

TRAINERS JOURNAL

SECTION

THE NATIONAL ATHLETIC TRAINERS ASSOCIATION

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No. 1

Official Publication
Of the National Athletic
Trainers Association

The Value and Methods of
Home Treatment for
Athletic Injuries
Frank Wiechec

Preparatory Drills for Football
Players
Albert Baumgarten

Ankle Injuries
Percy Quinlan

Trainer Henry Schmidt and
Coach L. T. "Buck" Shaw
University of Santa Clara



The High School Trainers Plan

AT a time when much emphasis is being put upon the physical fitness of the youth of our country, the high school trainer's plan is being proposed by the National Athletic Trainers Association through its publication *The Trainers Journal*.

Three things are necessary for the successful working of the plan: (1) An organization to head up the plan, to outline it and to send out material; (2) The co-operation of coaches to start it in their schools and (3) Four boys in every high school who have a desire to take the training course.

The first of these is assured as the officers and directors of the National Athletic Trainers Association have pledged their support.

The Coaches Responsibility

1. The coach will select four boys, one from each of the four high school classes. It may be suggested here that a conference with the instructor of the hygiene classes will help in the selection of boys who have shown a special interest in this study.

2. The senior class trainer in many cases will be the team manager.

3. Coaches should provide their trainers with a copy of the *Trainers Journal* and instruct them to keep the issues throughout their high school years, four, three, two and one as the case may be. The lessons will be continuous and progressive throughout the four-year course. Naturally this year, all student trainers will get the same material, but as the years pass, the lessons will progress.

4. The student trainers are to assist the coach and the medical supervisor or school physician.

5. The coach should explain to the boys whom he selects that they are to enter the course as upon any study course, to learn and to apply their knowledge in a practical way. By the time the freshmen trainers have become senior trainers, a coach will have helpful trainer assistants and will have been relieved of many of his arduous training duties.

The Student Trainers Program

1. The training lessons will be taken from the pages of the *Trainers Journal* and will be studied under the direction of the team medical supervisor or in consultation with him.

2. The course will include diet; exercises; protective gear for ankles, knees, shoulders, hips, wrists, etc.; all types of bandaging; body structure; treatment of injuries; hydro-therapy, electro-therapy, etc. These subjects will not necessarily be in the order named but in an order designed to sustain the interest of student trainers.

3. Many coaches now have managers who assist in the weighing in and out of the athletes. This duty may easily be assigned to student trainers. This is a simple task but an important one. The weight chart is as fundamental as the sterilizing of a surgeon's instruments. Weight charts tell the coaches the answers to the questions, is the boy getting too much exercise, too little, enough sleep, enough food or the right kind.

4. The student trainers' field is comprehensive. The extent of the responsibility put upon the trainers will depend upon the coach and his selection of trainers.

(a) They should have a knowledge of the social restrictions that their coaches put upon their athletes outside the training hours, such as late hours, drinking, smoking and dates. This should not be interpreted that the student trainer is to act as a spy. (b) They should have a knowledge of prophylactic care and responsibility for it, dependent again upon the coach. The study of each athlete will bring out individual factors that will go a long way toward preventing injuries. In this connection student trainers should:

(a) Examine the records of the athletes made by the examining physician at the beginning of the training period; (b) Have a knowledge of taping, bandaging, etc.; (c) Inspect the equipment and the proper fitting of it; (d) Keep continuous records as to the weight and general physical condition of the athletes; (e) Know about emergency care when a phy-

sician is not available; (f) Know about skin abrasions, blisters, boils, etc. and report them at once; (g) Recognize ligament and muscle injuries; (h) Recognize the seriousness of injuries that require the immediate services of a physician. Have a knowledge of diet. Information on diet will be given out in the *Trainers Journal*. Student trainers should familiarize themselves with this information.

5. Student trainers may be most helpful to the coach in assisting with the proper exercises for each sport. Athletes are hardened by systematic exercises which are an exact science and vary with the sport. It may be noted that the preparatory drills for football players by Albert Baumgarten in this issue are illustrated by a high-school boy.

6. Student trainers may assist in building protective equipment. A great deal of money may be invested in modern up-to-date equipment and training room fixtures. Where the funds are limited, student trainers may build protective and preventative equipment out of odds and ends found around the average locker room. To this end the *Trainers Journal* will endeavor to contribute by describing and picturing homemade devices now in use.

7. Most important of all responsibilities that student trainers should assume is that of an absolutely clean training room. There is no excuse for an insanitary training room which is dedicated to the prevention of ills.

8. Student trainers should familiarize themselves with the equipment and supplies needed in the training room. The listing of supplies for the model training room in this issue for three budgets, may be studied with interest.

The National Athletic Trainers Association has one object in sponsoring this program—that of decreasing injuries among the athletes, and is appealing to the boys in the high schools to join in the program. Enroll at once with your coach and ask that he send your name to the secretary of the National Athletic Trainers Association, Iowa City, Iowa.

BILL FORT

THE TRAINERS JOURNAL

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Officers National Athletic Trainers Association
For 1941-1942

President, Lloyd Stein, University of Minnesota
1st Vice-President, John Kelly, New York University
2nd Vice-President, Henry Schmidt, Santa Clara University
3rd Vice-President, Wilbur Bohm, Washington State College
Executive Secretary and Editor of Trainers Journal, Bill Frey
Office of Publication, Iowa City, Iowa

Trainers, Here We Are

HERE is the first issue of the Trainers Journal, according to the announcement made in June. It is a modest beginning but with the enthusiasm and co-operation already shown by many trainers in various parts of the country the Trainers Journal will grow.

Five years ago when the National Athletic Trainers Association was founded in Des Moines at the time of the Drake Relays, it agreed upon a broader purpose than to organize merely for goodfellowship and an exchange of ideas among its members. It immediately set up an educational program and began issuing bulletins which contained articles by outstanding trainers and doctors interested especially in training of athletes.

