The JOURNAL

JUNE 1957

OF THE

NATIONAL ATHLETIC TRAINERS ASSOCIATION

8th ANNUAL MEETINGS, LINCOLN, NEBRASKA

Let's Go Lincoln!

Lilac City Hosts Eighth Annual NATA Convention, Meetings and Horseplay

Lincoln is located some 55 miles west of the Iowa border and about the same distance north of Kansas. It is 1,167 feet above sea level and has an invigorating climate in the varying seasonal pattern of the temperate zone. Transportation facilities abound, with five railroads serving the city; numerous truck and bus companies plying the fine highways of which Lincoln is the hub; and a veritable beehive of aviation activity at the three airports. Lincoln Air Force Base (a 2-wing, medium bomber SAC unit) is used by scheduled commercial airlines. Private planes use Union Municipal and Arrow airports.

Lincoln started as the tiny village of "Lancaster," founded in 1856 to exploit nearby salt deposits. It flourished after the state capital, the University of Nebraska, and varied business enterprises were located here. It passed the 40,000 mark in 1900, and became metropolitan in the true sense when the separate surrounding communities of Havelock, University Place, College View and Bethany were integrated into the modern City of Lincoln. Emphasis always has been placed on **good** family living — on civic beauty and cleanliness. Among the countless trees and flowers which beautify its comfortable homes, the lilac is so popular and prolific that Lincoln has been christened "The Lilac City."

PROGRAM

Eighth Annual

N.A.T.A. NATIONAL CLINIC and CONVENTION

Lincoln, Nebraska

June 16, 17, 18, 1957

HOTEL CORNHUSKER

* * *

SUNDAY EVENING, JUNE 16, 1957

6:00 p.m. Cocktail hour

Smorgasbord, visiting, and program for members and families.
Cornhusker Hotel Ballroom
Mesdames Paul Schneider & William Orwig, Hostesses

MONDAY, JUNE 17

8:00 a.m. Registration

9:00 Welcome — Gov. of Nebraska Victor Anderson
Greetings from Duke Wyre, Maryland University, National Chairman N.A.T.A.

9:30 Ankle and Knee Injuries and Repair
Donald H. O'Donaghue, M. D.
Orthopedic Surgeon, Oklahoma City, Oklahoma
Fred Webster, M. D.
Orthopedic Surgeon, Lincoln, Nebraska

10:30 Break

10:45 Open Forum on Knee and Ankle Injuries
Panel
Donald H. O'Donaghue, M. D.
Fred Webster. M. D.
Frank Stone, M. D., Orthopedic Surgeon, Lincoln, Nebraska
Paul Geotowski, M. D., Orthopedic Surgeon, Lincoln, Nebraska

12:00 noon Lunch

2:00 p.m. Dangers of Nerve and Head Injuries in Athletics
Louis J. Gogela, M. D.
Neurological Surgeon
Lincoln, Nebraska

2:30 Break

2:40 Internal Injuries in Athletics
Jon T. Williams, M. D.
Lincoln, Nebraska

3:10 Break
Open Forum Nerve and Internal Injuries
Panel
Louis J. Gogela, M. D.
Jon T. Williams, M. D.
S. I. Fuenning, M. D.

7:00 Board of Directors' Meeting

TUESDAY, JUNE 18

9:00 a.m. Physiology of Muscle
Donald M. Pace, Ph. D.
Department Chairman
Professor Physiology
University of Nebraska

9:30 Break

9:40 Physiological Use of Hot and Cold Ultra Sound and Light in recovery period of injury.
Gordon M. Martin, M. D.
Department of Physical Medicine
Mayo Clinic, Rochester, Minnesota

10:10 Break

10:30 Open Forum: Muscle Injuries
Panel
Gordon M. Martin, M. D.
Donald Pace, Ph. D.
Frank H. Tanner, M. D.
Pathologist, Lincoln, Nebraska

12:00 noon Lunch

1:00 p.m. Trainer, Doctor, and Coach and Player Relations
Jerry Bush, Basketball Coach, University of Nebraska
James Hunt, University of Michigan
Frank Kavanaugh, Cornell University
Conrad Jarvis, Stanford University
Steve Wilkowski, Wesleyan University

2:00 Break

2:10 Annual Meeting
Guided tour of Nebraska State Capitol Building

THE JOURNAL
of the
NATIONAL ATHLETIC TRAINERS ASSOCIATION

The Official organ of the National Athletic Trainers Association published four times yearly. All communications regarding editorial matters, submitted writings, circulation, and advertisements should be addressed to:

ARTHUR L. DICKINSON, EDITOR
ARIZONA STATE
TEMPE, ARIZONA

Material appearing may be reproduced in abstract providing credit is given The Journal. Original writings or works cited in The Journal does not necessarily represent the position of the Association or its Board of Directors.

NATIONAL SECRETARY
WILLIAM NEWELL — Purdue University

PUBLIC RELATIONS CHAIRMAN
WILLIAM F. X. LINSKEY — Cambridge City Schools, Cambridge, Massachusetts

BOOK REVIEWS

THE EXTREMITIES, Quiring, Daniel P. and others, cloth. 117 pp., Lea and Febiger, Philadelphia, Pennsylvania. $2.75.

As a quick reference in myology and muscle function, **The extremities** is highly commendable. Bold, well-drawn illustrations graphically present the musculature with their neural and vascular network as concerned with movement of the extremities. Origin, insertion, oction nerve supply and motor point are listed with page reference as per Gray and Cunningham cited for each presentation. The quality of paper is good, and the large print pleasant to read.

Certainly no text for the college student because of its specificity, it is invaluable to the lecturer, Athletic Trainer or Therapist for the same reason. The illustrations lend themselves well to projector screening or as a guide to drawings for classroom teaching.

A maximum of information in a minimum of elapsed time places this book in the "real find" class in its field.

PERIODICAL LITERATURE OF INTEREST

Bass, David E., and Austin Henschel, "Responses of body Fluid Compartments to Heat and Cold," **Physiological Review,** 36:128-142, Jan. 1957.

Clarke, David H., "The Application of Measurement to Quadriceps Exercise Prescriptions," **Jour. Ass'n. Phys. and Mental Rehab.,** 11:48-50, Mar.-Apr. 1957.

Eggers, G. W. N. "Shoe Pad for Treatment of Calcaneal Spur," **Jour. Bone and Joint Surg.,** 39-A:219-20, Jan. 1957.

Feuton, Richard L. "Surgical Repair of a Torn Tibial Collateral Ligament of the Knee by Means of the Semitendinosus Tendon (Bosworth Procedure)," **Jour. Bone and Joint Surg.,** 39-A:304-08, April, 1957.

Friedland, Fritz, "The Present Status of Ultra-sound in Medicine," **The Jour. of the A.M.A.,** 163:No. 10, Mar. 9, 1957.

Lipkonsky, Samuel and others, "Gastrointestinal Regulation of Water and Its Effect on Food Intake and Rate of Digestion," **Amer. Jour. Physiology,** 188:327-33, Feb. 1957.

Michael, Ernest D., "Stress Adaptation Through Exercise," **Research Quarterly,** 28:50-54, March, 1957.

Michels, Eugene, "Physical Therapy in the Conservative Management of Back Injuries," **Phys. Ther. Review,** 37:139-49, March, 1957.

Muller, Erich A., "The Regulation of Muscular Strength," **Jour. Ass'n Phys. and Mental Rehab.,** 11:41-7, Mar.-Apr., 1957.

Norton, Paul L. and Thornton Brown, "The Demobilizing Efficiency of Back Braces. Their Effect on Posture and Motion of The Lumbro-Sacral Spine," **Jour. Bone and Joint Surg.,** 39-A:111-139, Jan., 1957.

Pacheco, Betty A., "Improvement in Jumping Performance Due to Preliminary Exercise," **Research Quarterly,** 28:55-63, March, 1957.

Rose, Donald L. and others, "Effect of Brief Maximal Exercise on Strength of Quadriceps Femoris," **Arch. Phys. ical Med.,** 38:157-64, March, 1957.

Wagner, Carruth J., "Perilunar Dislocations," **Jour. Bone and Joint Surg.,** 38-A:1198-1207, Dec., 1956.

AN APPROACH TO LOW BACK PROBLEMS WITH RELATIONSHIP TO FOOT IMBALANCE

By JOSEPH DOLLER, D.S.C. — Head Trainer - Chicago Cardinals Football Club; Consultant - Loyola University, Dep't of Athletics; Instructor - Chicago College of Chiropody; Member - National Athletic Trainers' Association; Member - National Association of Chiropodists.

Ever since our early days devoted to the prevention and care of athletic injuries, we have been thwarted on so many occasions to injuries that have been of a questionable history. Of the questionable variety, one that looms foremost is that of the classical low-back pain. So often the athlete will make his appearance in the training room with this complaint which sometimes will include the back of the thigh. More often than not, he will give us vague symptoms as to the type of pain, have limitations of movement, and give us a poor history as to how this injury manifested itself. How often have we asked ourselves, just why and how did this type of injury come about. The athlete relates no direct trauma, no violent or twisting movements, nor any direct clue that could aid us in our direction of treatment. Not that we as Trainers' or those coaches that must carry out their own training work should be looked upon as diagnosticians, but we all feel that coming in contact as we do with so many of these varied types of athletic injuries, gives us a wonderful approach in determining certain types of treatments for these injuries. Over the course of a year's activity, I doubt whether any team can go along without incidence of a low-back problem accompanied by a remote case history. I know that I, for one, have been faced with these problems and have turned to the study of Chiropody to help eleviate some of the problems. Quite naturally, our approach to all athletic injuries is the earliest possible ambulation. At no time thruout this writing shall there be any inference made that the method discussed herein is a sure fire approach to the treatment of all low-back pains. The preliminary workup must first be done in associationship with the team physician. He must rule out any organic disturbances and conclude that the prime disturbance is functional. It is hoped that the true purpose of this writing is to present a procedure with techniques that will be looked upon as another adjunct in the physician-trainer relationship.

