

are eight feet long, and sixteen to twenty-four inches wide. Across the upper side ribs or cleats of wood are fastened to give them strength, and along the side are hand-rails, to which the coasters may cling, and to which cushions are often strapped. The front is bent backward in a curve to form a sort of dashboard. The original toboggan slide was a natural one down the side of a hill. The artificial slide, the idea of which came from Russia, is made of boards covered with snow and ice, and often slopes down to the ground from a height of from 40 to 50 feet. In Canada and the Northern States they are a great feature of the Ice Carnivals, and furnish much sport for both sexes, who disport themselves in gay attire specially suited to the frequent spills in the snow, to which the skilled as well as the unskilled performer is often liable.

TRACK AND FIELD ATHLETICS.

BY

J. E. SULLIVAN, SECRETARY-TREASURER AMATEUR ATHLETIC UNION
OF THE UNITED STATES.

TRACK Athletics in America must now be considered as being on a very solid foundation, and experts are of the opinion that Track Athletics is the very foundation of our entire physical training structure. Running, walking, jumping, and throwing are natural forms of exercise; natural to the child and natural to the boy, and as such are considered to-day as valuable adjuncts in all educational institutions throughout America.

The history of track and field athletics in America is interesting because it shows a steady growth. There has never been a boom recorded in its history; it has steadily and quietly gone forward, and its present position is due to the hard and energetic work performed by a great many men in America during the past twenty-five years.

America held its first championship meeting, recognized as such, in 1876, and from that time to this track and field championships have been fixtures. The colleges took up track and field athletics about the same time, and from '76 to date they have held annual track and field championships.

How athletics has grown both in the outside and the college world is well known to all. The most remarkable growth in the past ten years has been school-boy athletics, and to-day the school-boy element is an important factor in athletics. The creation of the Public Schools Athletic League in the City of New York has done more for school-boy athletics than has ever been accomplished by any similar organization.

Athletics in public schools, or track and field play as it might be termed, is now conducted in a business-like manner—there is system

to it—and the boys are given ample opportunity to indulge in all forms of sport under proper regulations. What is being done by them is best shown by glancing at the report of the recent World's Elementary Schools Championships, wherein no less than 20,000 boys competed in the games held among the different schools, and 2,000 took part in the final-day competition. Such a meeting is simply remarkable and speaks well for the growth of athletics. The Public Schools Athletic League will, from now on, be popular.

It has always mystified New Yorkers that cities like Chicago, Pittsburg, Cleveland, Cincinnati, Boston, and others too numerous to mention, have not as yet organized Public Schools Athletic Leagues. It has been proven that these leagues are needed in many ways. According to the present plan in New York, a boy must be a student; he cannot have all play. The principal and teacher control the boy's right to compete. Besides that it teaches them to play fair and makes them subject to discipline. As a whole it has worked remarkably well in New York, and the benefits that will be derived from it in later years cannot be appreciated now. The members will naturally be the competitors for the high schools and colleges, they will make better students, and therefore in five or ten years from now our colleges will have phenomenal athletes.

The question of amateurism is one that is being discussed, and discussed quite generally. We have had a case of a so-called college man and amateur, who was nothing more than a fraud; who, while he was an amateur, was getting all the money he could, deceiving his companions and national officials, and then upon his retirement from athletics, he personally came forward and proclaimed that he had made money all through his athletic career. Of course, the finding out of a specimen of this kind hurts sport, and it is to be hoped that in the future the high schools, preparatory schools, and colleges will teach straightforwardness and honesty to the contestants. If they are taught these qualities they cannot go far wrong.

The history of athletics from a record standpoint is interesting. A glance at the records of '74 and '75 show that the American amateur athlete was not the possessor of an athletic "best on record." With, however, the coming of the world's greatest runner, L. E. Myers, in the early eighties, came a change in America's record books, and from that time to this America has excelled in athletics, and nearly all of the records to-day are a credit to the American athlete. We have excelled the English each time we have met them in International competition. The famous International Meeting of 1895 was the first meritorious win. Again at Paris in 1900, and at Athens in 1906, the American athlete proved conclusively his superiority. It must be said, however, that in distance running England is our superior. England produces distance men that are superior to Americans. This will be changed. Cross-country running in America will benefit the distance men, and just now we are enjoying a cross-country boom.

SPRINT OR SHORT DISTANCE RUNNING.

BY

PROFESSOR J. W. SIMS, Y. M. C. A., PHILADELPHIA, PA.

MAY we look at a programme of field-day sports? The first thing we see is the 100-yard dash. What is the chief element in this race? Is the start the most important? What is the requisite quality? A good active muscular system and lung power, and a brain that acts quickly, that will give the signal to act instantly. The man with a keen, wiry muscular system usually gets off before his opponent at the start, but is that all? What about that fellow that is always trying to steal the start? It is important to stand firm and wait patiently until you hear the crack of the pistol. I well remember being selected to act as starter in a dual meet of two of our important universities, and one of the trainers came to me, asking if I would not start the men quicker in the final heat, and my reply was, "Tell your men to set firmly, and just as soon as all are still, I will start them and not before."

A false start often wins a race, but the one who practises getting off before the crack of the pistol is the one whom honest athletes despise; but because these things do come to pass and he succeeds in gaining the prize, what satisfaction comes to him? I believe that honesty pays an hundred fold. I have heard this said, "No matter how you get there, win at any price." If demerit and dishonesty of taking mean advantage of the other fellow in a race are to win, why, drop athletics, but if we understand something more, higher, than a worldly triumph is the prize, why, our aims are purer and loftier. A good conscience is a greater reward than being first in the race. Whatever may be the chance of winning the prize, then, it will not profit the athlete to stray over the borders which we know are right and square, and thus lose the grip of honor. There is one thing sure, that we cannot evade the sting of conscience and remorse if our acts condemn us. Then, fellows, do to others just as you would they do to you. Be manly and true in the race and on the athletic field. The man who is clean in athletics is the man who is most admired.