The distribution of our bulletins was necessarily limited. Our educational program on the fundamentals of training called for a monthly magazine, one that would reach every high school and college that had an athletic program. The many requests that came to us for our bulletins was evidence that there was a demand for a wider distribution.

Many of our athletic trainers have been able and willing to assist coaches and high school athletes in their vicinities with training problems. At coaching schools and clinics where some time has been allotted to training subjects, much interest has been shown by coaches in attendance.

We are cognizant of the fact that thousands of our high school coaches have to do all or much of the actual taping of their athletes and care for the minor injuries. The school physician, who in many cases is the town physician, devoting in addition to his regular practice some time to high school athletes, does not have time to attend to the taping and minor injuries. We are therefore suggesting the High School Plan, explained elsewhere in the Trainers Journal. High school coaches, who in the past have had the training responsibilities of their boys have seen great possibilities in this plan, and have shown a desire in the clinics this summer, where the plan was explained in detail, to follow it.

for SEPTEMBER, 1941

UNDER THE SHOWERS



LLOYD STEIN, President of the N. A. T. A., has worked with Bernie Bierman, of Minnesota, the past nine years. Lloyd was at one time one of Bierman's great guards. He is the sort of trainer that goes back to school every summer, always on the watch for better ways to do this or that—truly a very fine trainer.

William "Bill" Dayton, head trainer at the University of Miami, represented the N. A. T. A. at the Florida coaching school held at Daytona Beach during August. He presented the high school trainers plan and reported a very favorable response by the coaches to this much needed program.



JOHN KELLY, head trainer at New York University and first Vice-President of the National Athletic Trainers Association, has offered his services and training room facilities to all athletes in the greater New York area. This coincides with the educational and co-operation theme song of the N. A. T. A. We encourage every trainer to give his time and information to all high school athletes.

Frank Hugo, the head trainer at Syracuse University, has served that school for the past seventeen years.



HENRY SCHMIDT has trained the Santa Clara teams for the past thirteen years. He and Jack Heppinstall, who is the head man at Michigan State College, have many an interesting talk as their two teams meet each year on the football field, first on the West Coast and then in the Mid-West. Schmidt is now the second vice president of the N. A. T. A.

Frank Kavanagh, trainer of the 1936 Olympic teams, has been at Cornell University for twenty years. He was on the bench during the All-Star game this year with his coach, Carl Snavely, who was the All-Star coach.



WILBUR BOHM of Washington State College has just completed a very fine book for trainers and physical education men, "Research and Writings on Training, Conditioning, Treatment of Athletic Injuries and Corrective

(Continued on page 41)

The Value and Methods of Home Treatment for Athletic Injuries

By Frank J. Wiechec
Athletic Trainer, Temple University

It has often been noted that comparatively simple injuries such as ankle sprains, shoulder separations, muscle contusions and knee injuries have kept boys from participating in sports for weeks and even months. It would be possible to cut down this long convalescence or absence from competition, if the trainer would instruct a boy in home treatment and provide the necessary apparatus to carry on treatment. In nearly all cases of injury, although facilities are available and the boy receives treatment either from the trainer or in a hospital physical therapy department, he can, as a rule, have only one treatment a day. The boy's daily class work and the large number of people to whom the trainer must give attention during the day prevent more frequent treatments. I think this is one of the reasons why it takes so long for injuries to heal.

If an injury were treated three or four times a day, the patient would recover more rapidly. Since it is not possible for a trainer or a physical therapy department head to devote that much time to one boy, it is, therefore, best to instruct the boy himself in treatment and have him carry it on at home. This, plus his regular hospital treatment, should materially cut down his time of convalescence.

In many hospitals, patients who are referred to the physical therapy department for treatment invariably receive instructions in methods of treatment that may be carried on at home. Frequently instruction is given in the application of heat, massage and exercise. Since these three phases of physical therapy are often used by trainers in treating athletic injuries, let us discuss methods of treatment and types of apparatus that injured athletes may use. The simple methods of heating that the trainer can teach the athlete to use at home are the following: (1) heat lamp, (2) paraffin bath, (3) hot compresses, and (4) contrast bath.

Heat Lamp

As part of my equipment at Temple University I have five small clamp lamps which I loan out to various boys for treatment at home. The lamps are small, light and inexpensive, and, if lost, can easily be replaced.

The important part of a lamp is not the stand or the reflector but the heat element

itself. This may be a resistant metal rod or a bulb. I prefer the use of bulbs for lamps rather than metal resistant units because medical experiments have demonstrated that the heat penetration from bulbs is greater than from the units.

The heat lamp is easily set up, not difficult to apply, and there is little danger of receiving burns from it. Almost any part of the body can be treated by the lamp. For best results it should be placed about fifteen to eighteen inches away from the injured part, for a period of not less than thirty minutes. Both the lamp and the part being treated should be covered with a sheet so as to prevent the rapid escape of heat.

Paraffin Bath

Melted paraffin is another heating agent that may be utilized by the injured athlete at home. It is a good source of heat and the close contact of the wax will keep the part warm for some time. I have found that better results are obtained with

BEFORE becoming head trainer at Temple University, Frank Wiechec served as supervisor of technical work and technicians in the department of Physical Therapy at the Mayo Clinic from 1936-38.



Frank J. Wiechec

paraffin than with the heat lamp in treating injuries of the extremities such as toes, fingers, wrists, ankles and hands. The lamp will give heat only to one side of the extremity while immersion of the injured part in wax will provide uniform heat around the entire part.