Before the discussion of treatment of functional low-back pains is begun, let us first get some idea of the structure as it exists. Rather than employing the use of complex technical terminology, it was felt that the simple comparison of the pelvic structure and legs to the man made structure such as a bridge span would fit our purpose. First, let us evaluate the pelvic girdle. This girdle is actually made up of two large bones called the innominate bones which join each other in the front but are attached to each other in the back by means of the sacrum bone. Anatomically speaking, the innominate bone consists of three parts: 1. The illium, 2. The ischium, and 3. The pubis. One of the main check points that we shall employ is the use of the illium bone. The illium is the winged portion of the innominate bone and the part of it that projects on either side of the abdomen and is called the crest of the illium. In football language this crest is called the hip-pointer. The point of the crest shall be this check-point.

For purposes of easy identification, we shall compare the body structure, from the top of the pelvic girdle down to and including the feet, to a rectagular box. The upper border will be an imaginary line drawn across the abdomen, extending from one illiac crest to the other. The sides of the rectangle will be formed by the legs and the bottom will consist of the feet.

SEE DIAGRAM NO. 1

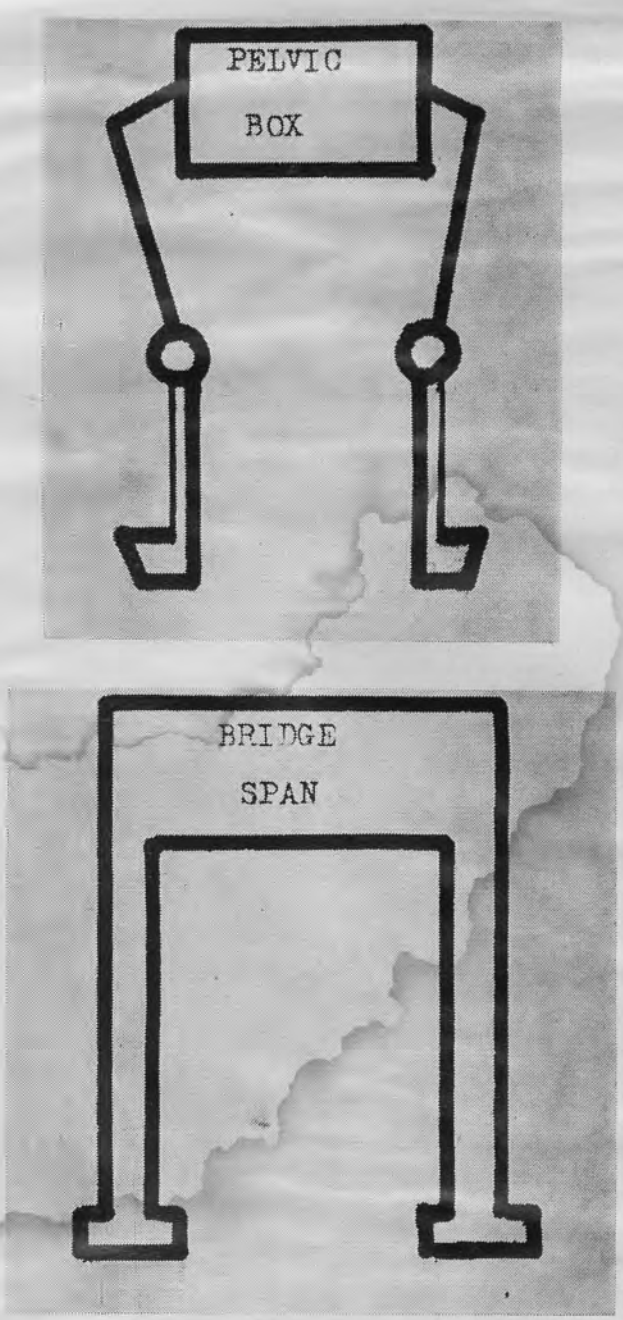


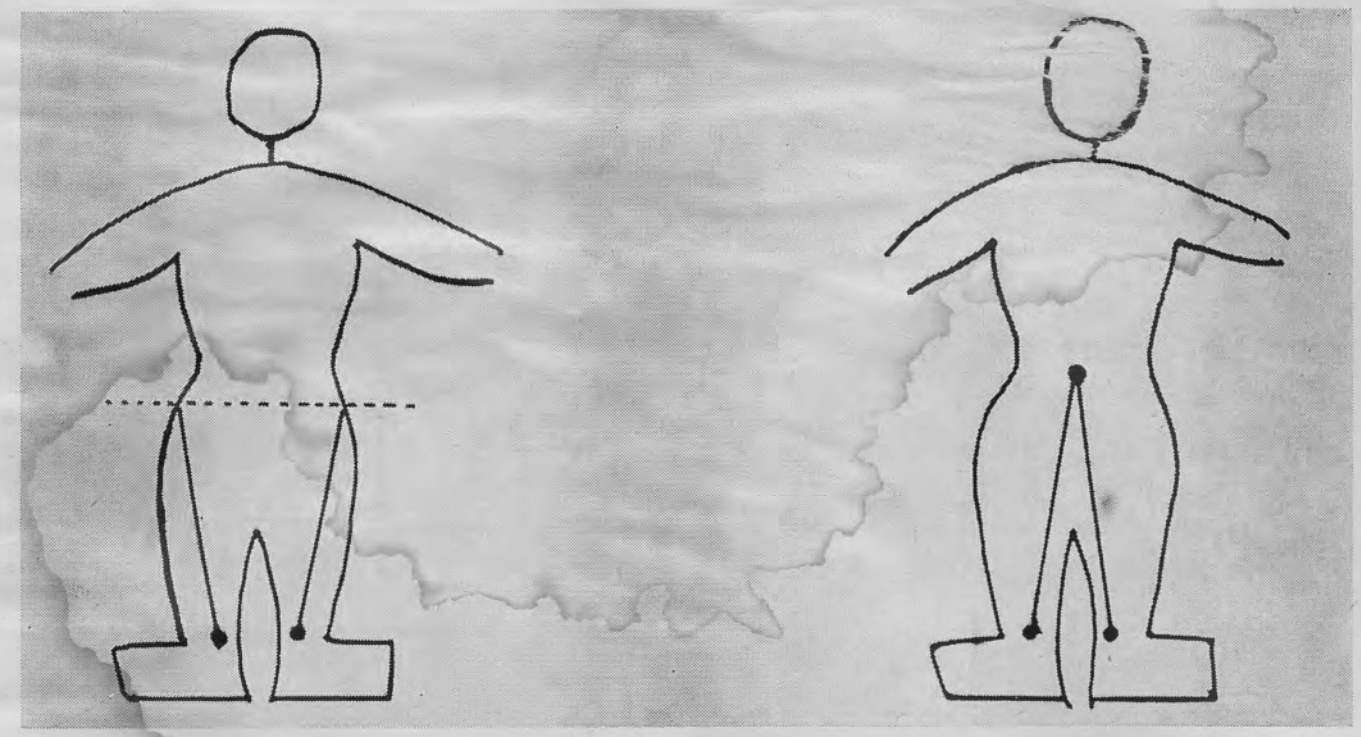
DIAGRAM NO. 1

A gross comparison of the pelvic structure, legs and feet to the structure of a bridge span.

It is this rectangular box that is the barometer in judgment of the competitive days of an athlete. This box is the foundation for the upper structures of the body. It is the boney framework that affords the attachments of the soft structures such as muscle, ligament, fascia, etc. If we can approach and solve problems of the hard structure, the soft structure will usually fall in line. Bear in mind at this point, that although we are stressing the pelvic hard structure, all the structures above and below the pelvic line must be considered as well. With these points made clear, we may now proceed to discuss some of the important points of low-back pains with the principal factors pointing to malalignment, imbalance, and postural incompetencies of the feet. Our approach is going to be from the bottom up.

the smoothness of the bridge span will be effected and the superstructure will soon follow suit. The change in the length of the upright can be attributed directly to a change in the position of the cement piling or foundation. Quite naturally the bridge span will conform its position in accordance to the changes in the pilings with the end result being a bridge that has lost its smooth grace and functional perfection. This of course takes time as it will do in the human body.

Using the bridge underpinning as the comparative example, it can now easily be seen how the human body can be so easily effected by improper alignment of the feet.



This shows the line of measurement from the crest of the illium to the inside ankle bones.

This shows the line of measurement from the navel to the inside of the ankle bones.

DIAGRAM NO. 2

To further understand the workings of the body, we can compare our God-given structure to one that is man-made, i.e.: a bridge or bridge span. The average bridge will consist of the span, the superstructure, the uprights, and pilings. The supporting media is represented by the uprights and pilings; the span is the moving force giving way to the surrounding elements, and the superstructure acts as a counter-balance for the span. To all of this, we can now compare the pelvic girdle to the span; the upper part of our body to the superstructure; and our legs and feet to the uprights and cement pilings.

Going back to the functional bridge, it is understandable that should the length of any of the uprights be altered,

The low-back syndrome can be, in a number of cases, related directly to the feet. Thru early recognition, these symptoms can be relieved or overcome thru proper foot balance technique and corrective exercises.

Using a hypothetical instance let us start our approach with the ultimate proceedure.

Complaint: Low back pains, pains sometimes in thigh. Pain is present on standing, walking, or running. Stiffness thru region of low back (lumbar) area on arising in the morning. Tightness in the muscles of the back.

*Additional symptoms could be many and must be considered by the team physician.

Method of approach:

Have the athlete stand before you as completely relaxed as possible, looking straight ahead, with his head level. Examine the level of both the shoulders and the hips. Assuming that the left shoulder is lower than the right shoulder and that the left hip is higher than the right hip. The legs and feet are now examined and careful observation is important. Note if the knees flex and extend easily and if movements of the feet and ankle are normal. Check the position of the feet to see if they are alike or if one is more pronated than the other. Now place the boy against the wall (in a standing position) and measure from the crest of the illium (hip point) down to the inside bone of each ankle. Record your measurements. To further check your accurancy you might measure from the navel down to the same check points on the ankle. To further emphasize the need for accuracy, place the boy in the supine position on a table and repeat the procedure of measuring. These are easy and accepted methods of finding gross shortages in the limbs. Your team physician can use X-ray methods to further substantiate your findings.

SEE DIAGRAM NO. 2

Assuming now that we have found a variance in the shoulder and hip level along with a shortage of the left leg amounting to one-half (½") inch. Using the formula:

$$\frac{\text{length of shortage}}{2} = \text{needed elevation}$$

or

$$\frac{\frac{1}{2}"}{2} = \frac{1}{4}"$$

Using the one-fourth (¼") inch as our unit of measure, we take a piece of felt of ¼" thickness and fashion a connective pad. The pad is to be shaped in accordance to the inside of the athletes' shoe and is to extend from the back of the heel, forward into the shoe, and ending at the same point that the metatarsal bones do. The high point of the pad is at the heel area with the forward end tapered down to a fine edge.

