THE PHYSICAL FITNESS MAGAZINE

35c

STRENGTH & HEALTH

JANUARY 1960

PDC

Sensible Physical Training

TRY A "60-MINUTE WORKOUT"

Barbells on Campus—

Texas U.

MR. AMERICA ABDOMINAL ROUTINE

The EARL CLARK FAMILY

BARBELLS ON THE CAMPUS **TU**

Weight Training on Longhorn Campus dates back to 1913

By ROY. J. McLEAN and KARL K. KLEIN

The University of Texas

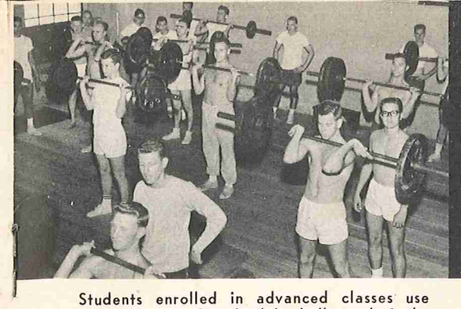
STARTING from a single acorn weightlifting has grown into a sturdy oak at the University of Texas. When Major L. Theo Bellmont became Director of Physical Training and Athletics in 1913, he brought with him from his former job as Physical Director of the Houston Y.M.C.A. a pair of 25-pound dumbells, which he used with more or less regularity along with handball playing, to preserve his splendid physical condition. During the fall of that same year H. L. Lutcher Stark visited the campus nearly every weekend to view the football games and to lift dumbells with Major Bellmont. Stark was a multi-millionaire from Orange, Texas, an alumnus who thereafter for many years was a member of the Board of Regents of the University of Texas and a great benefactor of the school. While a student Stark was the big, fat rich boy who rode around in one of the scarce automobiles of that day. Upon graduating he decided to do something about his physique, and on one of his frequent business trips to the East he visited Alan Calvert in Philadelphia. Calvert at that time was owner of the Milo Barbell Company and the founder of weightlifting in the United States. To promote sales of his products Calvert published a small monthly called *Strength,* which contained many fine articles by Calvert on weightlifting, profusely illustrated with photographs of such well-known past greats of the strength world as Joe Nordquest, Anton Matysek, Henry Steinborn, Tony Massimo, Owen Carr, Harry Paschall, and many others. Stark purchased a couple of sets of Milo barbells and under Calvert's instruction within a year had transformed his body from 230 pounds of obesity to 185 pounds of solid muscle. Thereafter, wherever he went Stark spread the gospel of the advantages to be derived from weight training.

In 1914 a skinny sixteen-year-old by the name of Roy McLean registered at the University of Texas and to pay part of his expenses worked as a part-time secretary for Athletic Director Bellmont. He was awed and inspired by the magnificent physiques of Bellmont and Stark, and encouraged by them he worked unceasingly with the limited equipment provided. By the time he was graduated he had succeeded in putting on some twenty-five pounds of solid muscle and had become one of the better wrestlers and handball players of the University. There followed a two-year period in the Air Corps in World War I for McLean and Bellmont, at the conclusion of which Major Bellmont resumed his position as Director of Physical Training and Athletics, with McLean as his assistant. From 1919 to the present day the name of McLean has been practically synonymous with weightlifting at the University of Texas.

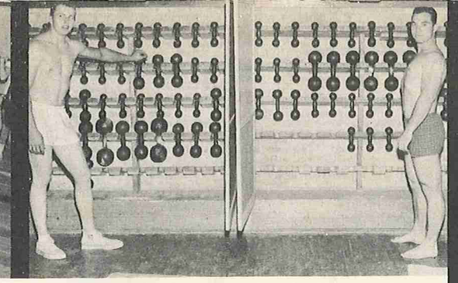
Enrollment at all universities and colleges skyrocketed after the war, and facilities were sorely taxed. Before World War I all activities were carried on in a large, poorly ventilated room in the basement of the Main Building. To meet the demand for increased space for physical training, the Department was moved into three vacated wooden barracks buildings, and it was in these quarters that McLean inaugurated the first class in weightlifting at the University of Texas in the fall of 1920. Two Milo barbells and a couple of pairs of dumbells comprised the total equipment and the enrollees met in the corner of a small room assigned to wrestling. Eleven Freshmen, none of whom had ever seen a barbell before, signed up for the course wondering what was in store for them. Coaches of the various sports forbade their athletes to even touch the weights. Despite all the opposition, McLean, by measurements