For treatment, about three or four pounds of paraffin, or jelly wax as it is commonly called, should be used. The wax is heated in a double boiler until it is liquefied. It is then allowed to cool until a thin, white coating appears on the surface. It is then ready for use. In treating fingers or toes, dip them in and remove the wax until several coatings have been applied, then let them remain immersed in the wax for twenty minutes, insisting that the patient not move his fingers while they are covered by the wax. The injured part can then be taken out and the wax peeled off like a glove. To treat wrists, elbows, ankles and knees obtain a paint brush or a wooden handle covered with gauze, dip this in the wax and paint a coat over the entire area to be treated, until the part is completely covered. Then paint ten to twelve coatings on top of the wax. Cover with a towel or blanket and leave on for twenty minutes. Peel off the wax and the part is ready for further treatment. If the part to be treated has a great deal of hair, it will be necessary first to coat the area with some oily substance such as mineral or olive oil before applying the wax. This will prevent wax from sticking to the hair.

Hot Fomentations

Heavy turkish towels, flannel or ordinary woolen blanket may be used. Wet and dip in hot water, 115 to 120 degrees of heat. Wring out and place on the part of the body to be treated. Cover with a piece of flannel or woolen cloth to prevent the escape of heat. Renew the fomentations frequently for a period of thirty to forty-five minutes. This type of heat is not so satisfactory as that which is given off by a heat lamp nor as that from a paraffin bath. Not only does the rapid cooling of the towels necessitate frequent replacement, but the towels are also clumsy and difficult to apply.

Contrast Baths

This is still another type of treatment

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TAKES PRECEDENCE OVER ALL OTHER EQUIPMENT IN TRAINING ROOM FOR TREATMENT OF ATHLETIC INJURIES OF EXTREMITIES.

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Iowa City, Iowa

may be used for sprains, strains, and
circulation and relax the muscles.
Use two deep buck-
two-thirds filled with water as hot
be borne safely and comfortably,
other two-thirds filled with cold tap
Place the part to be treated in the
water three minutes, then in the cold
water one minute. Alternate from hot
water for a period of twenty-four
minutes. Begin and end in the hot water.
For shoulders, knees and other parts of
body. Secure a bath spray or a rub-
ber hose and attach it to a hot and cold
faucet. Use the hot spray for five
minutes, then the cold spray one minute,
then the hot spray three minutes and the
cold spray one minute. Continue chang-
ing for twenty-six to thirty minutes. Al-
ways end with the hot spray.

Massage

Massage is an important adjunct to
treatment. Since it is not possible for an
individual to massage himself, I have
found that, if instructions on massage are
written out, explained and demonstrated
to the boy, he in turn is able, with the aid
of the instruction sheet, to have some one
at home give him massage. The follow-
ing instructions may be given a player for
home treatment.

Rules for Massage. 1. Be sure that the
part to be massaged is relaxed and com-
fortable and that the clothing is not tight
or binding. 2. Have someone else give
the massage as it is almost impossible to
massage one's self. 3. Massage well above
and below the affected area. 4. Heaviest
pressure should be on the upward stroke
toward the heart, lighter pressure on the
downward movement. 5. Massage should
be deep, firm, slow and rhythmical. Keep
the hand in contact with the skin at all
times. 6. Massage should rarely be pain-
ful.

Direction of Massage. The arm: Mas-
sage from elbow to shoulder, wrist to el-
bow, finger tips to wrist. The leg: Mas-
sage from knee to hip, ankle to knee, toes
to ankle. The back: (1) Massage from
the muscles of the back on both sides of
the spine from buttocks to neck; (2) from
buttocks to underarm; (3) along the
spine, and (4) over the entire back.

Movement of Massage. 1. Stroking:
This is a long, smooth movement. Keeping
the hand in contact with the skin, begin
lightly and gradually increase the pres-
sure. 2. Knending: This consists of grasp-
ing, wringing, lifting, rolling or pressing a
part of a muscle or muscle group. Take
care not to pinch with the finger tips.
Use the entire hand and arm in the move-
ment. 3. Friction: Move the fingers or
thumbs in small circles, making the skin
slide around over the underlying struc-
tures. Do not use a powder or lubricant
(Continued on page 40)

Preparatory Drills for Football Players

By Albert Baumgartner
Gymnasium Coach, State University of Iowa

COACHES have for some time recognized the value of early conditioning exercises for conditioning football players. Close observation will show that a backfield man needs different exercises from those required by a center, and a center likewise requires different exercises from those given an end. These special exercises are suggested in addition to your regular conditioning exercises.

When an athlete changes from one sport to another, it is a fact that he must exercise the muscles not extensively used in the previous sport and gradually accustom the muscles to the requirements of the sport he is to enter. This set of illustrations will be followed by illustrated exercises for other sports during the year. The initial position in each of the illustrations in this issue is shown at the top of the action at left.—Editor's note.

For the Ends

1. *Position:* The body is facing forward and supported by the hands on the feet, thighs extended, hands about half arms length ahead of the shoulders and shoulder-width apart; the legs should be held straight (Illustration 1). *Action:* Flex the arms so that the hands touch the ground, keeping the forearms parallel with the body. Extend the arms to starting position and repeat.

2. *Position:* Stand with the legs slightly apart, forearms forward with fingers pointing upward and slightly inward (Illustration 2). *Action:* Fall forward and land on the hands; flex the arms slightly to catch the fall.

3. *Position:* The body is facing forward and supported by the fingertips on the feet, thighs extended, the back straight, hands directly below the shoulders and shoulder-width apart (Not illustrated). *Action:* Flex the arms until the chest almost touches the ground, then extend the arms to starting position and repeat.

4. *Position:* Flex the knees fully (Illustrations 3 and 4). *Action:* Alternate left and right, place the leg forward, backward and backward.