It is most important to have regular sleep to restore the worn-out, jaded body and brain to a healthy condition. As regards the amount of sleep which a healthy adult requires during the twenty-four hours: on the average it should not be less than seven, or better, eight hours. Every boy, therefore, ought to make it a plan to cultivate the habit of regularity, to retire at a certain hour every night. "Early to bed, early to rise," is a good maxim. What is more invigorating than a good night's rest? To the boy: Begin your exercise lightly until you grow stronger, then take it more strenuously. Your work should be a delight, and be done most heartily, not by halves or shifts, but with a

will; what is not worth the effort should not be attempted at all. Victory comes hard sometimes, but it pays even by the good vigorous constitution and health attained.

I have observed wonderful improvement in the whole body and in the general good health in many of my pupils who have taken up track athletics as a recreation, not so much as developing a prize winner, but for the sole purpose of recreation. All sports should be recreative to be beneficial.

As to the diet. Eat slowly, masticate the food thoroughly. If the food is not chewed sufficiently, there will be lack of nourishment carried to the body. The athlete can select those articles of food that he thrives on; in other words, if he gains a little weight each week and is improving in speed and in endurance, he can rest assured that he is all right. Select that which is most nutritious; do not tax the stomach by overeating, avoid pastry and rich foods. "To breathe rightly is as important as to eat rightly." Pure air and the right kind of diet go together, which in order to be of use must be properly assimilated by the system. One of the best exercises, and I think the most beneficial for the development of the vital and respiratory organs is the easy running. Just a word to the one who has neglected physical exercise, and who is desirous to regain vim and good health so that he may run the race of life in a happy frame of mind and contentment. Be moderate in all things, take things easy, take no strenuous work, but be a boy again; play golf, cricket, and tennis, and again let me impress this fact; to secure the best of health do no violent exercise.

All men acknowledge that running in the fresh air is an excellent exercise. To be a first-class pedestrian it is necessary to take a systematic course of training. I would advise the young athlete: First, to see that his system is in proper condition, and to be regular in his habits. The second thing of importance is to have the proper diet; the food should be cooked so that it will digest easily. Thirdly, the right kind of exercise. The would-be sprinter should not try to run fast for several days; a run of one hundred yards at no more than a jog trot, say in about eighteen seconds, would be wise. Run this distance two or three times the first day, after which take a sponge bath (salt water preferred) and finish with a vigorous rubbing down. The second day try one hundred and fifty yards; be sure to walk back to the starting place very leisurely, so that your endurance will be sufficient to enable you to repeat the exercise without fatigue; do not try to run faster than the first day. The third day try two hundred yards and so on until you can run five or six hundred yards without being distressed. The object in running these distances so slowly is this: In ordinary breathing we use only a portion of our lungs; the cells at the extremities are not brought into play. By gradually bringing these neglected cells into action we obtain better results; then the special respiratory muscles that have not been used are steadily

strengthened. The muscles of the legs, arms, and trunk are gradually developed, and therefore better able to stand the strain of a good "spurt." It is important then, to go slow at the beginning, or the chances are that a strain or a more severe injury to the muscles or tendons will be the result. When the pedestrian is prepared for vigorous work, the first thing to do is to get the very best possible way of starting. There are no two men who start exactly alike. Get some experienced "trainer" to start you in several ways by the report of the pistol. He will very soon be able to advise you as to which is best. When you have decided on the way to start, measure the distance between the starting lines and the hole where the back foot goes, so that you will not under or over stride. I have known men to alter their stride or position on the day of a race, who by so doing have failed to get off with the report of the pistol. It is a good plan to have a stranger to start you in your practice once in a while, but be sure that he is competent.

As soon as one is prepared for the track with only his running suit on, he should keep moving, unless it is very warm weather. It is not necessary to run the full distance more than twice or three times a week when in good condition, but it is necessary to be on the track every day and run fifty or seventy-five yards at top speed. The day before running a "trial," only the lightest kind of exercise should be taken, and be sure to wear the clothing and "pumps" you are to use in the race. A trial should be run on the track where the race is to take place, and at the same hour of the day as near as possible. It is not considered graceful to swing the arms across the chest; this sways the body from side to side. The arms should be thrust out straight so that they will assist the legs in propelling the body forward. It is a good plan to have corks to grasp in the hands whilst running. It will be found helpful to hard work. Do not keep the body straight or the head thrown back, but rather bend forward with the chin down, and use the body with as much elasticity as possible. In breathing get the lungs brim-full before starting, and take the breath the quickest way while in the race. It is a good plan to take one or two easy spins before the race. Should any dispute arise, the contestant should not take part in it, but let his friend or trainer settle it.

Keep cool, remembering that since you have made a certain time in your trial you can say with confidence, "If this will win I shall 'get there.'" In conclusion, I would say that there is a great change in the mode of training to-day compared with that of fifteen or even ten years ago. I had the misfortune to train under the instruction of one of those old-time "peds" and will briefly relate something required of me. Rise at 5.30, take a cold bath, drink a glass of old sherry wine, walk eight miles before breakfast, then in the one cup of tea allowed was mixed a small glass of rum, at lunch a glass of stock ale, another glass of ale at dinner, and one after running in the afternoon, also one at supper, and a glass of rum before retiring.

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Seven glasses of intoxicating liquor and often more each day. Is this not the way to develop a drunkard? These "professional trainers" did not know much. If they had only read the Bible and studied the characters portrayed therein! Take the life of Daniel, one of the children of Israel, in captivity, but who was without blemish, and skilled in all wisdom. He did not defile himself with the portion of the king's meat and wine. I have trained without using wine or liquor of any kind, and have run faster without it, and my endurance has also been improved.

TRACK ATHLETICS.

RULES OF THE AMATEUR ATHLETIC UNION EVENTS.