(Continued on page 53)

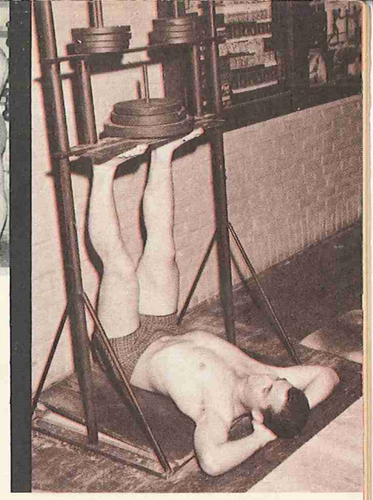
The outstanding 1959 University of Texas weightlifting team: left to right, back row: the co-author, Coach McLean, Suggs, who captained the team, Magness, Terry, Petmecky, and Davis. Front row: J. Conner, Wright, Hall, Rochelle, and R. Conner.



Students enrolled in advanced classes use York Olympic Standard barbells exclusively.

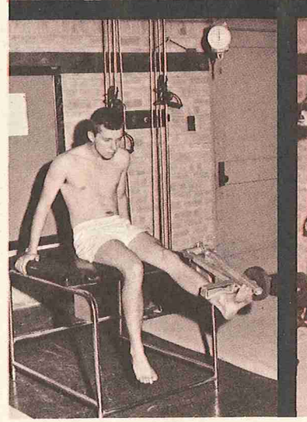


Barbell team members Barber and Pitts stand in front of dumbell cabinet in weight area of University athletic facilities.

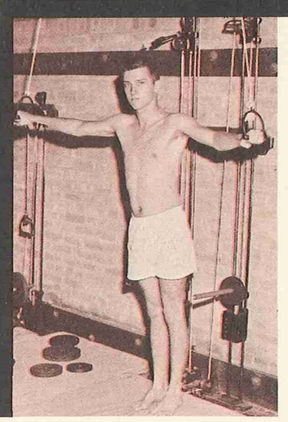


Sturdy leg press machine receives plenty of use. Note photos in wall cabinet.

Athletes from various teams make good use of leg curl apparatus.



Remedial therapy for weakened or injured knee joints calls for special equipment.



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Made up of purest forms of natural protein: white of egg protein, more than 90% pure protein; curd of milk, commercially known as Casseine powder, rates at 88% protein, and specially prepared soya powder containing as high as 15% lecithin, nerve, muscle and tissue builder. The human brain contains 17% lecithin. Therefore BNA Hi-Pro contains almost pure protein. It ranks as the finest high protein product science can produce. It will supply your body with the elements it needs for rapid growth, will help you build big, hard muscles fast, help you enjoy perfect health. A month's supply—$5.00 postpaid.

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BNA Rice Germ Oil tablets are made from a concentrate of the non-fatty acids, as found in the oil of the Rice grain or Germ. Nutritional deficiencies have resulted due to the lack of using the entire germ in our preparation of Cereal grains, and almost completely neglecting to eat organic and glandular meats; liver, kidney, sweetbreads, pancreas and other internal organs.

Rice Germ Oil has a rare ability to improve the hormone balance of men or women. So when there is a failure to respond to a training program. as rapidly as expected or desired, the cause is often the result of a lack of hormone balance. When a person is tired or weak physically and sexually, it is often caused by this same hormone unbalance.