For the Tackles

5. *Position:* Double front leaning position by two. Both men face each other, hands grasping each other, the feet of one man between the feet of the other (Not illustrated). *Action:* Against the resistance of the man that remains standing



Reparatory Drills for Football Players

By Albert Baumgartner
Gymnasium Coach, State University of Iowa

COACHES have for some time recognized the value of early morning exercises for conditioning their field men. Close observation will show that those required by a center, a tackle or a guard requires different exercises from those given an end. These specialized exercises are suggested in addition to the conditioning exercises now on the program.

When an athlete changes from one sport to another, it is a fact that he must exercise the muscles not extensively used in the previous sport and gradually accustom the muscles to the requirements of the new sport. This set of illustrations will be followed by illustrated exercises for other sports during the year. The position in each of the illustrations on this issue is shown at the right and at left.—Editor's note.

For the Ends

Position: The body is facing downward and supported by the hands and forearms extended, hands about one-third length ahead of the shoulders, shoulder-width apart; the back is held straight (Illustration 1). **Action:** Flex the arms so that the elbows touch the ground, keeping the forearms with the body. Extend the arms to starting position and repeat.

Position: Stand with the legs slightly apart, forearms forward with fingers upward and slightly inward (Illustration 2). **Action:** Fall forward and place the hands; flex the arms slightly to the fall.

Position: The body is facing downward supported by the fingertips and forearms extended, the back held straight, hands directly below the shoulders, shoulder-width apart (Not illustrated). **Action:** Flex the arms until the fingertips touch the ground, then extend the arms to starting position and repeat.

Position: Flex the knees fully (Illustration 3 and 4). **Action:** Alternately, place the leg forward, side-ward, backward.

For the Tackles

Position: Double front leaning rest. Both men face each other, with their feet overlapping each other, the feet of one man between the feet of the other (Not illustrated). **Action:** Against the resistance of the man that remains standing.

The other man lowers himself slowly to the back-lying position. The man slowly gives in with the trunk bending forward and so places himself on the front leaning rest on the other man's hands. From this position, either at a time or both together flex and extend the arms. The top man pulls the other man upward and both change position.

Position: Flex fully both knees (Illustration 5). **Action:** Walk forward and backward with alternate trunk bending forward right and left.

Position: Stand with the legs apart, right knee fully flexed, the right leg extended sideways, the hands placed on the hips (Illustration 6). **Action:** Alternately change the knee flexion from left to right and right to left.

Position: Lie on the back with hands on hips (Not illustrated). **Action:** Slightly raise the trunk with the head loosely hanging backward.

For the Guard

Position: Flex the knees fully and place the hands on the ground outside the knees and near the toes (Illustration 7). **Action:** Extend the knees sharply, with palms of hands remaining on the ground.

Position: Take a wide walk position and place the hands on the ground; keep the body erect (Illustration 8). **Action:** Alternately flex and extend the arms so that the body lowers and rises with the arm movements.

Position: Bend the trunk forward and place the hands in front of the toes; knees remain straight (Not illustrated). **Action:** Take small steps forward and backward on hands and feet.

Position: Stand with the legs apart, right hand placed on the head, the left hand on the hips (Illustration 9). **Action:** Bend the trunk to the left, both hands assisting by a powerful pressure. Do the same to the right with change of hand position.

For the Center

Position: Stand with the legs wide apart and with the hands grasp the ankles from behind (Not illustrated). **Action:** Flex the arms and pull the trunk downward until the head is between the legs and near the ground.

Position: Stand with the legs apart, the knees slightly flexed and the hands placed on the knees (Illustration 10). **Action:** Flex the knees as much as possible so that they touch each other. Do this at least twenty times.

Position: Stand with the legs apart, right knee flexed; the hands are placed on the hips (Not illustrated). **Action:** Vigorously change the knee-flexion with a

(Continued on page 40)



Training Room Equipment for Three Types of Budgets

By William Dayton
Trainer, University of Miami

TRAINING room equipment for three types of budgets has been suggested by William "Bill" Dayton, head trainer at the University of Miami, with the hope that each reader will find these recommendations helpful. Compare your own equipment with that suggested here. It may be that you can

add a valuable piece by some small effort and ingenuity. If you are just setting up a training room you will find that one of these budgets not only will save you time and money, but will give you the benefit of the experiences of others in selecting materials of this type. Quantities and names of manufacturers

have been omitted. Ailments and treatments for them that are peculiar to unusual climates have been disregarded. The rule, or average, rather than the exception has been the basis for the selections.

Consult your medical supervisor before you proceed.