100-yard dash, 220-yard dash, One-quarter mile run, One-half mile run, and the One-mile run; also, Running five miles.

Hurdle racing, 120 yards with hurdles 3ft. 6in., 220 yards with hurdles 2ft. 6in.

Walking one mile, Walking three miles, Walking seven miles.

Running high jump, and the Broad jump.

Pole leaping, Putting the shot, Throwing the hammer, Throwing 56-lb. weight, Bicycle racing, Individual Tug of War, and Tug of War with teams of five men.

RULE 1.—Officials.—SECTION 1. All amateur meetings shall be under the direction of: A Games Committee, One Referee, Two or more Inspectors, Three Judges at Finish, Three or more Field Judges, Three Timekeepers, One Judge of Walking, One Starter, One Clerk of the Course, One Scorer, One Marshal.

Sec. 2. If deemed necessary, assistants may be provided for the Judge of Walking, the Clerk of the Course, the Scorer, and the Marshal, and an Official Announcer may be appointed.

RULE 2.—The Games Committee. The Games Committee at any club meeting shall be composed of members of the Club holding the meeting.

This Committee shall have jurisdiction of all matters not assigned by these rules to the Referee or other games officials. (See also Rule 15.)

RULE 3.—The Referee shall decide all questions relating to the actual conduct of the meeting, whose final settlement is not otherwise covered by these rules. He alone shall have the power to change the order of events as laid down in the official programme, to add to, or to alter the announced arrangement of heats in any event.

RULE 4.—The Inspectors. It shall be the duty of an Inspector to stand at such point as the Referee may designate: to watch the competition closely, and in case of a claim of foul to report to the Referee what he saw of the incident.

Such Inspectors are merely assistants to the Referee, to whom they shall report, and have no power to make any decisions.

RULE 5.—The Judges at Finish shall determine the order of finishing contestants, and shall arrange among themselves as to noting the winner, 2d, 3d, 4th, etc., as the case may require.

Their decision in this respect shall be without appeal, and in case of disagreement a majority shall govern.

RULE 6.—The Field Judges shall make an accurate measurement, and keep a tally of all trials of competitors in the high and broad jumps, the pole vault, the weight competitions, and the tug of war.

They shall act as judges of these events, and their decisions shall likewise be without appeal. In case of disagreement a majority shall govern. In all weight competitions and jumps for distance, a small flag, placed in the ground, shall denote the best throw or jump as the contest progresses.

RULE 7.—The Timekeepers shall individually time all events where time record is called for. Should two of the three watches mark the same time and the third disagree, the time marked by the two watches shall be accepted. Should all three disagree, the time marked by the intermediate watch shall be accepted.

The *flash* of the pistol shall denote the actual time of starting. In case only two watches are held on an event, and they fail to agree, the longest time of the two shall be accepted.

RULE 8.—The Starter shall have sole jurisdiction over the competitors after the Clerk of the Course has properly placed them in their positions for the start.

NOTE.—The track upon which the running races take place, both in America and in England, is made up of about four inches of ashes, screened, raked, and levelled, and covered with a couple of inches of loam. This is rolled and watered for weeks and sometimes months before the events come off, and the loam is then covered with a final layer of cinders, well raked and rolled.

The method of starting shall be by pistol report, except that in time handicap races the word "go" shall be used.

An actual start shall not be effected until the pistol has been *purposely* discharged after the competitors have been warned to get ready.

When any part of a competitor shall touch the ground in front of his mark before the starting signal is given, it shall be considered a false start.

Penalties for false starting shall be inflicted by the Starter, as follows:

In races up to and including 300 yards, the competitor shall be put back one yard for the first and another yard for the second attempt; in races over 300 yards and including 600 yards, two yards for the first and two more for the second attempt; in races over 600 yards and including 1000 yards, three yards for the first and three more for the second attempt; in races over 1000 yards and including one mile, five yards for the first and five more for the second attempt; in all races over one mile, ten yards for the first and ten more for the second attempt. In all cases the third false start shall prevent his competing in that event.

The Starter shall also rule out of that event any competitor who attempts to advance himself from his mark, as prescribed in the official programme, after he has given the warning to "get ready."

RULE 9.—*The Clerk of the Course* shall be provided with the names and the numbers of all entered competitors, and he shall notify them to appear at the starting line before the start in each event in which they are entered.

RULE 10.—*The Judge of Walking* shall have sole power to determine the fairness or unfairness of walking, and his rulings thereon shall be final and without appeal.

He shall caution any competitor whenever walking unfairly; the third caution to disqualify, except that he shall immediately disqualify any competitor when walking unfairly during the last 220 yards of a race.

He shall control his assistants, and assign to them such of his duties as he may deem proper.

RULE 11.—*The Scorer* shall record the order in which each competitor finishes his event, together with the time furnished him by the Timekeeper.

He shall keep a tally of the laps made by each competitor in races covering more than one lap, and shall announce by means of a bell, or otherwise, when the leading man enters the last lap.

He shall control his assistants, and assign to them such of his duties as he may deem best.

RULE 12.—*The Marshal* shall have full police charge of the enclosure, and shall prevent any but officials and actual competitors from entering or remaining therein.

He shall control his assistants, and assign them their duties.

RULE 13.—*The Official Announcer* shall receive from the Scorer and Field Judges the result of each event, and announce the same by voice or by means of a bulletin board.

RULE 14.—*Competitors* shall report to the Clerk of the Course immediately upon their arrival at the place of meeting, and shall be provided by that official with their proper numbers, which must be worn conspicuously by the competitors when competing, and without which they shall not be allowed to start.

Each competitor shall inform himself of the time of starting, and shall be promptly at the starting point of each competition in which he is entered, and there report to the Clerk of the Course.

Under no condition shall the attendants be allowed to accompany competitors at the start or during any competition except in match races, where special agreements may be made.