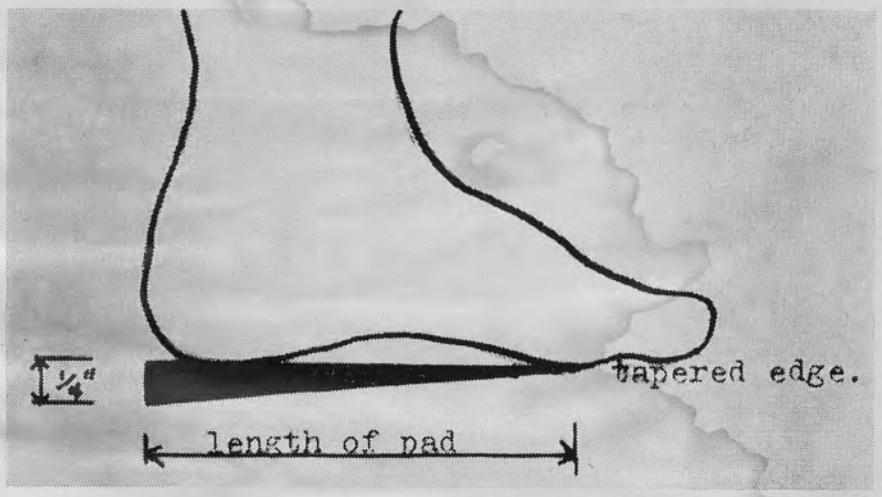
SEE DIAGRAM NO. 3

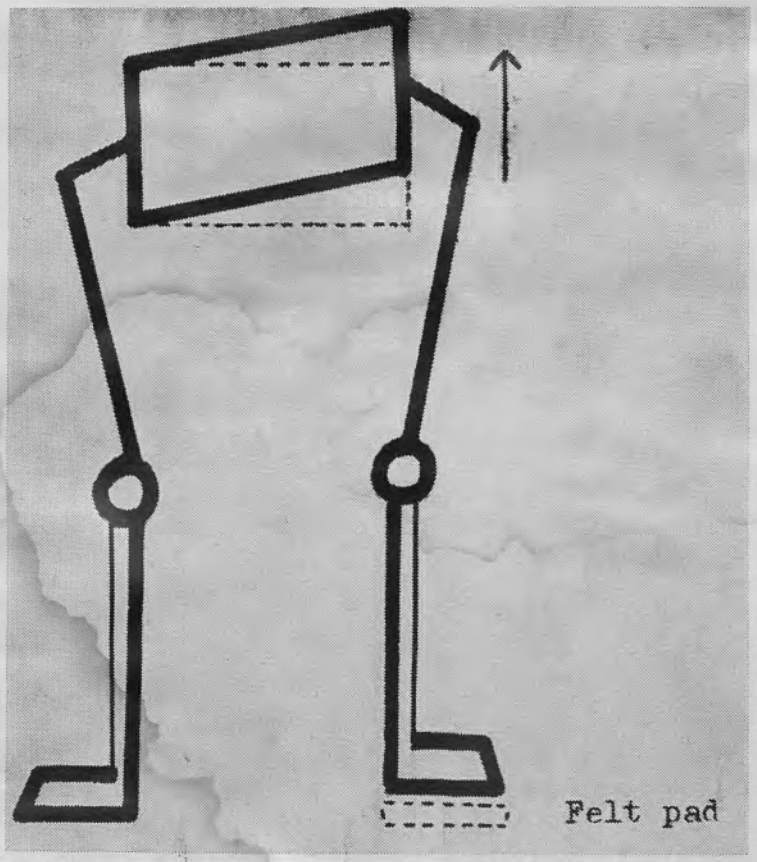
After the pad has been cut to completion it is then cemented into the shoe. In this case it would go into the left shoe to aid in compensating the leg shortage. Should the situation have presented a shortage on the right side, the pad would of course be placed into the right shoe. To sum it up, we are trying to level off the platform that the body rests upon. It is the feet that the body rests upon and not the earth's surface.

In conclusion, we have tried to present a simple approach to the solving of low-back pains of unknown origin where the possibility of organic malfunction has been ruled out. A simple procedure such as presented herein is within the scope of any training room procedure and could well be included in the daily workings of a trainer. In conjunction with the elevation principal the utilization of corrective exercises is self explanatory and should come under the surveilance of the trainer.

DIAGRAM NO. 3

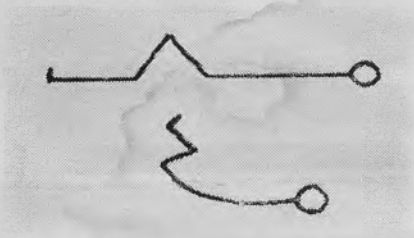
The felt pad should maintain this position in the shoe. It will extend from the back part of the heel, forward and ending at the ends of the metatarsals.





A chematic drawing illustrating the effects of the placing of the felt pad. Note that this is not a means of correction but rather a method of eleviating the painful symptoms.

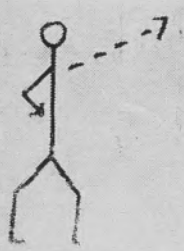
Corrective Exercises



No. 1. Hip flexion, bringing the legs up, high on to the chest.

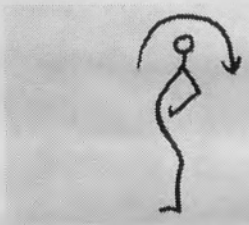
No. 2. Leg elevators, keep knees stiff.

No. 3. Hip bending sideways with the legs in the crossed position.

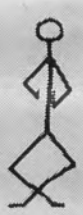


No. 4. Leaning against wall with the arm of the shorter side. Push away from wall, rotating inside to outward direction.

No. 5. Leaning against wall with arm of shorter side. Place opposite hand on hip, forcing pelvis towards the wall.



No. 6. Arch head and back, backwards from a standing position.



No. 7. Arch head and back, backwards from the lunge position.

No. 8. Toe touching while the legs are held in a crossed position. Interchange the legs after each exercise.

TAPE WORM

Introducing

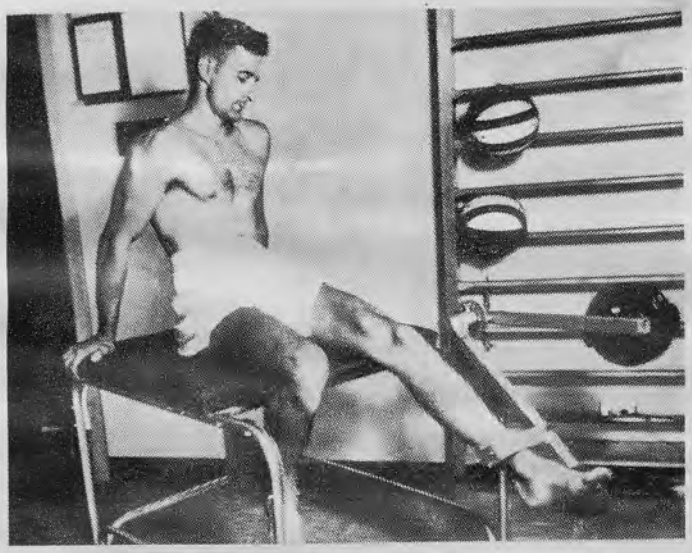
THE N-K EXERCISE UNIT

SCIENTIFICALLY DESIGNED TO MEET THE NEEDS OF MODERN TRAINING TECHNIQUES IN PROGRESSIVE RESISTANCE EXERCISE

SIMPLE

CONVENIENT

ADJUSTABLE



EFFECTIVE

COMFORTABLE

MOTIVATING

It is well known that the knee joint is one of the most commonly injured in athletics. Experience and mediical research have shown that the best way to prenvet knee injuries or to return injured knees to normal function is to strengthen the knee joint muscles, particularly the quadriceps, through the use of heavy progressive resistive exercises. THE N-K UNIT HAS BEEN SPECIFICALLY DESIGNED FOR THE MOST EFFECTIVE ADMINISTRATION OF PROGRESSIVE RESISTANCE EXERCISE TO THE IMPORTANT KNEE JOINT MUSCLE GROUP.

SIMPLE to operate. Patient places leg against leg contact. Weight arm is set for desired resistance and disc weights added. Nothing more is required — no collars, bars, buckles, or clumsy foot attachments. The unit is calibrated so that resistance can be varied without changing the weights.

Completely ADJUSTABLE from the smallest child to adult; accomplished by merely sliding the mobile leg rest to the desired position.

COMFORTABLE. Contact with leg is soft kid leather padded with foam rubber.

Maximum EFFECTIVENESS because the resistance can be given throughout the COMPLETE RANGE of knee joint motion with maximum resistance during the middle phases of joint range and diminishing resistance at either end, thus to coincide with the muscle force pattern. This is not possible with the usual technique of attaching the weighet directly to the foot.

CONVENIENT. It is possible to exercise both quadriceps and hamstrings without changing the patient's position. To change legs, simply place the unit in the opposite bracket.

MOTIVATION. Another unique feature is the built-in Range-of-Motion indicator which gives a measurement each time the exercise is performed, thereby giving an accurate day-to-day check on progress. This is not only convenient but an additional motivational factor for the patient. The ROM Indicator is included on every unit.

Note: Weights are not furnished with the unit but any conventional disc weight or even sand bags .....may be used.

AVAILABLE IN TWO MODELS

Standard N-K 100A (pictured above) — — Includes the specially designed polished aluminum table with padded red leatherette top and new N-K 5A Torque Resistance Unit and brackets, complete and ready to assemble $167.50

Fold-Away Model N-K 200A (space saving, designed to fold against wall when out of use) — Includes the special table for wall mounting with padded red leatherette top and light weight polished aluminum legs, and the new N-K 75A Torque Resistance Uunit and brackets, complete and ready for mounting $179.50

FOF FURTHER INFORMATION WRITE

N-K PRODUCTS COMPANY

P. O. BOX 172 DALY CITY, CALIFORNIA

Athletic Training Clinic

For High School Coaches and Student Trainers

By Thomas E. Healion
Trainer, Northwestern University

Many Professional, College and High School Athletic Trainers are being called upon to take part in various coaching clinics now being held throughout the United States, and overseas. They are also asked on occasion, to put on their own clinics pertaining to Athletic Training alone. For this reason, I feel a guide or outline is needed, which may enable us to do a more complete job.