EDITOR'S NOTE

EQUIPMENT AND USES

For Unlimited Budget	For Limited Budget	For Small Budget
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EQUIPMENT AND USES	For Unlimited Budget	For Limited Budget	For Small Budget
Message tables. For treatments and taping. The size of the ideal training table is twenty-three inches wide, six feet, six inches long by thirty inches high. The top should extend at least three inches over the frame at each end and should be padded and covered with canvas.	X	X	X
Diathermy machine. Excellent for treatment of sprains, pulled muscles, etc.	X	X	X
Whirlpool bath. Excellent for heat and massage at the same time. Use in sprains, strains, etc.	X	(A)	
Heat lamps. Infra-red, radiant heat. Use when you wish a surface heat.	X	(B)	(C)
Paraffin bath. Excellent for fingers and toes, ankles, knees, wrists, etc.	X	X	X
Scales and weight charts. Daily weights should be recorded before and after each practice.	X	(D)	X
Salt tablet dispenser. Use for the prevention of dehydration and heat exhaustion.	X	X	(E)
Field kit. Necessary for use outside the training room and on trips.	X	X	X
Ankle wraps. For the prevention of ankle injuries. These may be purchased in rolls, then cut to length.	X	X	X
Disinfectant. For lockers and training room floor. Training room should be cleaned every day.	X	X	X
Adhesive tape. Use for prevention and treatment of injuries.	X	X	X
Liquid adhesive. For small dressings.	X	X	
Gauze dressings. (Sterilized)	X	X	X
Sterilized pads in individual bags handy for dressings.	X	X	X
Small Dressings for minor cuts. Gauze and adhesive combination.	X	X	X
Thermometer. When in doubt use, or call a physician.	X	X	X
Tweezers	X		
Scissors	X	X	X
Nail clippers. Long finger nails are dangerous. If one should break off, much pain may result. Cut nails short.	X		
Applicators. (Wood.) Use to make swabs for application of medicaments.	X	X	
Stretcher. Players who have been injured should not be dragged or lugged from the field.	X	X	X
Sponge rubber. Use to prevent and protect injuries.	X	X	X
Felt. Use to prevent and protect injuries.	X		
Fibre board. Use to make protective equipment.	X		
Heat pads. Electric three-way switch type. Use after hemorrhage has stopped. Chemical heat pads are very satisfactory and better to use on trips.	X	X	X
Ice bags. For immediate application of ice at the time of the injury.	X	X	(F)
Steam box. To heat canvas packs for use on injured parts after hemorrhage has stopped.	X	(G)	(G)
Foot tub. Use in showers for the prevention of athlete's foot.	X	X	X
Tongue blades. For examining the throat and to apply ointments.	X	X	
Atomizer. Easier and more comfortable than swabbing a sore throat.	X	X	
Epsom salts. Excellent for hot water treatment.	X	X	
Tape remover. It is important that you use a fluid that is non-inflammable. Ether is highly flammable. Carbon tetrachloride is very good.	X	X	X
Collodion. Use cotton and collodion for small dressings on the face.	X	X	X
Cotton. Use sterilized cotton for the cleansing of wounds. Use it also for the base of pressure wraps.	X	X	X
Corn and bunion pads. For relief of corns and bunions, and also for protection for small injuries. Use under tape.	X		
Rosin. Use on hands to prevent fumbling.	X		
Elastic bandages or para rubber bandage. For compression over site of injury.	X	X	X
Analgesic balm. Excellent for heat. Is a counterirritant. Use on bruises, contusions, sprains, pulled muscles, etc.	X		
Hot liniments. May be made by using mineral oil as a base, adding oil of wintergreen, etc.	X	X	
Lubricants for massage. Mineral oil, olive oil, cold cream, etc. Use as a lubricant only.	X		
Powders. Foot powder for sweating feet. Talcum for chapped hands. B. F. I. for treatment of wounds. Monsell—styptic—for the stopping of bleeding.	X		
Benzoin, compound tincture. Use to toughen skin, also as base for tape. Prevents tape rash.	X	(H)	(H)
General. Aromatic spirits for nausea. Ammonia capsules for restorative. Bicarbonate of soda for nausea. Aspirin for relief from headache and pains. Surgical soap for cleansing of wounds—very fine for removal of cinders after track injury. Laxatives as mineral oil, castor oil, etc. Oil of cloves for relief of toothache. Petrolatum, to prevent dressings from adhering to wounds. Calomine lotion for prickly heat and other rashes. Pepto-Bismol for diarrhea. Ethyl chloride, an anesthetic for use in removal of splinters. Dextrose for quick energy. Listerine and Lactoris for gargle. Boric acid solution for washing eyes.	X	(J)	(J)
Ointments. Ichthyol ointment—ten per cent used in dressing boils. Ammoniated mercury—ten per cent used on gym itch. Whitefields ointment for gym itch. Zinc ointment—soothing and healing.	X	(K)	(L)
Butesin Picrate. Antiseptic and anesthetic. Use on burns, especially lime burns.	X	(L)	(M)
Antiseptics. Alcohol, iodine, metaphen, mercurochrome, potassium permanganate, all used for disinfecting wounds.	X	(M)	
	X	(N)	
	X		

(A) Buckets may be used filled with hot water and towels dipped into them, then placed on the injury.
 (B) Heat lamps, large or small. Mild heat for a longer period of time is better than intense heat for a short period.

(C) Home made heat lamps.
 (D) Salt tablets
 (E) Salt tablets or a very liberal amount of table salt used at meals.
 (F) Towels with ice.
 (G) Pail with towels.

(H) Powders.
 (J) Aromatic Spirits.
 (K) Ammonia Capsules.
 (L) Salt Water.
 (M) Boric Acid.
 (N) Whitfields Ointment, Zinc Ointment.

Ankle Injuries

By Percy H. Quinlan

Trainer, University of North Carolina

High School Trainers Lesson No. 1

MANY a valuable athlete is benched every season in every branch of sport because of an ankle injury. This, of course, should be remedied as soon as possible in order to get him back in action.

First, let us discuss the three types of ankle injuries, (1) inversion (2) eversion and (3) forced extension. Ninety per cent of all ankle sprains are of the inversion type. This type is caused when the foot has been forced to turn in, and the ligament attachments have been overstretched beyond their optimum load.

The second type, or the eversion sprain, is caused when the foot has been forced to turn out.

The third type, or the forced extension, is caused by pressure or weight being applied to the heel while the athlete is lying on his stomach. Here you get an overstretching of the tarsal ligaments.

Now what happens when you receive an inversion sprain? The tibia-fibula ligament has been strained by being overstretched. Therefore, the lower end of the fibula has been slightly pulled away from the tibia. The same thing might have happened to the external lateral ligament. If you have both, the injury is more severe. In severe cases of this type of sprain you will notice a great deal of swelling around the external malleolus or on the outside of the foot. This is the most common type of sprain and is usually the only one for which we strap.

The eversion type is rather uncommon, and is generally accompanied by a hair-line fracture. This hair-line fracture, called a Pott's fracture, shows up on the lower condyle of the fibula. If the soreness or pain is felt around the internal malleolus (or inside) you know that it is an eversion sprain.