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Basically a soya product, which contains two drops of Soy Germ Oil per tablet. Contains all 22 Amino acids, lecithin, calcium, phosphorus and iron, and all of the essential vitamins. Believed to be one of the most concentrated body building tablets made.

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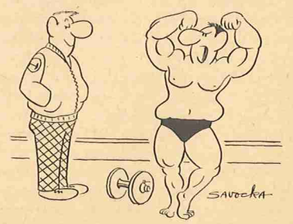
self in fine physical condition and today he can still show a mighty well-proportioned and a goodly defined muscular physique. He is now about eight pounds lighter than his former best body weight. He trains regularly with weights and states that he will never forsake them. He firmly believes in being in tip-top condition as it makes him feel better. He has never gone in for strength work, yet he is quite strong. I once saw him clean and jerk 285 pounds, which must be considered plenty good for one who was never an Olympic lifter.

His measurements at present: height 5'9", 163 pounds body weight, neck 16½", arms 16½", chest 42"-45", waist 32", thighs 23" and calves 15½". His muscles possess quality and perfect reflex action and these are essentialities for one who needs poise, control, agility and the physical alertness so often required for motion picture work. Producers and directors are partial towards athletic actors these days and the present crop of stars certainly verifies this choice.

A whole book full of words could be written about the exciting life and adventures of this well-built and successful professional who started from scratch with nothing but a youthful inspiration and a dream ahead. And although Kenneth Terrell has made a success throughout his career, he has not always tread across the arch of the rainbow. Like most of us, he knows the crazy ups and downs and turns and detours and wrecks of that unpredictable, tear-muddied highway called existence. But he has always been a conqueror! He has triumphed over all adversities, pulled himself up by his own bootstraps, so to speak, and has climbed to glories that are reached only by hard work and carefully planned ameliorations. And today he is the proud father of three teen-age boys and a two-year-old daughter.

He is an objective thinker with an analytical mind that opens further dimensions of understanding and which also prompts him to keep his fingers on the pulse of life. Anyone knowing him must quickly realize that he is a combination of the physical and mental and with the latter predominating. He is also a keen observer with good perception and is one of the most reliable personages I have ever known. This in itself has much to do with our long friendship. • *end*



"Fat, my eye! You just don't know a terrific pair of external obliques!"

60-Minute Workout

(Continued from page 31)

does a few exercises if only to keep from missing a training period. Usually he begins his training by doing a few sets of leg raises to warm up. He then goes on to do a series of bench presses, some high pull-ups, regular rowing exercises, side bends, a variety of presses, a curl with barbell and then (not always) a curl with dumbells. At times he may use the leg pressing apparatus and also includes some calf work, or do some leg curls and leg extensions on the leg curling device, and finally finishes with squats. This routine, as you can see, is quite extensive and is as complete as anyone can do. But you must make up your mind to train and not sit around loafing. You have to "get into the act" if you want to get results, and results come only from effort.

In recent months I have checked my own training time to see how many exercises I could do within a 60-minute period. Of course I think it's only fair to add that if you make up your mind to do a certain number of exercises you will do them . . . a sort of mind over matter business. In fact, just before our new gym was completed I continued to train in the old one where I trained alone. I was surprised that I was able to complete my entire workout and in less time than I've been able to do since I've switched my training to our new quarters. Naturally, in the old place there was no one around to disturb or distract me and I could go about my training without delay. Moreover, I realize that I went there to train and didn't allow anything to interfere with this plan and would do 15 to 20 different exercises, some of which I repeated in sets. But I was always amazed to discover the number of exercises I could do that normally required almost twice the time. Of course I don't mean to infer that everyone should do that many exercises, I'm merely hinting that it is possible to do that many and more, in view of the opinion held by some who feel that 60-minutes is not enough time to take a thorough workout. It is, but I reiterate, you have to keep training and not loafing!