The following is one that covers many of the basic practices and ideas of our profession. They are, to us, things we do every day, and usually pass off as "tools of our trade." Yet, there is a great need to relay these "tools" to the people who may, at some time, need them to help an athlete back into action, or prevent him from further injury. We know that in many of the high schools the coach must act as the trainer. We also know that there are many young Student Trainers who are handling this all important job, and must have the knowledge to perform it to the best of their abilities. This is where we can help these people do a better job of maintaining the high standards of our profession. Their actions as coaches and student trainers reflect highly on our ability to teach them, and to pass on our basic know-how and ideas.

I. INTRODUCTION — Discussion of the need for knowledge in the prevention and treatment of athletic injuries, and its importance in the school situation.

II. TAPING DISCUSSION AND DEMONSTRATION —

A — Discussion — Cover topics of how to select the type of tape you want, how much to buy, and what sizes are needed.

B — Demonstrations — Stress the ankle, knee and hand. Also, explain technique of shoulder strapping or bandaging, and the use of ankle wraps.

III. PROTECTIVE PADDING FOR INJURED AREAS —

To maintain the highest playing efficiency of injured boys, the injured area should have extra support and padding.

A — Size, shape and material content of the pad is determined by the type and place of injury.

B — The pad must stay in place during the game.

a) If the pad slides or moves, it then becomes an obstacle rather than aid to the athlete.

b) Natural contours of the body must be taken into consideration.

IV. "ON THE FIELD" FIRST-AID — Immediate action to head injuries, wind knocked out, groin injuries, sprains, fractures and contusions.

V. TECHNIQUES IN THE USE OF THERAPEUTIC AGENTS —

A — Explain the types of equipment and how they are used.

B — Demonstrative how "home-made" equipment can be put into use.

VI. USES OF THE MANY "TRAINER'S SUPPLIES" ON THE MARKET —

A — First-Aid and follow-up to cuts and abrasions.
B — Prevention of bacterial growth.
C — Care and prevention of blisters.
D — Care of skin from constant taping.
E — Use of the "Counter Irritant Pack."

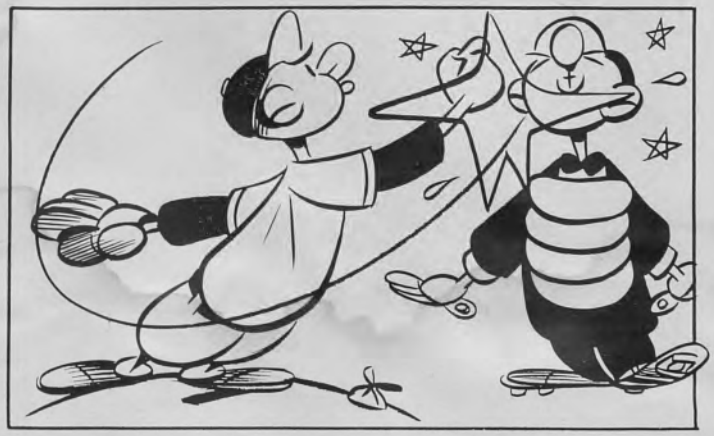
VII. PREVENTIVE AND CORRECTIVE RESISTANCE EXERCISES —

A — Prescribed work to build up the muscles and ligaments surrounding the shoulders, knees, ankles and hip joints.

B — Prescribed work to restore maximum function to the above.

VIII. ETHICAL METHODS IN HANDLING ATHLETIC INJURIES —

Discussion on how to explain the injury to the parents, and make them understand that their boy is receiving the best of care. Relation between the coach and teachers can also be discussed here.



THE TEAM PHYSICIAN IN ATHLETICS

By John E. Lacey

Head Trainer, Univ. of North Carolina

For the past twenty years, a great transformation has been taking place in the area of athletic training. Gone are the days of the so-called "iodine and liniment man," and in his place has come a group of highly skilled and trained men competent of doing a most important job, who are doing it with deftness and integrity.

Haphazardness is a word of the past, for this new breed is eager to learn. It is keeping abreast of the advancements being made daily in the field through study and research. With the close time schedules which athletic teams of today must meet, it is not only necessary but imperative, that the athletic trainer be a prime concern in any athletic plant.

There is no doubt that the trainer has come a long way, but the role which the team physician has played should not go unnoticed, for the success which trainers enjoy today is in direct relation to the important contributions which interested doctors have made in the past.

All athletic teams should have the services of a physician at their disposal, for time and again decisions will have to be made which are beyond the right of the trainer to make. But above that, the team which is fortunate enough to have a physician who is not only interested in athletics, but knows athletes and how to handle them is fortunate indeed.

Possibly one of the biggest things which must be faced by the team doctor is the realization that there is a great difference between injuries and athletic injuries. There is no doubt that boys who participate in a contact sport are less easily injured than those who do not take part in a contact activity. Nor is there doubt that athletes respond to treatment and heal much faster than non-athletes. The reason for this, of course, is still a mystery. Possibly the answer has psychological aspects, the boy's great desire to return to play, etc., playing a great part. At any rate, the evidence is there, and should be taken into consideration by the physicial.

It is of great importance that the doctor get to know his team individually. He should know the character and background of each boy, and this is never easy. No two athletes will be alike, but only by knowing them will the physician be able to determine the extent of injury or make an accurate diagnosis in many cases.

As was just said, no two athletes are alike, either in character or physical makeup. In the latter category we have those on the one hand who at the slightest sign of injury come to the trainer or doctor wanting treatment, when nine out of ten times no treatment is required. These are the chronic complainers and every squad has them. On the other hand, there are boys who never complain of injury, and in many instances are as bad or worse than those who fall in the former group.

All of us can recall cases in which a boy failed to report an injury, simply because he didn't think it serious, only to have something big crop up a couple of days later. It is generally agreed that one of the big jobs to confront the trainer and team physicial is getting to know the boys well enough to distinguish between the complainer and the non-complainer.

Many doctors participated in athletics when they were in school, and this can be a tremendous advantage, especially if he played a contact sport, such as football. Not only does it leave him with a true sense of values for the game, but it gives him a wealth of first-hand information on athletic injuries, and more important, on athletes themselves.

It is essential that the trainer and team physician get along well together, and that each cooperates with the other. Each should feel free to call on the other for help, since a great deal of good has been realized in the past through the exchange of ideas, opinions, and suggestions.

The consideration of a physician's background is quite important when securing his services. Most colleges, although not all, acquire the services of an orthopedist. The reason is evident, since the most serious injuries in contact sports are usually to the skeletal or related structures. Let it be added, however, that many fine team doctors have specialized in other fields.

Generally, high schools have at their disposal the services of a general practicioner, who in most cases is quite able and willing to handle athletic injuries. It should be realized, however, that the injury experience of most general practicioners is limited, and he should not hesitate to call in a specialist whenever the injury warrants such action.

A good background in injuries is a great asset to any team doctor. Athletic injury studies, which have been made over the past two decades, will be of untold value to anyone working in the area of sports injuries. Such studies are largely responsible for the great advancements which have been made in the past, not only in the prevention, but also the treatment of athletic injuries.

The latest advancements in physical therapy and related fields should be kept abreast of by the team doctor, for in this age of speed we are striving more and more to shorten the recovery period.

Whenever possible the physician should arrange his schedule so that he will be able to attend both practice and game sessions. Trainers for the most part are quite competent, but they are the first to admit that it is essential to have a physician present as much as possible. The trainer has his limits, and more important, he realizes them.

Although experience in injuries and their treatment is desired in a team physician, it should be noted that many of our fine team physicians never had any real injury work until starting in athletics. It may take him a little time to orientate himself into athletics, but through study and first-hand experience "on the field," he will adjust himself to this new program in a comparatively short time.

N. A. T. A. Membership List

Abraham, Joseph N., 370 Exchange St., Geneva, N. Y.
Adams, Snooky, 1802 N. Adams St., Odessa, Texas.
Ainsworth, Robert, L. R. Peck School, Barrington, R. I.
Alderman, Jess, Drexel Inst. of Technology, Upper Derby, Pa.
Alexander, Allen, Box 405 Springfield College, Springfield, Mass.
Alliman, Walter "Jack", 1088 Novara St., San Diego, Calif.
Altott, Joseph R., 71 Spring St., Williamstown, Mass.
Andel, Henry, Georgia Tech., Atlanta, Ga.
Anderson, Edward, Jr., Harvard University, Cambridge, Mass.
Anderson, Gerald, 1401 N. Dotsy No. 7, Odessa, Texas
Antill, Gene, The Rice Institute, Houston, Texas
Ariail, Warren, Faculty Apt. 3D, Reynolds, Winston-Salem, N. C.
Aten, Dennis W., 1304 N. 35th, Lincoln, Nebraska
Atty, Alex, Windber High School, Windber, Pa.
Ausley, Jim, 2006 Chantilly Lane, Houston, Texas
Ayres, Sam, Lowe & Campbell, Dallas, Texas