Simple sprains are not accompanied by very much swelling, but when they are of a severe nature there is a rapid influx of blood which collects in the ankle joint and around it.

Important. If the ankle has been strapped before the sprain occurred, have the athlete leave the adhesive on for forty-eight hours and as soon as possible have him put his foot in a pail of cold water to which cracked ice has been added. This should be done for at least two hours after the injury occurred for the purpose of checking the swelling. The more swelling there is, the more severe is the sprain or strain. This same treatment should be applied at intervals of every two hours during the first twelve hours after the injury has occurred. During the two-hour intervals, the patient should stay in bed

and keep the foot elevated.

Forty-eight hours after the sprain occurred the tape should be removed. You now have an opportunity to see how serious the sprain may be. If there is a great deal of swelling and discoloration, you can rest assured that the sprain is a serious one. All sprains of this type should have an X-ray picture, so that you may find out whether the athlete has a fracture. We owe this to the athlete. Many a grave mistake has been made by not taking a picture.

Treatment

Forty-eight hours after the injury has occurred you may start to apply the heat. I advocate three heat treatments a day. There are several ways of applying heat and all institutions do not have the more expensive methods of application. I am a strong advocate of the inductotherm and short wave diathermy treatments.

FOLLOWING his graduation from Springfield College, Mr. Quinlan coached and served as trainer at Penn State and Virginia Military Institute. For the past twelve years he has held the position of head trainer and varsity wrestling coach at the University of North Carolina.



Percy H. Quinlan.

This is deep penetrating heat and that is what it takes to break up the congestion and to stimulate a complete circulation. This type of heat will penetrate as deep as the periosteum (or the filament of the bone). Each of these treatments should last from twenty to thirty minutes.

In a week's time the ankle should be massaged lightly while the foot is kept elevated. I use the vibratory type of massage. When the soreness has disappeared, the ankle should be worked and exercised but not too strenuously. An athlete who has received this type of sprain may be benched for three weeks and in many cases for a much longer duration. Be careful and do not put him in action until he has made a complete recovery. A fairly good substitute in good physical condition is far more efficient than a crippled star. I dislike seeing a star performer carry an ankle limp for a whole season when it is absolutely unnecessary.

In reference again to treatment, I will mention other types of heat to be applied. I believe the following types will not be as efficient as the above-mentioned, but I realize that we all cannot have cream in our coffee. Infra-red or the Thermolite are lamps which will aid immensely. In using all these devices, care must be taken not to burn the skin. Here is a suggestion for the boy who has no opportunity to get any of the treatments, mentioned above. Fill one pail with hot water and a second one with cold water to which ice has been added. Immerse the foot in one and then in the other at intervals of every twenty or thirty seconds. Keep this up for at least one-half hour three times a day.

When you decide that the athlete is ready for action, you should not let him practice or play without being strapped with adhesive. Adhesive properly applied is far superior to the linen wrap. I personally use mole-skin tape on this type of ankle.