RULE 15.—*Protests* against any entered competitor may be made verbally or in writing to the Referee, or a member of the Games Committee, before or during the meeting. If possible the Committee shall decide such protest at once. If the nature of the protest or the necessity of obtaining testimony prevents an immediate decision, the competitor shall be allowed to compete under protest, and the protest shall be decided by the Games Committee within one week, unless its subject be the amateur standing of the competitor, in which case the Games Committee must report such protest within forty-eight hours to the Secretary of the A. A. U.

RULE 16.—*Track Measurement.* All distances run or walked shall be measured upon a line eighteen inches outward from the inner edge of the track, except that in races on straightaway tracks the distance shall be measured in a direct line from the starting mark to the finishing line.

RULE 17.—*The Course.* Each competitor shall keep in his respective position from start to finish in all races on straightaway tracks, and in all races on tracks with one or more turns he shall not cross to the inner edge of the track, except when he is at least six feet in advance of his nearest competitor.

The Referee shall disqualify from that event any competitor who wilfully pushes against, impedes, crosses the course of, or in any way interferes with another competitor.

The Referee shall disqualify from further participation in the games, any contestant competing to lose, to coach, or in any way impede the chances of another competitor either in a trial or final contest.

RULE 18.—*The Finish* of the course shall be represented by a line between two

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finishing posts, drawn across and at right angles to the sides of the track, and three feet above which line shall be placed a tape attached at either end to the finishing posts. A finish shall be counted when any part of the winner's body, except his hands or arms, shall touch the tape at the finish line. The tape is to be considered the finishing line for the winner, but the order of finishing across the track line shall determine the positions of the other competitors.

Men who engage in athletic sports for a money prize or for a portion of the gate receipts are termed professional athletes, and are not allowed to compete in amateur contests. The National Amateur Athletic Union has adopted the following definition of an Amateur:

"One who has not entered in an open competition; or for either a stake, public or admission money or entrance fee; or under a fictitious name; or has not competed with or against a professional for any prize or where admission fee is charged; or who has not instructed, pursued or assisted in the pursuit of athletic exercises as a means of livelihood, or for gain or any emolument; or whose membership of any Athletic Club of any kind was not brought about or does not continue, because of any mutual understanding, express or implied, whereby his becoming or continuing a member of such Club would be of any pecuniary benefit to him whatever, direct or indirect, and who shall in other and all respects conform to the rules and regulations of this organization, will be considered an Amateur."

An open competition is one in which any one who wishes may enter.

RUNNING BROAD JUMP.

In this game the take-off is the main point to be guarded. In a competition, unless the jumper secures a good take-off, the jump is worthless. It matters little whether he be in the best of condition; if the joist is not properly reached all is wrong. It is necessary, therefore, to mark a starting point for the run which will fetch him to the jumping line exactly. This is a matter easily accomplished with the aid of a friend. Have him stand at the joist and note where the foot strikes; should it strike six inches or two feet short of the line, then set the starting line six inches or two feet farther back. The jumper must run with all the speed at his command, without hesitation, and be confident that the take-off will be properly met. Plenty of practice will be required to get the necessary confidence. Some jumpers have two marks, which is a good idea; a starting mark at say 110 feet distant from the take-off, and the second about fifty feet further on. The latter serves as a sort of check. The knees should be quickly raised as high as possible when the jump is made; additional impetus is thus given. Care should be taken not to shorten the stride while running. The natural stride should prevail until the last two paces, when, if possible, it should be lengthened by a few inches. The natural result of this lengthening of the stride is to throw the body up, which means a few more inches gained in distance. Long striders are generally the best broad jumpers. Short striders, unless they have great speed, seldom excel at the game. As speed is an important factor in broad jumping, the jumper should constantly practise at sprinting. Hopping about five hundred times a day is an excellent method of strengthening the jumping leg. Cover about nine inches with each hop about seventy-five consecutive times, with a rest of a few minutes, and then the same thing over again until the desired number of times is reached. The jumper should never lose sight of the fact that it is important to rise as high as possible when jumping. During a competition, while awaiting his turn, he should carefully protect his legs from the cold air and exposure, keeping them thoroughly warm. It is impossible to jump well with cold and stiffened limbs.

NATIONAL AMATEUR ATHLETIC UNION JUMPING RULES.

SECTION 1. A fair jump shall be one that is made without the assistance of weights, diving, somersets, or hand springs of any kind.

In all handicap jumps the scratch man shall be entitled to try last.

SEC. 2. *The Running High Jump.* The Field Judges shall decide the height at which the jump shall commence, and shall regulate the succeeding elevations.

Each competitor shall be allowed three trial jumps at each height, and if on the third trial he shall fail, he shall be declared out of the competition.

Competitors shall jump in order as placed in the programme; then those failing, if any, shall have their second trial jump in a like order, after which those having failed twice shall make their third trial jump.

The jump shall be made over a bar resting on pins projecting not more than three inches from the uprights, and when this bar is removed from its place it shall be counted as a trial jump.

Running under the bar in making an attempt to jump shall be counted as a "balk," and three successive "balks" shall be counted as a trial jump.

The distance of the run before the jump shall be unlimited.

A competitor may decline to jump at any height in his turn, and by so doing forfeits his right to again jump at the height declined.

SEC. 3. *The Standing High Jump.* The feet of the competitor may be placed in any position, but shall leave the ground only once in making an attempt to jump. When the feet are lifted from the ground twice, or two springs are made in making the attempt, it shall count as a trial jump without result.

With this exception the rules governing the Running High Jump shall govern the Standing High Jump.

SEC. 4. *The Running Broad Jump.* When jumped on earth, a joist five inches wide shall be sunk flush with it. The outer edge of this joist shall be called the scratch line, and the measurement of all jumps shall be made from it at right angles to the nearest break in the ground made by any part of the person of the competitor.

In front of the scratch line the ground shall be removed to the depth of three and the width of twelve inches outward.