Baker, Jack, 15 S. Willogrove Ave., Dayton, Ohio
Baker, Royce, 23 Bruce St., London, Ontario, Can.
Bakke, Walter, University of Wisconsin, Madison, Wisc.
Ball, Frank, Brookline High School, Brookline, Mass.
Barbour, Everett, Y.M.C.A. 369 Atlantic St., Stamford, Conn.
Batey, John, Victoria College, Victoria, Texas
Battipaglia, Al, 62 Hall St., New Haven, Conn.
Bauman, Bob, St. Louis University, St. Louis 8, Mo.
Beattie, Robert, 244 Winnett Ave., Toronto, Ontario, Can.
Beck, William, M.D., Miami University, Oxford, Ohio
Beeten, Bob, 6412 Aztec Road, El Paso, Texas
Beeton, Robert, Colorado A&M, Fort Collins, Colo.
Benjamin, Paul K., 28 Briarwood, Normal, Ill.
Bennett, Pat, Baylor University, Waco, Texas
Benson, James M., Johns Hopkins University, Baltimore, Md.
Bentley, John, M.D., University of Wisconsin, Madison, Wisc.
Bernstein, Fred, 3455 Robina, Berkley, Mich.
Berquist, Ivan, N. H. State Industrial Sch., Manchester, N. H.
Bevan, Roland, US Military Academy, West Point, N. Y.
Beyerle, William, 1340 Mulberry St., Reading, Pa.
Bickerstaff, C. R., New Mexico A&M, Las Cruces, N. M.
Biggs, Ernie, Ohio State University, Columbus, Ohio
Bilik, S. E., M.D., 427 Broadway, New York 13, N. Y.
Billings, C. R. Bob, 2512-A Rio Grande St., Austin 5, Texas
Bishop, Bill, P.O. Box 123, Wink, Texas
Bjorklund, Dale A., 247 Blackhawk Dr., Park Forest, Ill.
Blackwell, Harold J., 7310 Support Sq. APO 57, New York, N. Y.
Blankowitsch, Joe, Allentown High School, Allentown, Pa.
Bleam, Don, Adrian College, Adrian, Mich.
Blickenstaff, Mal, Columbus High School, Columbus, Ind.
Blumenthal, Marvin, 2020 Herman Dr., Houston, Texas
Bohm, Wilbur, Poag Road, Edwardsville, Ill.
Bostwick, William, The Citadel, Charleston, S. C.
Boveey, Warren, 803 Reinecke, Houston, Texas
Bow, David, Hofstra College, Hempstaed, N. Y.
Boyle, Packey, University of Idaho, Moscow, Idaho
Braatz, James, 30 Markham Dr., Hampton, Va.
Brannon, Jack, M.D., The Rice Institute, Houston, Texas
Brashaer, Robert, M.D., 807 Medical Arts Bldg., Knoxville, Tenn.
Brennan, John E., 7016 Saybrook Ave., Philadelphia, Pa.
Bridges, Don, Hardin-Simmons University, Abilene, Texas
Briare, Vince, San Francisco University, San Francisco, Calif.
Brisnahan, James, R.R. No. 8, Bloomington, Ind.
Brockstein, Bobby, 2355 Kelving Dr., Houston 25, Texas
Bronk, John, Phillips Academy, Andover, Mass.
Broussard, Marty, Louisiana State University, Baton Rouge, La.
Brown, Bobby, 3800 Cullen Blvd., Houston, Texas
Brown, Delmer, Texas Tech College, Lubbock, Texas
Brown, Edward, 275 West Rock Ave., New Haven, Conn.
Brown, Elmer, Texas Christian University, Fort Worth, Texas
Brownlee, Les, 807 W. 26th St., Odessa, Texas
Bruner, Carl, 610 N. Huntington, Apt. 8, Pomona, Calif.
Bruner, Harry, 8631 Ferndale St., Philadelphia, Pa.
Buhler, Bill, 785 Union St., Brooklyn, N. Y.
Buday, Richard, Apt. 12, 92 James St., Toronto 14, Ont., Can.
Bunch, Herman, Reynolds Memorial Coliseum, Raleigh, N. C.
Burdette, Michael, 316 Denson St., Fairfax, Ala.
Burhard, Chuck, Johnson & Johnson, New Brunswick, N. J.
Busenberg, George, Ohio State University, Columbus, Ohio
Butorac, Jack, Florence High School, Florence, Colo.
Byrne, Eddie A., University of California, Berkeley, Calif.

Callahan, Leo A., Siena College, Loudonville, N. Y.
Campbell, Vere X, Westminister College, Salt Lake City, Utah
Canale, Gildo, 505 E. Kirkwood, Bloomington, Ind.
Capozzi, Rome, Gettysburg College, Gettysburg, Pa.
Cappola, Eddie, Seton Hall University, So. Orange, N. J.
Carlson, H. C., M.D., University of Pittsburgh, Pittsburgh, Pa.
Carr, Richard, University of Arizona, Tucson, Ariz.
Caskey, Readey, 547 W. O'Neal, Wills Point, Texas
Casman, Daniel, Yale University, New Haven, Conn.
Catt, Howard, 3836 S. Dearborn St., Indianapolis, Ind.
Cavallin, Roy, 4641 Fairlawn Dr., No. Burnaby, B. C., Can.
Chambers, Billy, University of Oklahoma, Norman, Okla.
Chambers, R. L., Duke University, Durham, N. C.
Chapin, Marvin, M.D., University of North Carolina, Chapel Hill, N. C.
Cima, Prosper, Princeton University, Princeton, N. J.
Close, Mike, MacGregor Goldsmith, Inc., Cincinnati, Ohio
Coffman, Harry, M.D., 3817 Fannin St., Houston, Texas
Cole, Richard K., 7 Spencer Circle, Wickford, R. I.
Collins, Roosevelt, Colorado College, Colorado Springs, Colo.
Colville, Jay, R. R. No. 1, Oxford, Ohio
Conbay, Jim, US Air Force Academy, Denver 8, Colo.
Connell, John, 527 High St., Portsmouth, Va.
Conrad, Thomas, 4th Inf., APO 743, New York, N. Y.
Cook, Marshall, Montana State College, Bozeman, Mont.
Copeland, Jackie, Ohio State University, Columbus, Ohio
Cordall, Harold E., 19 S. 31st St., Lafayette, Ind.
Costello, Jack, Box 177, Springfield College, Springfield, Mass.
Coward, Jack, 2111 So. Pierce, Amarillo, Texas
Cramer, Bill, The Cramer Chemical Co., Gardner, Kansas
Cramer, Charles, The Cramer Chemical Co., Gardner, Kansas
Cramer, Frank, The Cramer Chemical Co., Gardner, Kansas
Cramer, Jack, The Cramer Chemical Co., Gardner, Kansas
Cramer, John, The Cramer Chemical Co., Gardner, Kansas
Crawshaw, Alan S., 214 Tioga St., Johnstown, Pa.
Crescenzo, Angelo, 63 Perry St., New York, N. Y.

Dakelman, Jay H., Highland Park High School, Highland Park, N. J.
Danno, John, 3324 W. Flournoy, Chicago, Ill.
Dascoulias, Bill, 212 N. San Mateo Dr., San Mateo, Calif.
Davis, Deb, Washington&Lee University, Lexington, Va.
Davis, F. E., M.D., North Carolina A&T Col., Greensboro, N. C.
Davis, Otho L., 5250 Sunset Dr., Beaumont, Texas
Dayton, Bill, Yale University, New Haven, Conn.
DeKay, E. W., M.D., 316 S. 2nd St., Laramie, Wyo.
Deland, Walt, University of Utah, Salt Lake City, Utah
DeMauro, Daniel, 216½ S. Indiana Ave., Bloomington, Ind.
DeSue, Ernest, Clairton High School, Clairton, Pa.
Detty, Moose, Bike Web Co., Chicago, Ill.
DeVictor, Ollie, University of Missouri, Columbia, Mo.
Dickey, John W., Box 27, Meeteetse, Wyo.
Dickinson, Art, Jr., Arizona State College, Tempe, Ariz.
Dickinson, Art, Iowa State Teachers College, Cedar Falls, Iowa
Diehm, L. F. "Tow", Michigan State University, East Lansing, Mich.
DiMare, Joe, 493 S. W. Purdue, Dallas, Texas
Dingwall, Garman, Ithaca College, Ithaca, N. Y.
Dixon, Spike, Indiana University, Bloomington, Ind.
Dougal, Anthony, Dartmouth College, Hanover, N. H.
Drager, Hubert L., Loyola University, Los Angeles, Calif.
Drake, Elvin "Duckey", U.C.L.A., Los Angeles, Calif.
DuBreuil, Clifford, Co. A, 17th Inf. Div. APO 7, San Francisco, Calif.
Durham, Wylie, Jr., 410 West 20th St., Houston, Texas
Dziegiel, John, 559 East 191st St., New York, N. Y.

Eggert, Allen, 3614 Zephyr, Houston, Texas
Emmerich, Jim, South Dakota State College, Brookings, S. D.
Emmitt, Joseph R., 570 East Gates, Columbus, Ohio
Enzinna, Charles, Saratoga High School, Saratoga Springs, N. Y.
Evans, Lloyd R., M.D., 318 South Second St., Laramie, Wyo.
Evans, Ralph, Wm. Penn Charter School, Philadelphia 44, Pa.
Evans, Roy, 5210 No. Warnock Ave., Philadelphia, Pa.
Ewanitis, Emil, 1064 Terrace Dr., Latrobe, Pa.
Fadden, John, Boston Red Sox, Fenway Park, Boston, Mass.

Ferrell, William, University of Arkansas, Fayetteville, Ark.
Fessenden, Ray, M.D., Athol High School, Athol, Mass.
Feurig, C. J., M.D., Michigan State College, East Lansing, Mich.
Fitzsimmons, Gene, 88 Jay Place, North Branford, Conn.
Foley, Frank, 33 Fountain St., New Haven, Conn.
Forrer, John, North Dakota Agri. College, Fargo, N. D.
Fraser, Tom J., Episcopal Academy, Philadelphia 31, Pa.
Friederichs, Don C., 1562 Center Ave., Apt. 8E, Fort Lee, N. J.

Gabel, Ed, Western Michigan College, Kalamazoo, Mich.
Garen, Nick, Chicago Blackhawk Hockey Team, Chicago 12, Ill.
Gearhart, Kenneth, Poughkeepsie High School, Poughkeepsie, N. Y.

George, Pat, 2106 Guadalupe St., Austin 5, Texas
Geracioti, Lawrence, Boston University, Boston, Mass.
Gill, Bob, William & Mary College, Williamsburg, Va.
Goddu, Louis, Goddu Ave., Winchester, Mass.
Goldman, Richard, Peach Orchard Rd., Burlington, Mass.
Gonzales, Johnny, Sam Houston Senior High School, Houston, Texas
Goodale, Tom, 315 6th St. S.E. Hampton, Iowa
Goodish, William, Box 345, Beaverdam, Ohio
Goolsby, Frank, 1211 Dogwood Dr., Pasadena, Texas
Goostree, James H., 200 Castle Heights, Clarksville, Tenn.
Gostick, Glen F., Case Inst. of Technology, Cleveland, Ohio
Grant, Chester A., North Carolina State College, Raleigh, N. C.
Grant, Robert, Purdue University, West Lafayette, Ind.
Grazier, Jack, 4815 Pine, Houston, Texas
Green, Winslow C., 16 Grayfield Ave., West Roxbury, Mass.
Grevelle, Louis, Midland High School, Midland, Texas
Griess, Alfred, M.D., Penn State University, University Park, Pa.
Grockowski, Walter A., Wesleyan University, Middletown, Conn.
Grubiss, Hugh, The Cramer Chemical Co., Gardner, Kansas
Guillory, Thomas, Jr., 731 Harding Ave., Port Arthur, Texas
Gulick, Herbert, University of South Carolina, Columbia, S. C.
Gunn, Bobby, Brazosport High School, Freeport, Texas
Gwynne, A. C. Whitey, West Virginia University, Morgantown, W. Va.