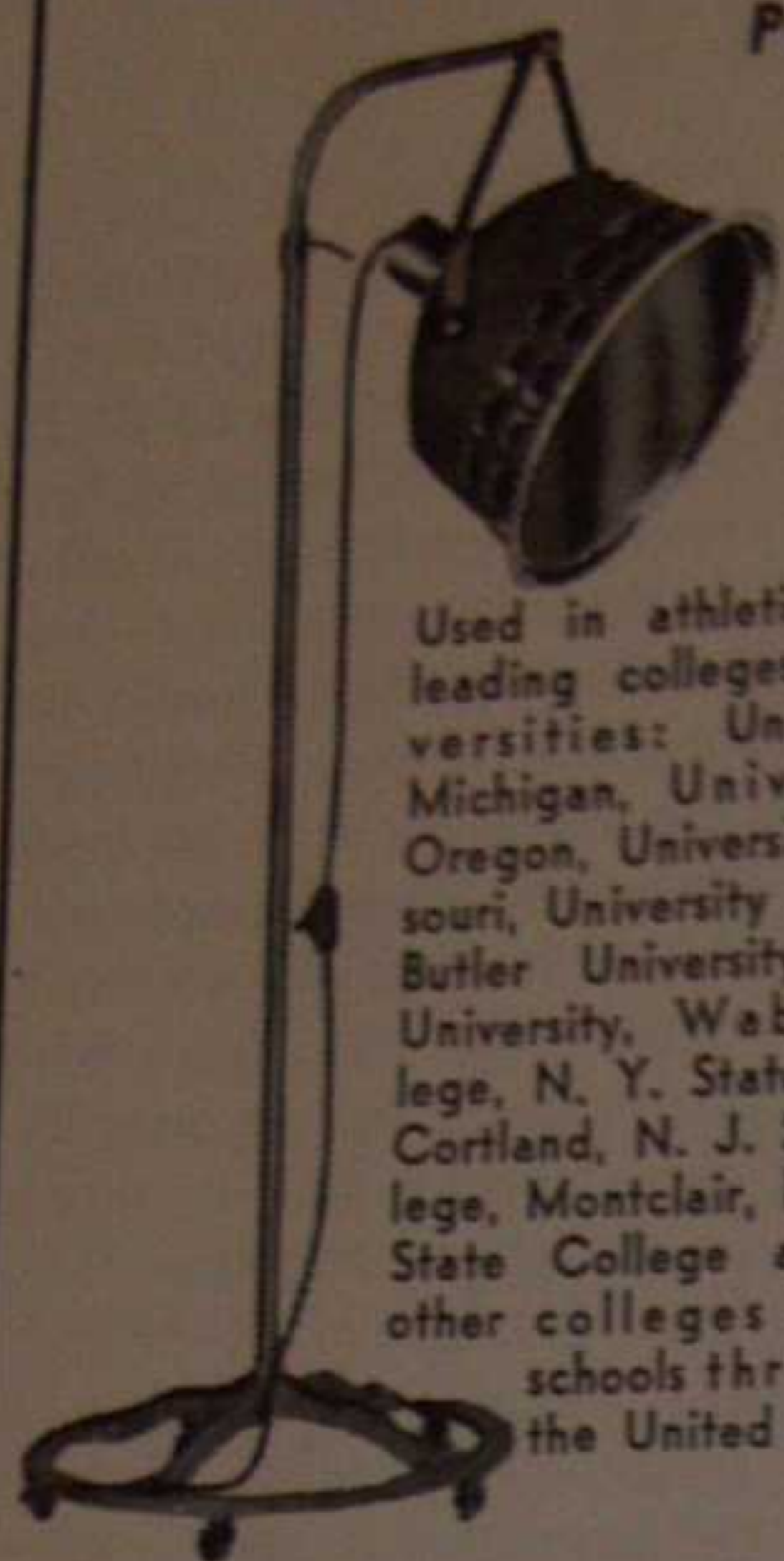
Precaution

Every man on your squad should be issued a pair of linen ankle wraps. They should be at least eight feet long and two inches wide. Every member of the squad should be shown exactly how to apply these wraps. If applied incorrectly they will cause a sprain. Wrap them fairly tight and always work pulling out and up when wrapping. Make this wrap fast above the ankle with tape and fix securely. With a squad of fifty or sixty men it is impossible for a trainer to strap every man with adhesive. Therefore, ankle wraps should be furnished. If you have several weak ankles on your squad, I

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would advise strapping with adhesive every day. On days of a game I strap from sixty to eighty ankles. I, personally, apply from ten to twelve miles of adhesive (two inches wide) annually. I find it pays. Whatever method of strapping you use, it should be such as to prevent the foot from turning in as 90 per cent of all ankle sprains are of the inversion type. I enclose the whole ankle with adhesive when I strap. This is different from the basket weave with the break in front. If a break is left in front, as in most basket-weave strapping, the ankle does not have the proper support.

Preparatory Drills for Football Players

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gradual enlargement of the stride position through sideward placing of a foot.

16. *Position:* Stand with the legs apart, hands extended upward (Not illustrated). *Action:* Rotate and bend the trunk to the right and immediately return to the starting position and rotate and bend the trunk to the left. Knees should remain straight during the exercise.

For the Fullback

17. *Position:* Place the right leg backward (Not illustrated). *Action:* Swing the thigh forward till horizontal or at right angles to the trunk; then fling the leg forward with the toes pulled backward. Repeat this several times.

18. *Position:* Lie on the back, the right leg flexed and the sole of the right foot on the ground (Not illustrated). *Action:* Raise the left leg and grasp the left ankle with both hands. Pull the left leg to the chest. In this position extend the right leg.

19. *Position:* The body is facing downward and supported by the hands and feet, thighs extended (Not illustrated). *Action:* Move and circle the hip sideways left and right. (Increase the movement-circumference and speed.)

20. *Position:* Lie on the back, legs raised backward with the toes touching the ground behind the head, thighs extended, arms raised overhead (Illustration 11). *Action:* (a) Swing the legs forward; (b) Raise and bend the trunk forward, grasp the feet; (c) Return to starting position and repeat.

21. *Position:* Stand with the legs apart, left knee flexed, trunk bent loosely to the left, right arm hanging over the head, left arm toward the ground (Not illustrated). *Action:* Push the hip to the left and change the knee flexion from left to right, swing the trunk to sideward flexion right, the left arm hangs over the head and the right arm towards the ground.

For the Halfback

22. *Position:* Lie face down, legs extended back; grasp the ankles. *Action:* Swing forward and backward (Not illustrated).

23. *Position:* Flex the knees; place the hands on the ground between the feet (Illustration 12). *Action:* Extend the right leg backward and swing it forward without touching the ground. Do the same with the left leg.

24. *Position:* Lie on the back, with the arms on the side of the body (Not illustrated). *Action:* Raise the trunk until you rest on the neck. (Trunk and legs vertical.) From here, swing the trunk alternately left and right towards the ground until they touch the ground.

25. *Position:* Lie on the back, legs extended forward, toes touching the floor behind the head, arms parallel to the body (Not illustrated). *Action:* Straddle the legs forward and close them again. Do this rapidly and snappy.

For the Quarterback

26. *Position:* Sit with the legs extended (Not illustrated). *Action:* Grasp the lower leg with both hands and pull up to the chest. The legs and back remain straight as much as possible.

27. *Position:* Lie on the back, with the legs raised a hand-breadth from the ground (Not illustrated). *Action:* Alternate left and right, pull the knee to the chest with the help of the hands.

28. *Position:* The body is facing downward and supported by the hands and feet, thighs extended (Not illustrated). *Action:* Hop forward with the legs in a straddle stand and return.

29. *Position:* Lie on the back, legs extended forward, toes touching the ground behind the head, arms sideward (Not illustrated). *Action:* Make semi-circles of the legs to the right and left; toes on the ground.

The Value and Method of Home Treatment for Athletic Injuries

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and do not allow the fingers to slide over the patient's skin. 4. Begin and end the massage of each part with stroking. Finish with a very light stroke. 5. The time required for a massage: arm, five to ten minutes; leg, ten minutes; back, ten to fifteen minutes.