In planning any sort of weight training program it is advisable to select the type of exercises that you feel essential in your own case to shape or better your symmetry. For example, if your midsection is too heavy you should select the exercises that will work this region and thus trim it down. Or if you feel your chest, back, legs or arms are not large enough to by symmetrical, then include additional exercises for whichever area you feel needs it. On the other hand, if you require an over-all training routine to develop your body symmetrically, then by all means employ a program like the one illustrated and suggested within these pages, and which you can use to advantage . . . all within 60 minutes! • *end*

Barbells on Campus

(Continued from page 35)

and tests at the beginning and end of the semester, was able to prove, at least to himself and the members of the class, that their efforts had been productive and well worthwhile. The word spread around that there really was an activity that would produce results in a relatively short time and each subsequent semester witnessed an increase in enrollment for weightlifting classes, and the necessity for providing additional equipment.

In 1929 Gregory Memorial Gymnasium was built and a large, well-ventilated room, with mats and additional barbells and dumbells was provided for the exclusive use of weightliftig classes, which had grown to ten by that time. Interest and the demand for instruction in weightlifting has grown steadily in the thirty years since. The past year weightlifting was the choice of twenty-three per cent of the 2800 students taking the elective physical training courses required of all first and second-year students. In number and percentage this is far greater than the enrollment in such usually favored activities as basketball, swimming and tennis. To adequately take care of weightlifting, fourteen beginners' and eight advanced classes were set up under the direction of six instructors headed by Associate Professor McLean. For instruction of beginners' classes forty bars are available with sufficient 20-, 10-, and 5-pound plates to load to any weight desired. Forty sets of 5-pound dumbells are also available. For the advanced classes twelve York Olympic sets are provided; also a large assortment of dumbells ranging from 5 to 50 pounds, benches, inclined boards, lifting stands, leg-press machine, lat machine lifting platform, and so forth.

All students enrolling for weightlifting are weighed, measured and strength-tested after undergoing a physical examination by the University Health Service. Since beginners have had no previous familiarity with the use of weights and the majority are poorly developed and unconditioned, the first two weeks are devoted to progressively strenuous setting-up exercises, at first without, and then with five-pound dumbells, along with con-

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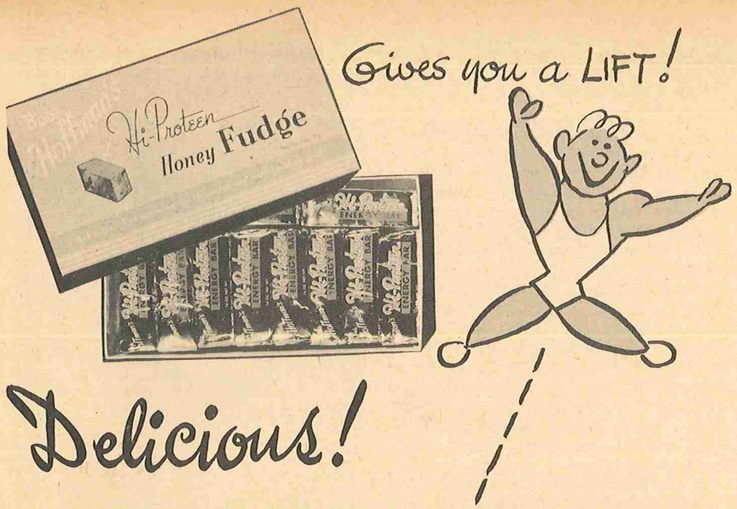
The Physical Fitness Special has proven to be so popular with Strength & Health readers that we are offering additional bargain specials. The Gain Weight-ENERGOL Bargain Special includes two one-pound canisters of Gain Weight Hi-Proteen and a pint of ENERGOL, also the DAILY DOZEN, a $12.00 value for $10.00.

STANDARD HI-PROTEEN-ENERGOL Bargain Special includes two one-pound canisters of the Standard Hi-Proteen, Hoffman's famous DAILY DOZEN, and a full pint of Energol, an $8.70 value for $7.50.