Hamel, Leo, Kingswood School, West Hartford, Conn.
Hand, Robert, San Diego Naval Training Ct., San Diego, Calif.
Hanley, Daniel, M.D., Bowdoin College, Brunswick, Maine
Harbour, William, 148 Water St., Jackson, Ohio
Harkins, Leo, Academy High School, Erie, Pa.
Harper, Smokey, Texas A&M College, College Station, Texas
Harrison, Henry, M.D., Texas A&M College, College Station, Texas
Hart, Alan, Ohio University, Athens, Ohio
Harvey, Robert R., DePauw University, Greencastle, Ind.
Havach, Emil, Lehigh University, Bethlehem, Pa.
Hawkinson, Charles, US Air Force Academy, Denver 8, Colo.
Haynie, George, Johnson & Johnson, Baton Rouge, La.
Healy, Jerome J., The Abbey School, Canyon City, Colo.
Healion, Tom, Northwestern University, Evanston, Ill.
Heppinstall, Jack, Michigan State University, East Lansing, Mich.
Herman, Vincent, M.D., 20 Twelfth St., Campbell, Ohio
Herndon, Ruffin, Swarthmore College, Swarthmore, Pa.
Herwig, Gordon, 108-S-Popular, Carbondale, Ill.
Herzog, C. J., Duke Laboratories, So. Norwalk, Conn.
Hessel, Aaron, Featherlax Corp., Houston, Texas
Hoffman, Bill, Box 63 Acc Station, Abilene, Texas
Holladay, Lloyd, M.D., 410-412 Lafayette Life Bldg., Lafayette, Ind.
Hollihan, Harry, Shaler Township High School, Glenshaw, Pa.
Homan, Ralph, M.D., Medical Center, El Paso, Texas
Hopkins, John J., 229 Caledonia St., Lockport, N. Y.
Hoppens, Neil, 204 C Huskerville, Lincoln, Nebraska
Houy, Clinton L., US Air Force Academy, Denver 8, Colo.
Howard, C. T., 304 Lippert Bldg., Boone, Iowa
Howard, Kenny, Alabama Polytechnic Inst., Auburn, Ala.
Howe, Charles, 833 Leonard St., Grand Rapids, Mich.
Howell, Hornsby, North Carolina A&T, Greensboro, N. C.
Hudak, Ernest, 8 Struthers-Liberty Rd., Campbell, Ohio
Hughes, Paul, 420 Cedar St., Ottawa, Kansas
Hunsicker, H. M., 103 So. 5th St., Perkasie, Pa.
Hunt, James, University of Michigan, Ann Arbor, Mich.
Huser, Laverne, Hardin-Simmons University, Abilene, Texas
Hutter, George, 50 Surrey Lane, Bergenfield, N. J.

Iliano, Dick, 837 Wayside Road, Cleveland, Ohio
Isaacson, Carlton, University of Michigan, Ann Arbor, Mich.

Jarvis, Conrad, Stanford University, Stanford, Calif.
Jenkins, W. M., 3101 E. 8th St., Tulsa 4, Okla.
Jensen, Marvin, 8380 S. Redwood Rd., West Jordan, Utah
Johnson, John, 1 Manhattan College, Riverdale, N. Y.
Johnson, Johnny, DelMar Junior College, Corpus Christi, Texas
Johnson, Roger, Bldg. No. 121, Stanford Village, Stanford, Calif.
Johnston, John, Oklahoma A&M College, Stillwater, Okla.
Jones, Blanford, 310 South Centre St., Pottsville, Pa.
Jones, Frank, Boston College, Newton, Mass.
Jones, Jack D., Western Michigan College, Kalamazoo, Mich.
Jordan, Delmar, Waukegan High School, Waukegan, Ill.
Jordan, Weaver, Baylor University, Waco, Texas
Jorgensen, Carl, Green Bay Packers, Green Bay, Wisc.
Jurich, Joseph, 1365 Fitzwatertown Rd., Roslyn, Pa.

Kahn, Alan, El Paso High School, El Paso, Texas
Kaiser, Herman, 220½ Jefferson St., Wausau, Wisc.
Kammer, John D., Loras College, Dubuque, Iowa
Kassabian, Kerkor, Northeastern University, Boston, Mass.
Kavanagh, Frank, Cornell University, Ithaca, N. Y.
Kearns, Joseph, 924 State St., New Haven, Conn.
Keating, Harold, North Carolina State College, Raleigh, N. C.
Keedy, Victor, University of Massachusetts, Amherst, Mass.
Keller, C. E., Union High School, Union, N. J.
Keller, Walter, Washington High School, Massillon, Ohio
Kelley, John H., 40-38-82nd St., Elmhurst, N. Y.
Kelley, Millard, Detroit Lions, Detroit, Mich.
Kerns, Richard, Box 465 Cary Hall, West Lafayette, Ind.
Kevatos, Christopher, 12 Sunnybrook Drive W., Oceanside, L. I., N. Y.
Kimball, Rodney, Brigham Young University, Provo, Utah
Kimura, Lincoln, San Jose State College, San Jose, Calif.
King, George, University of Buffalo, Buffalo, N. Y.

Kleckner, Bob, 4275 Walnut Blvd., Walnut Creek, Calif.
Klein, Richard, University of Illinois, Champaign, Ill.
Knight, Wesley, University of Mississippi, Oxford, Miss.
Knowlton, Hal, 30 Butler Ave., Stoneham, Mass.
Knowlton, Henry, Winchester High School, Winchester, Mass.
Koch, Walter O., 313 So. Leonard St., Lima, Ohio
Konsek, Al, 545 No. Marengo Apt. No. 9, Pasadena, Calif.
Kosalko, Henry, Whiting High School, Whiting, Ind.
Kressler, Kenneth, M.D., Lafayette College, Easton, Pa.
Krol, Stanley, Waltham High School, Waltham, Mass.
Kruger, Irving, 150 Elmora Ave., Elizabeth, N. J.
Kwest, Eddie, 300 College Park, Dayton, Ohio

LaBelle, William, University of Massachusetts, Amherst, Mass.
Lacey, John, University of North Carolina, Chapel Hill, N. C.
Lakey, Edward, Appalachian State Teachers Col., Boone, N. C.
Lancaster, Lanny, 210 West Pearl, Granbury, Texas
Lane, Bobby, Arlington State College, Arlington, Texas
Lane, Eddie, Washington State College, Pullman, Wash.
Lane, Clarence, Brooklyn Polytech, Brooklyn, N. Y.
Lane, William J., St. Joseph's College, Philadelphia, Pa.
Langdon, Stu, Queen's University, Kingston, Canada
Lanigan, Charles, Brown University, Providence, Rhode Island
Lanzi, Joseph R., Trenton Central High School, Pennington, N. J.
Lawrence, Jasper, Bro., Christian Brothers Scholastic, Winona, Minn.
Ledford, Harry, George Washington University, Washington, D. C.
Leighton, Guy, 86 Speen St., Natick, Mass.
Leone, Louis J., 2405 Grays Ferry Ave., Philadelphia 46, Pa.
LeRoux, Edward, Jr., 9 Van Worden Rd., Woburn, Mass.
Lester, James, Massachusetts Inst. Technology, Cambridge, Mass.
Levy, David, M.D., 414 Home Savings Bldg., Youngstown, Ohio
Lewis, Cecil, 2724 Arbuckle, Houston, Texas
Linkenaugher, Mont, Hampden-Sidney College, Hampden-Sidney, Va.
Linkovich, Mike, Bowdoin College, Brunswick, Maine
Linskey, William, X., 163 Magazine St., Cambridge, Mass.
Liscomb, Jesse, Maj., Post Special Services, Fort Lee, Va.
Littlejohn, John, St. Lawrence University, Canton, N. Y.
Loef, John, 351 Sturges, Elmhurst, Ill.
Long, Eugene, Hamilton College, Clinton, N. Y.
Luchsinger, W. J., Mississippi State College, Starkville, Miss.
Lunn, William, M.D., 408 No. Allegheny, Odessa, Texas
Lutte, Wilson, 756 South Hall, Allentown, Pa.
Lyles, Tommy, 129 Dorset Dr., Alexander, Va.