A foul jump shall be one where the competitor in jumping off the scratch line makes a mark on the ground immediately in front of it, and shall count as a trial jump without result.

Each competitor shall have three trial jumps, and the best three shall each have three more trial jumps.

The competition shall be decided by the best of all the trial jumps of the competitors.

The distance of the run before the scratch line shall be unlimited.

SEC. 6. *The Standing Broad Jump.* The feet of the competitor may be placed in any position, but shall leave the ground only once in making an attempt to jump. When the feet are lifted from the ground twice, or two springs are made in making the attempt, it shall count as a trial jump without result.

In all other respects the rules governing the Running Broad Jump shall also govern the Standing Broad Jump.

SEC. 7. *The Three Standing Broad Jumps.* The feet of the competitor shall leave the ground only once in making an attempt for each of the three jumps, and no stoppage between jumps shall be allowed. In all other respects the rules governing the Standing Broad Jump shall also govern the Three Standing Broad Jumps.

SEC. 8. *Running Hop, Step, and Jump.* The competitor shall first land upon the same foot with which he shall have taken-off. The reverse foot shall be used for the second landing, and both feet shall be used for the third landing.

In all other respects the rules governing the Running Broad Jump shall also govern the Running Hop, Step, and Jump.

HURDLE RACING.

The hurdle races most popular are the 120-yards, with ten 3ft. 6in. hurdles, placed at 10-yard intervals, with 15 yards from the start to the first obstacle, and a like distance from the last obstacle to the finish; and the 220-yards with ten 2ft. 6in. hurdles, placed at 20-yard intervals, with like distances from the start to the first obstacle, and from the last obstacle to the finish.

The former race is the more popular with the spectators and the expert hurdler, while the latter is more in favor with the novice, but is seldom as interesting from the onlooker's point of view.

The hurdler, like the football player, must think and act quickly and be possessed of a fair amount of nerve and dash. "He who hesitates is lost," may be aptly applied to the hurdle racer.

In the 3ft. 6in. race the runner should dash at the first hurdle with all possible speed; no hesitation. At first the novice will hesitate and be overcareful. To overcome the tendency he should put up one hurdle at the proper distance, and, with a revolver starting, practise over a single hurdle about six or seven times every other day for about two weeks, or until he obliterates all traces of his hesitancy. He can now put up three or four more hurdles and practise over these four or five times a day on as many days during the week as his strength will permit, but never more than four or five times a week. A trial of the entire flight may be run once a week. After each day's practice he may run 120 yards on the flat, with a somewhat shortened and quickened stride in 15 seconds. If the spring is made off the right foot, turn the body slightly to the right while clearing the hurdle, and *vice versa*. He should abstain from going over the hurdle for at least three days before a race, so as to avoid the chance of getting sore. Long walks should be avoided.

RULES OF THE NATIONAL AMATEUR ATHLETIC UNION FOR HURDLE RACES.

Different heights, distances, and numbers of hurdles may be selected for hurdle races.

In the 120-yard hurdle race ten hurdles shall be used; each hurdle to be three feet six inches high. They shall be placed ten yards apart, with the first hurdle fifteen yards distance from the starting point, and the last hurdle fifteen yards before the finishing line. In the 220-yard hurdle race ten hurdles shall be used, each hurdle to be two feet six inches high. They shall be placed twenty yards apart, with the first hurdle twenty yards distant from the starting mark, and the last hurdle twenty yards before the finishing line.

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In hurdle races of other distances and with different numbers of hurdles, the hurdles shall be placed at equal intervals, with the same space between the first hurdle and the starting point and the last hurdle and the finishing line, as between each of the hurdles.

In making a record it shall be necessary for the competitor to jump over every hurdle in its proper position.

RULES OF THE NATIONAL AMATEUR ATHLETIC UNION FOR PUTTING THE SHOT.

The shot shall be a solid sphere, made of metal and weighing at least 16 or 24 pounds, as the event may call for.

It shall be put with one hand, and in making the attempt it shall be above and not behind the shoulder.

The competitor shall stand in a circle seven feet in diameter, on four feet of the circumference of which shall be placed a board four inches high, at which the competitor must stand when the shot leaves his hand.

A fair put shall be one where no part of the person of the competitor shall touch in front of the circle or on the board in making the attempt.

A put shall be counted as foul if the competitor steps over the front half of the circle or on the board, before the measurement of his put is made.

The measurement of all puts shall be made from the nearest mark made by the shot to a point on the circumference of the circle, on a line with the object mark and the centre of the circle.

Foul puts and letting go the shot in making an attempt shall be counted as trial puts without result.

A board similar to the one in front may be used at the back of the circle.

The order of competing and number of trials shall be the same as for the running broad jump. Shots shall be furnished by the Games Committee. Any contestant may use his private shot, if correct in weight and shape; in which case the other contestants must also be allowed to use it, if they wish.

THROWING THE WEIGHTS.

The main point to learn in throwing the hammer, is to get as much impetus as possible upon the body by rapidly spinning round, the arms being held perfectly rigid with the hammer grasped in the hands. When the greatest impetus is obtained the hammer is let go, an extra push being given at the last moment by a jerk of the whole body. No actual arm work is called for, the strain falling mainly upon the back and loins. The hammer is swung round, when once the thrower has begun his spin at right angles to the body, and in a vertical position, and the arm and handle thus act as one and the same lever. A very slight grasp of mechanical principles will show that the hammer head is as it were attached to the circumference of a revolving circle, the motive power being supplied by the spinning human body at the centre. At the moment of delivery the centrifugal force causes the hammer to fly off in a straight line. It follows that the hammer will fly furthest when the greatest momentum can be produced. It is, therefore, obvious that where run is allowed, the heaviest man, provided he can acquire enough skill to revolve rapidly without falling over, must inevitably be able to throw the hammer furthest; or, as an English trainer once pithily observed, "A good big 'un will always beat a good little 'un."