Try the Hoffman Invigorator way to better health, more strength and muscle, more energy. Mix a tablespoonful of Hi-Proteen and one of ENERGOL, with Orange Juice, milk, either skim or whole, or both milk and juice. The resulting drink is so nutritionally complete that it will supply your body with the minerals, vitamins and proteins it needs, as suggested by the Food and Nutrition Board of the National Research Council. Order these Bargain Specials from Bob Hoffman, York, Pa.



HOFFMAN'S HI-PROTEEN FUDGE is so delicious you wonder whether it could be *good* for you . . . but shortly after eating one of these health bars you can feel a surge of *instant energy* that assures you they are just as good as they taste! Athletes eat them during competition for an added *lift*. They are equally good for anyone to use during the day for a quick "bite" at lunch-time or instead of the insidious coffee breaks.

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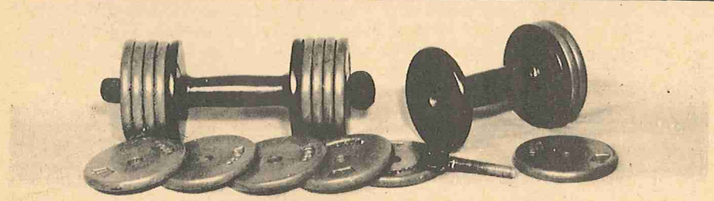
York ARISTOCRAT Dumbell Set



The York Aristocrat Dumbell Set is the finest made. It is attractively designed. This adjustable dumbell set consists of well made special dumbell handles to which the 1¼ pound plates are attached. There are two combinations available; 30 pound set and 40 pound set.

Either of these sets are a wonderful aid in body building and physical conditioning. Many women use the York Aristocrat dumbells in performing exercises to improve the bust. They are employed by a number of the greatest champions of strength and physique, such as Steve Stanko, in performing leverage body building exercises. These excellent dumbells should be in every home and gym.

$10.95 —F. O. B.—for the 30 Lb. set.
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siderable outdoor running. Thereafter the students are introduced to progressive barbell training, and the routines followed are largely those of the York First and Second Courses. The group system of instruction is followed, and all members of the class are required to perform the exercise simultaneously and the same number of times, although the weight used in the exercise is prescribed for each individual. At the end of the semester the students are again weighed, measured, and tested, and grades are given based on improvement, interest, and attendance.

In order to enroll in an advanced class the student must have had at least one semester of beginners' weightlifting at the University of Texas, or its equivalent elsewhere. These students work entirely with York Olympic barbells, two students of approximately the same weight and strength being assigned to a bell. A work schedule is laid out for each day's work, and all students must stay with the schedule. At least half the class time is devoted to the Olympic lifts, and the other half to power exercises that aid such lifting. A class meet is held every three weeks on the Olympic lifts, and records kept of each individual. Those contestants showing the most proficiency are urged to try out for the University of Texas weightlifting team, which practices three nights a week.

It will be noted that we emphasize the development of strength, speed, co-ordination and skill by the use of weights, and that group work predominates. We think these attributes to be the prime consideration in training the body to meet the need to adjust quickly to different situations and to face the unexpected challenges in life. We definitely discourage the vain, narcissistic type, who if allowed, would stand before a mirror and go through repeated sets by himself to see how much he can inflate his muscles, without any particular regard to the development of strength, speed and skill.

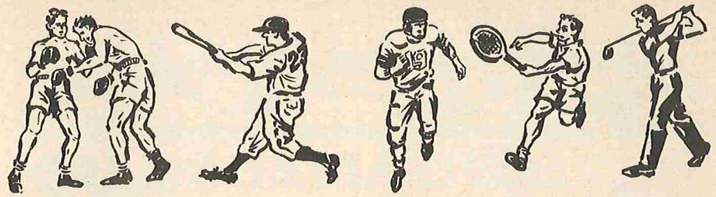
With the retirement of Major Bellmont in 1952, Associate Professor Thomas Edward Barlow was appointed Director of the Department of Required Physical Education. Professor Barlow is an enthusiastic believer in the benefits to be derived from weight training and is presently working on plans for a greatly enlarged and remodeled Gregory Gymnasium that will provide two large rooms specifically designed for weightlifting classes. Upon completion of the new building it will be possible to take care of at least sixteen beginners' classes, and the same number of advanced classes if necessary to meet the demand.

