods, in apprehension and fretting, finally refuse to "let down," or do so with difficulty. They
are chronically taut and hyper-sensitive -the person is "nervous."

School yourself not to "key up" before a contest. You may find it hard at first, but keep trying till you can "await the gong" in perfect calmness and relaxation.

And this mention of relaxation brings up another thought, Do not hold the muscles rigid for several seconds before an effort, with the belief that this adds to their strengh. This is a popular but entirely erroneous idea; it is a serious waste of nervous energy, and detracts materially from the muscles' power. I conducted a series of experiments in this, using a striking machine, and found that the hardest blow could be struck with an arm that contracted only in the act of striking.
Some physical instructors believe that nervous energy, as an athletic quality, is born in a man; they do not think it can be acquired to any appreciable extent. I have seen absolute proof in a number of instances that it is cultivable. The naturally slow, lethargic person will never be as "fast" as the temperamentally energetic (with the same training); but this fact need not keep the former from gaining all there is to be obtained from training.

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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 he 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 |
| Riliousness | 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.


[^0]:    23 VITAL CHAPTERS

    1. Vitality-What Is It?
    2. The Secret of Power
    3. The Proper Bodily Posture
    4. Stimulating the Source of Vitality
    5. Strengthening the Spine
    6. Stimulating the Alimentary Canal
    7. Fxerciso for Vitality Building
    8. How to Breathe
    9. Outdoor Life
    ro. Strengthening the Stomach
    10. Preserving the Tecth
    11. How to Eat
    12. What to Eat
    13. Foods Cirre Constipation
    14. Movements for Inner Strength
    15. Blood Purification

    17 . Hints on Bathing
    18. Facts About Clothing
    19. Suggestions About Sleep
    20. Mind-the Master Force
    21. The Laugh Cure
    22. Singing-the Great Tonic 23. The Daily Regimen