The advantage of this preparation, even to a man never destined to excel in high-class competition, will be found to repay lavishly the amount of time and trouble expended. The muscles called into play serve to draw the shoulders and ribs into a healthy and natural position, and to give the lungs and heart plenty of room to perform their vital functions. These organs are never slow to avail themselves of this rare indulgence and soon contribute conspicuously to the comfort and health of the general system. The back and loins, and, to a minor extent, the lower limbs, will be strengthened and developed.

In throwing the 56-pound weight a great deal of practice is required, and skill is not such an important factor. A strong, healthy man, with plenty of practice and careful coaching, can, no doubt, become proficient at this game.

The main point in putting the shot is to get one's "weight on," as rowing coaches express it; that is to say, to employ mere arm work as little as possible, getting the impetus for propulsion from a rapid spring and half turn of the body. The method adopted for securing this by all good weight putters may be gleaned from the following description: The putter stands at the back of the circle, holds the weight in his right hand (supposing him to be right-handed), and balances his body on his right leg. After having acquired his balance and limbered the muscles of his arm by stretching it to its full extent, he takes a quick hop to the centre of the circle; then, with a sharp spring, the right half of the body is brought sharply to the front, and arm and body shoot out in unison with the concentrated effort of the entire muscular system. A careful study of the most scientific performers must be made to render a written account intelligible to the novice, who should then be careful to use a light shot until he has thoroughly mastered the requisite motions.





TRACK ATHLETICS

1. A Bicycle Meet.
2. At the Tape.
3. Throwing the Discus.
4. Pole Vaulting—McLaughlin of Yale breaking inter-college record.
5. Putting the Shot—Ralph Rose (6 ft. 6 in. tall), Freshman, at Ann Arbor, University of Michigan, making the world's record at Philadelphia (48 ft. 3½ inches).
6. Obstacle Race.
7. 120-Yard Hurdle Race.
8. Start in Hundred-Yard Dash.
(Left to right)—Rogers of Cornell, Gamble of Princeton, Seitz of Georgetown, Dean of Penna.
9. J. E. Sullivan, President Amateur Athletic Union.

RULES OF THE AMATEUR UNION; THROWING THE HAMMER.

The hammer-head shall be a metal sphere. The handle shall be of wood, the length of handle and head combined shall be four feet, and the combined weight shall be at least sixteen pounds.

All throws shall be made from a circle, seven feet in diameter.

The competitor may assume any position he chooses in making an attempt. A fair throw shall be one when no part of the person of the competitor shall touch outside of the circle in making the attempt.

A throw shall be counted foul if the competitor steps over the front half of the circle before his throw is measured.

Foul throws and letting go of the hammer in an attempt, shall count as trial throws.

The measurement of all throws shall be made from the nearest mark made by the head of the hammer, to a point on the circumference of the circle, on a line with the object mark and the centre of the circle.

The order of competing and number of trials shall be the same as prescribed for the Running Broad Jump.

Hammers shall be furnished by the Games Committee. Any contestant may use his private hammer, if correct in weight and shape; in which case the other contestants must also be allowed to use it, if they wish.

The thrower, in some contests, is allowed to run as far as he pleases before throwing the hammer, so long as he does not cross the "scratch line" from which the measurement is made. Sometimes he is allowed to run a fixed distance, as seven feet, and sometimes he is permitted to turn around once before throwing. Some throwers hold the hammer in one hand, and some in both.

THE AMATEUR ATHLETIC UNION RULES FOR THROWING THE 56-LB. WEIGHT.

SECTION 1. The weight shall be a sphere made of metal, with a metal handle attached. Their combined weight shall be at least fifty-six pounds, and the combined height shall be sixteen inches, but no flexible attachment will be allowed.

All throws shall be made from a circle seven feet in diameter.

The competitor may assume any position he chooses in making an attempt.

Foul throws and letting go the weight in an attempt shall count as a trial throw without result.

The order of competing and number of trials shall be the same as laid down for the jumping contests.

SEC. 2. *In Throwing for Distance.* A fair throw shall be one where no part of the person of the competitor shall touch in front of the circle in making an attempt.

A throw shall be counted foul if the competitor steps over the front half of the circle before his throw is measured.

The measurement of all throws shall be made from the nearest mark made by the sphere of the weight, to a point on the circumference of the circle, on a line with the object mark and the centre of the circle.

SEC. 3. *In Throwing for Height,* a barrel-head three feet in diameter shall be suspended in the air.

A fair throw shall be one where no part of the person of the competitor shall touch in front of the circle in making an attempt, and where any part of the weight or handle touches any part of the barrel-head.

A foul throw shall be one where the competitor touches outside the circle before letting go the weight.

The measurement of all throws shall be from a point on the ground drawn directly under and parallel to the lowest point of the barrel-head.

The order of competing and number of trials shall be the same as for the running broad jump. Weights shall be furnished by the Games Committee. Any contestant may use his private weight, if correct in weight and shape; in which case the other contestants must also be allowed to use it, if they wish.

POLE VAULTING.

This is a game which requires a strong pair of arms as well as a strong pair of nether limbs. As in the broad jump, a starting mark should be used, but the run need not be more than 75 or 80 feet. Speed is an important factor in this game, as in the running jump.

Two of the commonest faults to be found with the pole vaulter are, first, the take-off foot is brought too close to the point of the pole in the ground; this prevents attaining the swing necessary to carry the jumper over; second, the arms are not used in raising the body, which should be done immediately on leaving the ground. Both these faults can easily be remedied, but either is fatal. The faster the run to the bar, the more the impetus obtained. When clearing the bar the body should be turned so as to face the bar when the ground is reached.

In taking hold of the pole, the upper hand should be at a point about twelve inches below the height to be cleared, the lower hand from 2ft. to 2ft. 6in. under the upper.