Although weight training has been an integral part of the required program in physical training for forty years, it has been only recently that an effort was made to promote weightlifting as a team sport and to seek outside competition. This has not been due to any lack of enthusiasm on the part of the staff, but because weightlifting is not yet a recognized sport in the Southwest Athletic Conference, of which the University of Texas is a member, and consequently no funds are available from the Department of Intercollegiate Athletics. At the present time all competitive weightlifting, both intramural and extramural, is under the control of the Department of Intramural Athletics, which is entirely separate and distinct from the Department of Required Physical Training, and limits outside competition to three meets a year and provides only actual automobile travel expense. It is hoped, however, that within the next few years other institutions in the Southwest Athletic Conference will become interested in weightlifting as a sport. When this occurs supervision would pass to the Department of Intercollegiate Athletics, and adequate funds would no doubt be provided.

Despite the handicaps cited above, the University of Texas Weightlifting Team participated in five A.A.U. and Open Meets in Texas and Oklahoma during 1959-60 and carried off the team trophy on each occasion. Five men qualified for the 1959 National Intercollegiate Weightlifting Meet at Pittsburgh but were unable to attend because of lack of funds to travel by air and time away from classes forbade any other method of travel. From a comparison of the results of the National Intercollegiate Meet with the totals made by members of the team in the five meets in which they participated, it would appear that the five qualifiers would likely have won second places in three classes and at least fourth in two more classes, which would have been sufficient to win the team trophy. The outstanding lifters on the team were Tommy Suggs, 198-pound class, who totaled 815; Al Wright, 181-pound class, who totaled 760; Billy Rochelle, 165-pound class, who totaled 760; Terry Todd, heavyweight, who totaled 790; and three 123-pounders, all of whom each totaled 450. One of the boys in the bantamweight class was a post-polio case who, despite his handicap in the snatch and clean and jerk, made a total of 450.

In the past three years coaches of the various sports at the University of Texas have shown considerable interest in the use of weights as a means of furthering increased strength and skill of members of their teams. Track coaches Clyde Littlefield and Froggie Lovvorn, baseball coach Bib Falk, and swimming coach Hank Chapman, in particular, are providing and encouraging weight training for their charges.

Another highly important and successful use of weights at the University of Texas is in connection with the Physical Education Rehabilitation Laboratory, a division of the Department of Required Physical Education Department under the direct supervision



BETTER ATHLETES

through Weight Training

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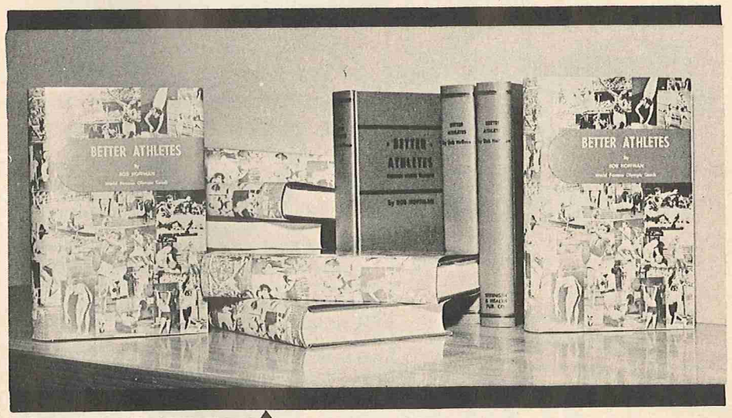