Exercise

Too frequently athletes return to play after recovering from an injury only to find that the injured part cannot stand

...of play imposed upon it. ...and players seem to forget that ...tearing of the surround- ...a consequent weaken- ...with the injury itself. ...return of function ...it is as ...weaken the ...Corrective exercises are, ...strengthen the af- ...surrounding the af- ...Walking or running is not ...to strengthen an ankle ...It is necessary to have one or ...for each muscle or ligament ...in an injured region and ...The wise trainer will take time ...a group of exercises, then give ...to the injured player who should ...at home and at any other ...time that he has. Exercises may be ...as soon as heat and massage are ...They should be graded in ...Soon after injury they should ...then, as pain subsides and func- ...returns, the exercises should be ...and made more strenuous.

Under the Showers

(Continued from page 33)

Wilbur is one of the leaders of the N. A. T. A., handling the West Coast section, since the association was founded. He is now acting as third vice-president of the N. A. T. A. The profession needs men like Bohm. We award him the month's "Gold Plated Bucket" for outstanding work in the N. A. T. A.

J. S. Picariello, head trainer at Long Island University, the school of the famous basketball teams, has been appointed manager of the section surrounding New York City to handle the new high school training program. Picariello presented the plan sponsored by the N.A.T.A. to the coaches attending the Eastern Coaching School during August. He also handled the training program for that clinic. Coaches wishing to receive more information about the above mentioned plan should contact Picariello or the N.A.T.A. office.

Bob Bauman of the St. Louis Browns baseball team has been appointed chairman of the professional baseball trainers division of the N.A.T.A. Bob is one of the charter members of the association and has contributed some fine articles on the injuries of baseball players. He has secured many of the outstanding baseball trainers for membership in the association during the past few years. After the baseball season, he is head trainer for St. Louis University.

Jack Stuart did such a fine job as state manager of the N.A.T.A. while at Mississippi when he moved to the state as head trainer at "Ole Miss." Besides training athletic teams, Jack has studied law and some day the training profession may lose a good trainer.

West Point has the right idea about trainers. They now have two of the best in Roland Logan and Rollie Bevan. Bevan moved to West Point with his coach, Red Blaik. Up until that time Bevan was head trainer at Dartmouth. More schools should follow the example of West Point and employ more good trainers to discharge properly the many duties incident to training. Too many schools are trying to do the job without enough help.

Bill Raney, head trainer of the University of Alabama, has recently been appointed state manager of Alabama, replacing Jack Stuart who has moved on to Mississippi University, representing the N.A.T.A. He will have complete charge of the high school trainers' program. Coaches from that state or surrounding states wishing to receive information about this plan should contact Raney. Bill has trained the Crimson Tide for several seasons. Your editor recently had the pleasure of reviewing Bill's new training quarters at Alabama, and found them to be complete in every respect. There is electrical equipment enough to make Steinmetz envious and gadgets that would have given Edison a thrill. The N.A.T.A. is very grateful for men of Raney's ability to act in the important position of state manager.

Raney has the niftiest way to apply benzoin or tuff-foot to any part of the body. He merely uses an insect spray gun filled with either fluid. It gives an even surface of benzoin and prevents waste. Because of the fine spray that the gun affords, the benzoin dries more rapidly, permitting the trainer to work on the part sprayed much sooner. Benzoin prevents tape rash, and enables the user to remove tape much more easily, as well as making possible perfect adhesive surfaces. Bill also uses a common squirt can to apply his rubbing dope. The can is handy, will not leak and will not spill. It is simple but good. Thank you, Raney, for the two helpful suggestions on handy gadgets for the training room.

Leonard Mann has trained athletic teams for the past thirty-five years. Fifteen of these were at Chicago University, two at Penn State and the rest at his present school, Purdue University. Reports come to me that the training rooms at Purdue University are the finest in the Big Ten. Purdue has in Dr. Floyd Eastwood a man who is doing much toward improving training methods and equipment. His new position on the board, recently appointed by the Football Coaches Association, will help him carry out his work nationally.

Jake Weber has been in the training profession for so long that it is easier for

him to remember the years he has been a trainer than the ones when he was not. He has trained Olympic teams and Fordham University teams, the latter for the past twenty-nine years. He is a trustee of the N.A.T.A. and almost the grandpappy of the trainers.

Howard Waite moved to Pittsburgh from Colorado University several years ago. At the latter school he had the pleasure of handling Whizzer White and has wished for another Whizzer ever since. Howard has recently perfected a knee brace that should take good care of some of the "Jikkey" knees around the country. This is a plug for Waite. His address is just Pittsburgh University.

Eugene "Scrap Iron" Young, and he comes by the name honestly, has trained the Notre Dame teams nineteen years. I have heard that he has a Tung Oil grove down south and a very large tung tree all picked out with plenty of shade around it to keep the sun off when he retires. This tree has many tung nuts on it. Why? So that "Scrappy" can name each one after one of the Notre Dame greats. He has so many greats under his care that he would have to have a very prolific tree to carry out his naming idea. A great trainer and a great school—the two together will spell poison to many a football team.

Matt Bullock is starting his twenty-seventh season at the University of Illinois as head trainer. Matt had a very serious illness a year ago and it looked as if he were not going to be able to continue his work at the school, but he has recovered and is back on the job. Zuppke has one worry off his mind—he has Bullock to condition his teams.

Every school should teach training methods to its physical education students just as Michigan State College does. The man responsible for this fine course is Jack Heppinstall, head trainer. The course is outstanding in the field of training. Future coaches are taught exactly what should be done to prevent injuries and how to treat them if they do appear. Michigan State men will know how to get the backs around the ends and also how to keep the men on the field playing. Jack has championed the trainer's cause ever since the association was formed and is one of America's outstanding trainers.

Tape Topics

UNDER the heading Tape Topics, a column will appear in the October issue and subsequent numbers of the Trainers Journal containing questions and answers on trainers' problems. If you request immediate answers to your questions they will be sent you direct, otherwise held for the Tape-Topics column. All questions should be sent to the publication office of the Trainers Journal, Iowa City, Iowa. Until October we'll be taping.

BILL FREY, Editor.