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The vaulter should grasp the pole as he would a rope in climbing upward; the thumbs pointing upward.

The arms can be strengthened by all-round work on the horizontal bar. Another method is to hang a rope over the inside corner of a door, or on a hook in the wall; raise and lower the body by the arms, allowing the heels to remain on the floor.

As in the broad jump, the speed and strength in the jumping leg should be developed, which can be accomplished by following the suggestions contained in running broad jump.

NATIONAL AMATEUR ATHLETIC UNION RULES FOR BICYCLE RACING.

Records. The standard table of recognized records shall be 1-4, 1-3, 1-2, 2-3, 3-4, 1 mile, and all even miles upward, no intermediate distances.

Records against time may be made at an open meeting, or in private, and with or without pacemakers.

The Board will consider flying-start only in records against time; standing-start only in competition records.

A competition record must be made in a race between men.

Records made with the assistance of other than recognized cycling machines, propelled by man power, will be recorded separately.

In unpaced events, or during unpaced record trials, there shall be no pacing devices, and only the rider making the trial shall be on the track.

Tracks. Tracks shall be measured on a line drawn eighteen inches out from a well-defined, fixed, and continuous inner curb or pole; no record shall be allowed on a track otherwise measured.

Machines Excluded. The Board reserves the right to exclude from the racing path any and all machines which, in its judgment, do not come within the commonly accepted meaning of the term "bicycle," either by peculiarity of construction or by undoubted mechanical advantages which they may possess.

Road Racing. The League of American Wheelmen regards racing on the public highways as an unlawful practice, and refuses to recognize and legislate for such form of the sport except to forbid the competing together therein or pace-making one for the other, of amateurs and professionals.

Should any part of a road race be run upon the track, such part immediately becomes subject to track rules.

TRACK RULES.

Officials; their Powers and Duties. The officers of all race meetings and cycling events shall be a referee, who must be an amateur wheelman, three judges at the finish, three timekeepers, one starter, one scorer, one clerk of the course, with assistants if necessary, and one umpire for each turn of the track, or more, at option of the referee. The referee, judges, and clerk of the course shall constitute the Executive Board.

The referee shall have general supervision of the race meeting. He shall give judgment on protests received by him, shall decide all questions or objections respecting foul riding or offences which he may be personally cognizant of, or which may be brought to his attention by an umpire or other officer.

The judges shall decide the positions of the men at the finish. In case of disagreement the majority shall decide.

The timekeepers shall compare watches before the races are started, and shall note any variance; they shall each time every event, and in case of disagreement the intermediate time of the three watches shall be the official time. Time shall be taken from the flash of a pistol. In case two watches of the three mark the same time, that shall be the official time.

The scorer shall record the laps made by each competitor, the order of the men at the finish as given him by the judges, and the time as given him by the timekeepers. He should indicate the commencement of the last lap by ringing a bell as the riders pass over the tape for the final lap, but the riders must keep count of the laps for themselves.

It shall be the duty of the starter, when it has been reported to him by the clerk of the course that all the competitors are ready, to see that the timekeepers are warned, and before starting the men, to say, "Mount"; in a few seconds after to say, "Are the timers ready? Are the starters ready?" and, if no reply to the contrary be given, to effect a start by a report of a pistol. Should the pistol miss fire, the start may be made by the word "Go." The starter shall announce to the competitors the distance which they are to ride. The starter may at his discretion, put back for a distance any competitor starting before the signal is given. In case of a false start, the competitors shall be called back by the starter by the ringing of a bell or pistol fire and restarted.

In case of a fall or accident within thirty feet of the scratch line, the contestants shall be recalled by the starter by the ringing of a bell or pistol fire, and the race started over again.

The clerk of the course shall call competitors in ample time for each event, and see that they are provided with numbers properly worn. He shall report the contestants to the scorers, see that they are on their appointed marks, and call the numbers for the scorers as they cross the line at the end of each lap.

It shall be the duty of the umpire to stand at such part of the field as the referee may direct, to watch closely the riding, and immediately after each race to report to the referee any unfair riding he may see.

Positions. The drawing for position in each event shall be done by the promoters of the meeting, and the positions of the men shall appear on the programme. When it becomes necessary to draw for positions on the grounds, the work shall be done by the clerk and starter in conjunction. In heat races the winner of a heat shall take the pole (or inside position) the succeeding heat, and the other riders shall take their positions in the order assigned them in judging the last preceding heat. When two or more riders make a dead heat, they shall start for the succeeding heat in the same positions with reference to the pole that they occupied at the finish of the dead heat.

When races are run in heats and a final, the winner of the fastest heat shall take the pole in the final, the winner of the second fastest heat the next position, and so on. If more than one qualifies for the final from each heat, the second man in fastest heat shall be next outside the winner of slowest heat, and so on. Only the winners of positions in the trial heats, as stipulated by the terms of the race, shall compete in the final.

No one shall be allowed in a final because of a foul or an accident in a trial heat.

Should two or more riders make a dead heat of any qualifying place in a trial heat, they shall both be allowed to enter the final heat, except in the National Championship. Should two or more riders make a dead heat of any final, or a dead heat for second or any lower place for which there is a prize, they may decide by lot who shall take the prize, or may again ride the distance to decide the race, at the discretion of the referee.

Starts. All starts shall be from the inside of the track, and, except in a flying-start event, shall be from a standstill, with the left hand toward the curb, and the machines shall be held in position by an attendant (the front wheel touching the starting line) until the signal is given by starter. Attendants, when pushing off competitors, must keep behind the mark from which the competitors actually start. Should any part of the attendant touch the track in front of the mark, the competitor may be disqualified. Unless excused by the referee, every rider who enters in a handicap race must start in same.

Finish. The finish of all races shall be judged by the first part of the front wheel which touches the tape fastened flat on the ground at the winning post, and no rider shall be allowed a finishing position who abandons the track and afterward returns and crosses the tape.