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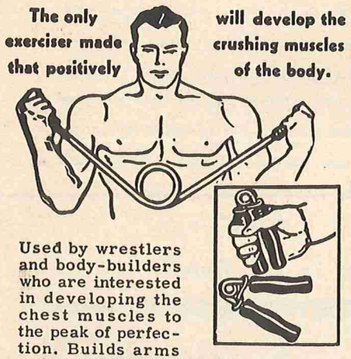

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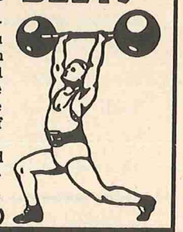

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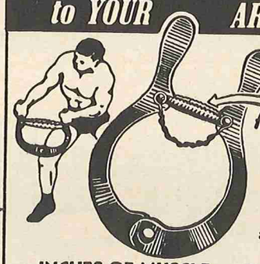

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of Assistant Professor Karl K. Klein.

This particular phase of the required program is responsible for all students who have other than "A" health rating, and plans the specific activities for such students according to medical recommendations. Included in this classification are those students not required to participate in the Required Physical Education program, but who are recommended for special exercise by the University Health Service or the family physician. Also, this division gives consideration to special problems of athletic conditioning when requested by the coaches of the various sports, and to athletic reconditioning problems that are recommended by the team physician of the Department of Intercollegiate Athletics.

Within the scope of work done in the Rehabilitation Laboratory considerable emphasis is given to the modality of the various aspects of progressive weight training. Such techniques are applied according to medical prescription and on the individual basis, adjusted according to the specific problem. In the approach to the individual problem testing procedures are utilized for determining the individual status of strength relationships, flexibility, muscular balance and imbalance, and general physical status as based on available standards applicable to the individual problem being dealt with. Utilization of progressive weight training in this phase of the program involves not only the use of barbells and dumbells, but also various types of apparatus, such as pulley weights, ankle exercisers, leg extension and flexion apparatus, "lat" machine, resistance bicycles, shoulder wheel exerciser, manual treadmill, traction equipment, and various types of benches for specific resistive purposes. The functional operation of some of this equipment is illustrated in the accompanying pictures.

The various types of problems worked with may be classified as follows: (1) pre- and post-operative cases; (2) chronic orthopedic; (3) asthmatic; (4) cardiac; (5) postural; (6) nutritional; (7) general conditioning; (8) post-polio; (9) neurological; (10) general medical; (11) co-ordination; and (12) special athletic conditioning.

The individual program, following medical review and test evaluation, is developed through the modality of specific exercise techniques geared to the condition and physical status of the individual. For example, in a case of general conditioning an all-around modified program of progressive resistive exercise may be the plan of approach. In a postural problem the effort may be developed to rebuild muscular balance and to teach habit patterns for good posture. In the neurological problem exercise emphasis is given to the specific body area in need of special physical work in an effort to stimulate better muscle function as based on muscle and nerve involvement. In the asthmatic case exercise emphasis is placed on vital capacity development through breathing exercises along with progressive exercise designed to enhance general condition and chest area development. In orthopedic problems exercise is designed to develop muscular strength and balance for stabilizing the body part involved and to enable better function.

Upon completion of the individual's exercise program retest procedures and medical evaluation take place. Based upon the results of this process the individual is either returned to the required physical education program or continues to work in the laboratory until the end of the semester.

In the area of special athletic conditioning much work has been done in the area of baseball with emphasis on progressive exercise techniques designed to be of assistance to the pitchers, in particular, for increasing ball-throwing speed, and exercises for increasing the potential for long ball hitting. Such exercises are developed from weight-training techniques. Emphasis is also placed on certain areas of track and field where weight training is used to build strength, power and endurance in the individual.

In the area of knee and shoulder injuries special exercise programs have been developed for their ameliorative effects. At the present time exhaustive research in these areas of injuries is being carried on in the Rehabilitation Laboratory with extensive use of progressive resistive techniques being utilized in the reconditioning process.