McCary, R. M., M.D., Freeport Clinic, Freeport, Texas
McCauley, Fred, 52 Strathmore Rd., Brookline, Mass.
McChesney, W. M., M.D., University of Florida, Gainesville, Fla.
McClain, Bill, 3814 S. St., Galveston, Texas
McClintock, Bobby, Texas Christian University, Fort Worth, Texas
McClung, Willard, 220 W. Union St., Minden, La.
McCoy, Thomas, 2500 Hillcrest Rd., Drexel-Hill, Pa.
McDowell, Charles, W., The McCallie School, Chattanooga, Tenn.
McGee, Herman, Clemson College, Clemson, S. C.
McGill, Roger, University of Pittsburgh, Pittsburgh, Pa.
McGory, Tom, Cornell University, Ithaca, N. Y.
McGrath, Neil, M.D., Florence High School, Florence, Colo.
McGugan, Thomas, New Mexico A&M, Las Cruces, N. M.
McGuire, Thomas V., 3272 Sansom St., Philadelphia, Pa.
McKinnon, John, Brown University, Providence, Rhode Island
McLaughlin, James, 2508 So. Lambert St., Philadelphia 45, Pa.
McMullen, Harold G., Highland Park High School, Highland Park, Ill.
McNeal, Leonard, University of Richmond, Richmond, Va.
McPhee, Harry, M.D., Princeton University, Princeton, N. J.
McQuaid, Walter, 79 Alexander St., Belmont, Mass.
Macko, Joseph, 1500 Edgefield, Lyndhurst 24, Ohio
Magnon, Joe, 1403 Farragut St., Laredo, Texas
Magnon, Tony, 1403 Farragut St., Laredo, Texas
Maguire, John, Jr., 407 Cavalier Lane, Pasadena, Texas
Maguire, Thomas, University of Penn, Philadelphia, Pa.
Marsh, J. E., M.D., Texas A&M College, College Station, Texas
Marshall, James, Notre Dame University, South Bend, Ind.
Martin, Charles, 714 South 10th St., McAlexter, Okla.
Martin, H. E., Crain Junior High School, Victoria, Texas
Martin, Irvin, Stinson Field, Bldg. 515, San Antonio, Texas
Martin, Robert, Furman University, Greenville, S. C.
Mason, James, 1409 Woodard, Houston, Texas
Massman, Fritz, Iona College, New Rochelle, N. Y.
Mastro, Joseph, Rankin High School, Rankin, Penna.
Matschke, William, 10512 E. 28th Terrace, Independence, Mo.
Maurais, Robert L., 2726 Sheridan Rd., Evanston, Ill.
Mauriello, Nicholas, 11 Harding Rd., Wakefield, Mass.
Maxtutis, Albert, City College of New York, New York 31, N. Y.
Medlar, Charles, Penn State University, University Park, Pa.
Meeks, S. M., Jr., Athletic Repair Service, San Antonio, Texas
Melin, Bruce, Washington University, St. Louis, Mo.
Metz, Gustave, Delano Joint Union High Sch., Delano, Calif.
Miller, Lyle S., First Aid Service Co., San Francisco, Calif.
Miller, Stewart, 1828 Forster St., Harrisburg, Pa.
Miller, Thomas, 5301 Evergreen, Bellaire, Texas
Moers, Robert, M.D., 13th Floor, Medical Arts Bldg., Houston, Texas
Montfort, Robert, Duke University, Durham, N. C.
Moore, Hamilton, 139 Walnut St., Lynnfield, Mass.
Moore, Ross, Texas Western College, El Paso, Texas
Moore, Thomas, 300 Mt. Auburn St., Cambridge, Mass.
Moretti, Mel, College of Pacific, Stockton, Calif.
Morgan, Porky, Kansas State College, Manhattan, Kansas
Morgan, Robert, M.D., National City Bank Bldg., Dallas, Texas
Morrow, William, 39 Shultz Ave., Phillipsburg, N. J.
Motley, Edward, Virginia Polytechnic, Blacksburg, Va.
Morsch, Richard, Haverford College, Haverford, Pa.
Moutis, Nick, Phillips Exter Academy, Exter, N. H.
Mulligan, John, Union College, Schenectady, N. Y.
Mundy, Harold, 17524 Heyden, Detroit, Mich.
Murko, Fred, Woodrow Rehabilitation Center, Fisherville, Va.
Murphy, James, 626 Thomas St., Elkhart, Ind.
Murphy, Joseph, Harvard University, Boston, Mass.

Needham, Lester, University of Wichita, Wichita, Kansas
Nelson, George, Utah State College, Logan, Utah
Nesmith, Dean, Kansas University, Lawrence, Kansas
Neuberger, Tom, 416 W. 39th, Davenport, Iowa
Neuin, John, Villanova College, Philadelphia, Pa.
Newell, William, Purdue University, West Lafayette, Ind.
Nice, James, Northwestern University, Evanston, Ill.
Noonan, Edward, 1218 Massachusetts Ave., Cambridge, Mass.
Novich, Max, M.D., 299 Clinton Ave., Newark 8, N. J.

O'Brien, Mickey, University of Tennessee, Knoxville, Tenn.
O'Donnell, Edward, 158 Whitney Ave., New Haven, Conn.
Officer, Robert, University of Oregon, Eugene, Oregon
O'Neil, Frank, University of Southern Calif., Los Angeles, Calif.
Orr, Robert, 1200 W. Smith St., Odessa, Texas
Owens, Ralph, 1700 Exchange Ave., Oklahoma City, Okla.

Paddock, Len, University of Michigan, Ann Arbor, Mich.
Pagano, John, 60 Broad View Rd., East Providence, Rhode Island
Panneton, Paul, 7348 Chambord St., Apt. 5, Montreal, Quebec, Canada
Parish, Bill, Station ACC, Box 545, Abilene, Texas
Parker, Charles, Davidson College, Davidson, N. C.
Parsons, Blaine, 215 W. Fair Oaks, San Antonio, Texas
Paskiet, Gene, Notre Dame University, South Bend, Ind.
Patchin, Herb, Virginia Military Inst., Lexington, Va.

Payne, John, University of Kentucky, Lexington, Ky.
Pelton, E. C., M.D., 208 Garfield, Laramie, Wyo.
Pennock, E. W., Springfield College, Springfield, Mass.
Peterson, Fred, 3087 East Richert, Fresno, Calif.
Peterson, Irvin, Nebraska Wesleyan University, Lincoln, Nebraska
Peterson, Robert, University of California, Berkeley, Calif.
Peterson, Robert L., 402 Meridan St., Tipton, Iowa
Pickard, Billy, 3228 13th St., Port Arthur, Texas
Pickard, Bobby, 226 Haggin St., San Antonio, Texas
Piefke, Bruno, Essex County High School, Bloomfield, N. J.
Pienkiewicz, Rounald, 11 Straight St., Paterson, N. J.
Pillings, Edward, University of New Mexico, Albuquerque, N. M.
Ploch, James, 759 S. Kentucky Ave., Evansville, Ind.
Poisson, Francis, University of Bridgeport, Bridgeport, Conn.
Porter, Ben, New Mexico A&M, Las Cruces, N. M.
Porter, James, 534 W. Missouri No. 9, El Paso, Texas
Posey, Fred, University of Alabama, Tuscaloosa, Ala.
Potts, Harold E., 55 Madison Ave., Montclair, N. J.
Pratt, Neil, 1019 Harrison St., Syracuse, N. Y.
Prelaz, Edward, Marshall College, Huntington, West Va.
Pressman, Samuel H., University of Kentucky, Lexington, Ky.
Pritts, Ralph, 3043 Glenn, Toledo 13, Ohio
Pritts, Ralph, Jr., Ohio University, Athens, Ohio
Provinzano, Peter, 37 Florence St., Winchester, Mass.
Purcell, John, Bellaire Senior High School, Bellaire, Texas

Quigley, Joseph, 34 Maryland Ave., W. Long Branch, N. J.

Rawlinson, Kenneth, University of Oklahoma, Norman, Okla.
Read, Henry, University of North Carolina, Chapel Hill, N. C.
Recine, Victor, New Brunswick High School, New Brunswick, N. J.
Rector, Albert W., Ohio Wesleyan University, Delaware, Ohio
Redd, Frank, 184 Commercial St., New Brunswick, N. J.
Reeb, Kearney, 832 So. 7th St., Alhambra, Calif.
Reichel, Julius, 502 University Ave., Syracuse, N. Y.
Reich, Walter, M.D., 1328 Lincoln Ave., Highland Park, Ill.
Reutinger, Ed, Wilson Sporting Goods, River Grove, Ill.
Rhea, Jerry, Texas A&M College, College Station, Texas
Rhinehart, Naseby, University of Montana, Missoula, Mont.
Rhodes, Warren, 2929 Hubbard Ave., Dearborn, Mich.
Rice, Glen H., Granite City High School, Granite City, Ill.
Richardson, Dan, W. A. Holt Co., Houston, Texas
Richwine, Sam, Box 272, Waycross, Ga.
Rideout, Wayne, Bryan High School, Bryan, Texas
Robertson, W., M.D., Box 603, Durham, N. C.
Robinson, Clifford, St. Joseph College, Collegeville, Ind.
Robinson, Gayle B., Michigan State College, East Lansing, Mich.
Robnett, Morgan, 317 Virginia Ave., Waxahachie, Texas
Rockwell, Jack, University of Colorado, Boulder, Colo.
Romo, Joseph, Lafayette College, Easton, Pa.
Roth, E. F. "Fritz", Palo Alto Clinic, Palo Alto, Calif.
Rowan, Paul, 460 Tonnelo Ave., Jersey City, N. J.
Rowlett, Jack, M.D., 318 So. 2nd St., Laramie, Wyo.
Ruby, Edward J., 90 Mountain Ave., Springfield, N. J.
Rudd, Billy Jack, Box 1144, So. Methodist U., Dallas, Texas
Ruddock, Mac O., 1508 Greenbrier, Pasadena, Texas
Rudy, Wayne, Southern Methodist University, Dallas, Texas
Ruggiero, Leonard, 37 N. Essex Ave., Orange, N. J.
Russell, James, 1121 Del Monte Dr., El Paso, Texas
Ruthven, Donald, D.D.S., Medical Arts Bldg., Houston, Texas
Ryan, Tom, 57 N. White Road, San Jose, 27, Calif.
Ryder, Thomas, 112 Clove Ave., Haverstraw, N. Y.
Rylander, Roy C., University of Delaware, Newark, Delaware