Riding. Riders shall pass on the outside (unless the man passed be dismounted), and must be at least a clear length of the cycle in front before taking the inside, but on entering the homestretch in the last lap of a race, the foremost rider or riders must keep to that part of the track first selected; and the hindmost rider or riders, when there is sufficient room to pass on the inside or anywhere on the homestretch without interfering with others, shall be allowed to do so. A rider shall not change from the inner to the outside of the track during any part of a race when another rider is so near that in altering his position he interferes with or impedes the progress of the rider. No rider shall touch another.

No rider during a race shall turn his head to look backward, remove his hands from the handle-bars, or otherwise ride in a careless or unskilful manner, thereby imperilling the safety of other riders.

Competitors may dismount during a race at their pleasure, and may run with their cycles if they wish to, but they must keep to the extreme outside of the path whenever dismounted. If a rider be dismounted by accident, or to change his machine, an attendant may hold his machine while he mounts it, and he shall so mount at the extreme outside of the path.

Time Limits. The referee may place a time limit on any race except handicap, team, and lap races. The time limit shall not be announced to the contestants until their arrival at the tape, preparatory to the start of the race. If the competitors finish within the limit, they shall receive the prizes. If they fail to so finish, and the referee is convinced by their riding and the time that they endeavored to reach the limit, he may award the prizes.

Pacemaking. A general pacemaker may be put in any race by the race promoter, having previously notified the referee of the fact. He shall assist no single rider, but shall act to increase the speed of the race in general. He shall, if a single rider only, be entitled to any place or prize he may win, if he starts from the scratch, or may be rewarded by a special prize, within the limits of the class.

Tandems or pacing machines carrying more than two riders, may be put in to pace competitions only by written consent of the members of the Racing Board in charge of the district.

Track Privileges and Decorum. No person whatsoever shall be allowed inside the track except the officials of the meet. The handicappers of the meet shall at all times, however, have track privileges. Authorized persons shall wear a badge. Competitors or pacemakers not engaged in a race actually taking place shall not be allowed inside or on the track. No one shall be allowed to "coach" competitors on the track. No shouting or remarks by trainers or attendants to encourage certain riders or disconcert others shall be permitted.

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Choice of Machines and Costumes. Choice or change of machine and choice of costume shall not be limited except that shirt shall not bare shoulders, and breeches must reach to the knees.

In races distinctly stated on the programme of events to be for a particular class of machine, this rule shall not apply so far as choice and change of machine are concerned. Safety bicycle races shall be limited to machines whose driving wheel does not exceed thirty-six inches in diameter.

Competitors to Wear Numbers. Every competitor shall receive in the dressing-room a number corresponding with his number on the programme, which must be worn on his back or right shoulder during the race. He shall inform himself of the times at which he must compete, and wait the call of the clerk in the dressing-room.

Definition of Races. A novice race is open only to those who have never won a prize in a track race, and shall be the first race of the meet. A novice race is a class race.

A class race is only open to those who, up to date of the closing of the entries, have not won the first position in a track race or trial heat in the same or better time than the class under consideration. In all class races the time limit shall be the time of the class. If the competitors fail to finish within the limit, and it is a good day, good track, and there are pacemakers, the referee shall declare no race. If they fail to finish in the time limit, and there are no pacemakers, or it is not (in the judgment of the referee) a good day, or it is not a good track, and the referee is convinced by their riding that they endeavored to reach the limit, and were not able to do so because of the absence of any one or all three conditions, he may award the prizes.

In a lap race the position of the first three men shall be taken at the finish of every lap. The first man shall score three points, the second man shall score two points, and the third man shall score one point, and no others shall score. The contestant who crosses the line first at the finish shall, for that lap, score four points. The competitor who scores the greatest number of points shall be declared the winner, but any contestant, in order to secure a prize, must ride the entire distance and be within 150 yards of the finish when the first man crosses the tape at the end of the last lap. The 150-yard mark must be marked by a flag.

In a team race the positions of all the riders starting shall be taken at the end of the race.

The first man shall count a number of points equal to the number of men starting, the second one less, and so on.

The team scoring the greatest number of points shall be declared the winner. A team shall be limited to three riders, each of whom shall have been a member of the club entering the team for at least three months previous to date of event. Each team member must also have resided within five miles of the city or town where the club has its headquarters for at least six months previous to the date of contest.

In a heat race the position of each rider must be taken at the finish of each heat. The first man shall count a number equal to that of the contestants in the first heat, the second man shall count one less, the third two less, and so on. The competitor who scores the greatest number of points shall be declared the winner. Or, as an alternative, which must be stated in the programme as rule or alternative, in running a heat race, such event may be conducted under the rule outlined below:

When the race is best two out of three heats, the winner is not reached until one rider has won two heats, either through virtue of finishing first or by the disqualification of a competitor or competitors who may finish in front and lose such position or positions through ruling or rulings of the referee. The second and other prizes shall be distributed according to the standing of the rider in the summary, heat winners to be placed before all those who have occupied lesser positions, and in case two riders are tied by finishing an equal number of times in the same position, the one occupying the best position in the concluding heat shall be awarded the prize. In every heat a rider must finish within 150 yards of the winner or be adjudged distanced. In case a rider fails to win one heat in three, he will be disqualified from any subsequent heats that may be necessary to decide the prizes.

Entries in a consolation race shall be limited to those who have not won a prize in any event of the meeting; provided, however, if only a single prize is given in the team race, members of the winning team shall not be considered to have won a prize and shall be eligible to the consolation race.

In a pursuit race the conditions must be printed on the programme or announced to the spectators.

In a handicap race the marks must be printed on the programme, and the men must start from the marks assigned by the handicapper in trial heats and finals.

In middle-distance races (10 to 100 miles) the terms and conditions must be printed on the programme.

Ignorance of Rules No Excuse. Ignorance of any of the foregoing rules will not be considered a valid excuse for violation.