Return of the student to the regular program is the ultimate objective of the work of the Physical Education Rehabilitation Labcratory, and that has been accomplished in a large percentage of cases. For those students remaining in this individual work section efforts are made to design additional physical activities that meet the desires and needs of the student. The utilization of individual and dual activities is stressed, and time and effort is given by the staff to the teaching of such skills as have a carry-over value and which will be of inestimable value to the individual after he has completed the highly specialized instructive period in the Laboratory.

The authors feel that weightlifting has amply justified itself in the various phases of physical education and athletics at the University of Texas, and that it has a great deal to offer the student. To the undeveloped young man it presents an unparalleled means of developing his body, and to those who prefer participation in other sports it cannot but help produce a decent fitness and a foundation of strength and power upon which other activities can be based. The authors have been exceedingly fortunate in their efforts to promote weightlifting at the University of Texas in that the college administration, and the Department head, Professor Barlow, have given their unstinted cooperation and approval to every suggestion and effort. Under such conditions the future of weightlifting at the University of Texas would appear to be exceptionally bright. • *end*

Important Abdominals

(Continued from page 37)

"Rome wasn't built in a day;" neither are abdominals. No one should expect to go right into a specialized program doing all the prescribed exercises, sets and repetitions. Rather, you should pick out two exercises and gradually add repetitions, sets, and excerises until over a period of three weeks you have mastered the whole course.

I have tried to enumerate some of the pitfalls that you will encounter during your abdominal training so that you won't become discouraged. The results you obtain from the course I will outline will more than compensate for the time and effort you put in to it.

The course I am going to outline consists of five exercises which work the whole abdominal region thoroughly. It should be used on alternate days from your regular training program. However, you should endeavor to do at least 500 sit-ups and 90 leg raises during your regular training days. This can be done by doing five sets of 100 repetitions in the abdominal raise and three sets of 30 repetitions for the leg raise. You can do these sets between some of your regular exercises until you have completed the desired number of sets and repetitions.

On the alternate days you should do the full course of five exercises which should be done in the following manner:

Exercise No. 1, Abdominal raise

With knees bent as shown in start position, lean back until the flat of your back barely touches the abdominal board as shown in finish photo. Do one set of 100 repetitions. After a slight rest, go to the next exercise.

Exercise No. 2, Leg raise while lying on bench

With York Health Shoes strapped to your feet, lock your knees so that your legs will be straight as shown in start photo and raise legs to finish position. Repeat for 30 repetitions. After another short rest, go back to Exercise No. 1 for another hundred repetitions.

Exercise No. 3, Leg extension while lying on bench

This exercise again requires the use of iron shoes and should be done as illustrated in start and finish photos. The movement is done by

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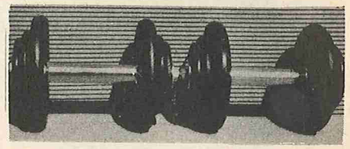
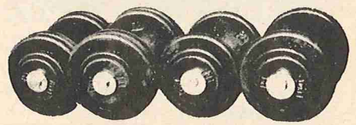


Illustrated are the type of York dumbells which were designed for and are used in many professional gymnasiums throughout the world. Beautifully made, they are adaptable for home gyms too.

Note the pleasing flat plate design, which permits the construction of a more compact dumbell. These sets are not adjustable, but are made to order. Note that the handles are chrome plated and that the plates, with their rounded edges and more compact design, will not bump wrists, forearms, shoulders and other parts of the body as do most dumbells. The retaining rings and bolts are also chrome plated; the plates are made with baked-on enamel. A full set of York professional gym dumbells makes a beautiful, useful display. Like other York, or "Muscletown," products, you will agree that these sets are the best—from the standpoint of usefulness, balance, comfort in handling and general appearance.

We will supply these dumbells in 5-pound increases from 10 pounds each to 120 or more. It is our business to fully equip professional or private gyms, club and service training quarters. We can supply racks for these dumbells or barbells. Write to us for prices of this equipment, as well as "lat machines" and other gym apparatus, and we will quote special prices to you.



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