Saad, Charles, University of South Carolina, Columbia, S. C.
Samko, Bill, Holy Cross College A. A., Worcester, Mass.
Sandlin, Sandy, Chattanooga Baseball Co., Chattanooga, Tenn.
Sawdy, Al, 602 West Wooster, Bowling Green, Ohio
Schaeffler, Willy, University of Denver, Denver, Colo.
Scheuneman, Al, Chicago Baseball Cubs, Chicago, Ill.
Schmidt, Henry, 2196 Forbes, Santa Clara, Calif.
Schneider, Paul, University of Nebraska, Lincoln, Nebraska
Schneider, Rudolph, 133 Hemingway Ave., East Haven, Conn.
Schroder, Kenneth, George School, Pa.
Schwab, Charles, 730 Griswold St., Port Huron, Mich.
Seaburg, Gus, University Garden Apts., Newark, Dela.
Semple, John D., 62 Linwood Rd., Lynn, Mass.
Shaw, C. M., Shaw Garage, Gen. Del., Perryopolis, Pa.
Sheehan, Tom, Rensselaer Polytech., Troy, N. Y.
Shelton, Robert E., University of Illinois, Champaign-Urbana, Ill.
Sheridan, Francis, Phillipsburg High School, Phillipsburg, N. J.
Shindler, Thomas, M.D., Hermann Professional Bldg., Houston, Texas
Simpson, Jim, Fort Hays Kansas State College, Hays, Kansas
Sinkler, Robert W., 307 Witherspoon St., Princeton, N. J.
Skrinar, Don, 428 Greenbay Rd., Highwood, Ill.
Slaughter, Robert, Trinity College, Hartford, Conn.
Smiley, Robert, Kendall Hill Rd., Sterling, Mass.
Smith, Edward T., M.D., Hermann Professional Bldg., Houston, Texas
Smith, Gene, 2707-B Cirtis Dr., Amarillo, Texas
Smith, Madison K., 101-A Elizabeth Rd., Hampton, Va.
Smith, P. O., Scarsdale High School, Scarsdale, N. Y.
Smith, Reginald E., Newton High School, Newton, Mass.
Smith, Shelley, McMurray College, Abilene, Texas
Smith, W. K., M.D., University of Pittsburgh, Pittsburgh, Pa.
Snider, Jack, Registrar, King College, Bristol, Tenn.
Sofrance, Joseph J., 710 Wick Bldg., Youngstown, Ohio
Spackman, Robert, Jr., 3611 Essary Dr., Fountain City, Tenn.
Sparks, Don, Little Rock High School, Little Rock, Ark.
Sparks, Marvin, Vibra-Whirl Co., Panhandle, Texas
Sperber, Ray, Plough, Inc., Memphis, Tenn.
Spiegel, John, McKeesport High School, McKeesport, Pa.
Stahly, Preston G., Athletic Products Co., South Bend, Ind.
Stamatis, Paul, 707 Jefferson, Amarillo, Texas
Stang, Michael, Rutgers University, New Brunswick, N. J.
Stanitis, Joe, Amherst College, Amherst, Mass.
Stearns, William P., Brusch Medical Center, Cambridge, Mass.
Steele, Harold A., US Coast Guard Academy, New London, Conn.
Stern, Harold L., Featherlax Corp., Houston, Texas
Stevens, George, 848 Dunlop St., Forest Park, Ill.
Stiles, Russ, 1417 Concord Place, Elizabeth, N. J.
Stith, Hunter, 214 Atlantic Ave., Rocky Mount, N. C.
Stober, Duane, No. 3 Walnut Grove Courts, Bloomington, Ind.
Stofko, Edward, Sr., 122 Homestead Ave., Johnston, Pa.
Storey, L. W., M.D., 318 So. 2nd St., Laramie, Wyo.
Streigel, George R., Featherlax Corp., Houston, Texas
Stringer, Phil, Box 722, Eunice, N. M.
Stults, Jim, Colorado A&M, Fort Collins, Colo.
Sulkowski, Eddie A., Penn State University, University Park, Pa.
Sullivan, Bernard, M.D., 318 So. 2nd St., Laramie, Wyo.
Sullivan, George F., University of Nebraska, Lincoln, Nebraska
Svienbjornson, Harold, Penn Military College, Chester, Pa.
Sweeney, Francis J., M.D., Manhattan College, Riverdale, N. Y.
Sweeten, Kenneth, 58 Maltby Place, New Haven 13, Conn.
Swyers, Walter, School No. 93077, Box 511, Columbus, Ohio

Taylor, Henry A., Morgan State College, Baltimore 12, Md.
Thomas, Charles A., 605 Plain St., Commerce, Texas
Thomas, Roger E., Appalachian State Teachers, Boone, N. C.
Thomas, Sidney L., 420 St. John St., Lewisburg, Pa.
Tilley, Glenn, Louisiana Tech, Ruston, La.
Tillotson, Roy E., Toledo University, Toledo 6, Ohio
Timm, Warren, ATC, VA-172, Box 38, NAS, Jacksonville, Fla.
Timmons, Hayes, New Mexico A&M, Las Cruces, N. M.
Tow, Irving, American White Cross Labs, New Rochelle, N. Y.
Turner, Charles W., 961 St. Nicholas Ave., New York 32, N. Y.

Ulinski, Ray, Penn State University, University Park, Pa.

Van Blake, Seymour, Princeton University, Princeton, N. J.
Van Demark, R. W., Premier Athletic Products, Riverdale, N. J.
Vandervoort, Richard, 1215 Lincoln St., Concordia, Kansas
Van Deusen, James L., 2630 Gramercy A-4, Houston 25, Texas
Vanni, Rober E., Woodlawn Courts, Annex No. 34, Bloomington, Ind.
Varon, Albert, 1346 West Devon Ave., Chicago 40, Ill.
Vickers, Hugh, Rogers Center, Bloomington, Ind.
Vukas, Steve, 1837 Eileen Ave., Ypsilanti, Mich.

Waite, Howard, University of Maine, Orono, Maine
Walsky, Al, Garden City High School, Garden City, L. I., N. Y.
Wappel, Fred, University of Missouri, Columbia, Mo.
Ward, Jack C., 2622 Grammercy St., Houston, Texas
Ward, John, 5904 Blue Hills Rd., Kansas City 10, Mo.
Wargo, Dick, University of Connecticut, Storrs, Conn.
Washington, Robert, 3516 St. Charles St., Houston, Texas
Waterman, Richard, Middlebury College, Middlebury, Vermont
Watson, Robert L., 1709 Welch, Houston, Texas
Webster, Willard, 42 Melbourne Ave., Youngstown, Ohio
Weightman, Joseph, M.D., Bucknell University, Lewisburg, Pa.
Weingart, Bob, Marquette University, Milwaukee, Wisc.
Welsh, Hugh, M.D., 2715 Fannin St., Houston, Texas
White, R. A., "Doc", University of North Carolina, Chapel Hill, N. C.
White, Robert, Wayne State University, Detroit 2, Mich.
Whitehurst, James, M.D., Hermann Professional Bldg., Houston, Texas
Whitten, John C., Lamar High School, Houston, Texas
Wiechec, Frank, 5160 Butler Pike, Plymouth Meeting, Pa.
Wike, Dave, University of Miami, Coral Gables, Fla.
Williams, Ariel, M.D., 1055 Ash Ave., Provo, Utah
Williams, Lewis H., Eaton Rd., Hamilton, N. Y.
Williamson, Jack, University of California, Berkeley, Calif.
Williamson, Mike, Athletic Repair Service, San Antonio, Texas
Willoughby, Walter O., Carnegie Tech, Pittsburgh, Pa.
Wilson, Billy Burk, 3513 N. Versailles, Dallas, Texas
Wilson, Stanley, 27 East River Terrace, Minneapolis, Minn.
Witkowski, Stephen, Wesleyan University, Middletown, Conn.
Wojecki, Eddie, The Rice Institute, Houston, Texas
Wooten, Kempton, 1016 E. Michigan St., Michigan City, Ind.
Worden, Joe, P.O. Box 6158, Nashville, Tenn.
Worrell, William, D.D.S., Medical Arts Bldg., Houston, Texas
Wroblicky, Emil, Los Angeles State College, Los Angeles, Calif.
Wylder, Al, University of California, Berkeley, Calif.
Wyre, Duke A. J., University of Maryland, College Park, Md.

Yarborough, Bobby J., 1720 Colquitt, Houston, Texas
Yocum, Charles, Becton Dickinson Co., Rutherford, N. J.

Zamberletti, Fred, Box 217, Melcher, Iowa
Zanfrini, Edward, Princeton University, Princeton, N. J.
Zarbock, Richard, 796 Halsy Rd., Dover, Deleware

MEMBERS WHO JUST CAME IN TODAY
Barnaby, Louis M., V.A. Center, PT Dept., Bonham, Texas
Crow, George, 2106 Guadalupe, Austin, Texas
DeWitt, Peter, Cranbrook School, Bloomfield Hills, Mich.
Donaho, Cecil E., 3740 Ector, Beaumont, Texas
Klein, Karl K., Phys. Ed. Dept., Univ. of Texas, Austin, Texas
Leonard, Robert E., 409 Perrin Ave., Lafayette, Ind.
Harcus, Glen E., 74 Craig Ave., Madison, Wisc.
Mendillo, Anthony, 26 So. Loomis St., Chicago, Ill.
Midkiff, Bo, 2409 10th St., Apt. No. 3, Lubbock, Texas
Mullins, Edward J., 7826 Muskegon, Ave., Chicago 49, Ill.
Norman, Gerald, Box 124 H-SU, Abilene, Texas

NEW FROM BIKE... a complete line of

Trainers Supplies

from the Bike Research Laboratories

Bike, long famous for its training room *equipment,* now announces an improved, scientifically prepared line of training-room *chemicals.*

Now, for the first time, you can order all your training supplies (supporters, tapes, wraps, pads, first aid and chemical products) from one source . . . with unequalled assurance of quality.

These trainers chemical supplies were developed in the research laboratories responsible for some of the outstanding medical discoveries of recent years.

An example is "a-carboxythioanisole," the wonder drug added to the new Bike Foot and Body Powder (*see below*) that gives it important fungicidal, keratin exfoliative and anti-perspirant properties.

This is typical of the exclusive chemical improvements developed in the laboratory and now incorporated for the first time in a line of trainers supplies.

We would like you to try one of these new Bike chemical products . . . to see for yourself the kind of improvements Bike has incorporated into its revolutionary new line. Write today on your school letterhead for a free sample.

Analgesic Balm

★

Special ("Hot") Analgesic Balm

★

Germicide

★

Anti-Fungal Spray

★

Athletic Ointment

★

Tape and Bandage Adherent

★

Tape Remover

★

Dextrose Tablets

★

Salt Tablets

★

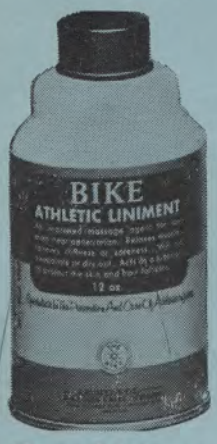
Aspirin Tablets

★

Ammonia Capsules

★

Trainers Kit



Foam Liniment

Foot and Body Powder

Skin Toughener

ONE SOURCE FOR ALL YOUR TRAINERS SUPPLIES

Sold only by sporting goods dealers

BIKE

The Bike Web Company
Division of The Kendall Company
309 W. Jackson Blvd., Chicago 6, Ill.