

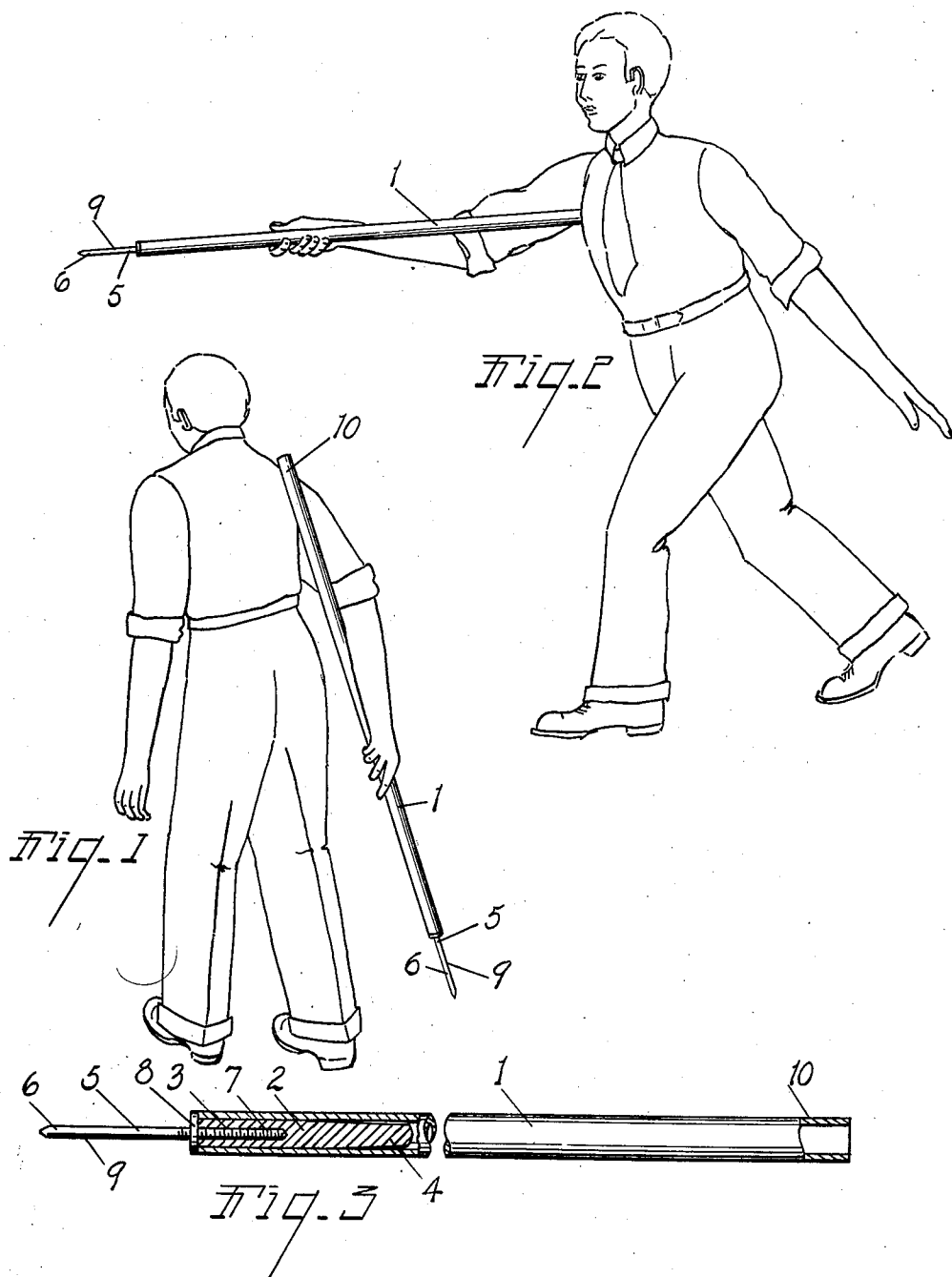
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ATHLETIC EQUIPMENT

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ATHLETIC EQUIPMENT

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This invention relates to improvements in athletic equipment.

This invention relates to athletic equipment and particularly to such equipment designed to be thrown. It has for its objects:

First, to produce a new and different article of athletic equipment suitable for throwing.

Second, to produce such an article which may be thrown by a new and different method.

Third, to provide such an article of athletic equipment which is adapted to be thrown in the aforesaid new manner and which will sail through the air headforemost to penetrate the ground and remain sticking upright in the ground.

Fourth, to provide such an article of athletic equipment which is properly constructed and balanced for throwing in the aforesaid new manner and which is capable of withstanding the strains and shock attendant on its use.

Other objects and advantages pertaining to details and economies of construction and operation will appear from the description to follow. The invention is defined in the claims.

A preferred embodiment of my invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a view showing a man grasping my new article of athletic equipment preparatory to throwing the same.

Fig. 2 is a view showing a man in the act of throwing my new article of athletic equipment.

Fig. 3 is a view partly in section showing the details of construction of my new article of athletic equipment.

My new article of athletic equipment which is shown in detail in Fig. 3 is carefully proportioned and weighted to adapt to a new method of throwing. It consists of a body portion 1 of tubular form. This tubular body portion is made of stiff, resilient and very strong and tough material which is also of relatively light weight. I prefer to use fiber board material which is known as vulcanized fiber. This material is tough, stiff and resilient and of the desired weight.

Inserted in one end of the tubular body portion 1 is a wooden dowel 2 which is provided with a central bore 3. The inner end 4 of the dowel is tapered slightly as shown in Fig. 3 so that it does not contact the inner walls of the body portion 1 for its entire length. The end is rounded as shown. The object of this will be later explained.

The head of my new article of athletic equipment consists of a steel rod 5 which is formed

at one end with a slender strong spike 6 adapted to penetrate the ground easily. The inner end 7 is provided with screw threads to engage in the bore 3 of the plug or dowel 2. A metal washer 8 is located at the end of the body portion and is fastened to the member 5.

My method of hurling this article of athletic equipment is completely new. Heretofore, javelins have been thrown in athletic competition. The javelin consists of a metal head and a wood shaft which tapers toward both ends and which is provided with a hand grip. The one hurling the javelin uses an overhand delivery which requires considerable skill and calls into play many muscles not otherwise used. My new method of throwing is entirely different. My new article of equipment is grasped at about its middle by the hand of the throwing arm of the user. The head end 9 points downwardly and the tail end 10 is placed back of the shoulder of the user and is pressed against the shoulder. This is shown in Fig. 1. The article is thrown by making an arc-like movement, swinging the head end of the article of equipment through an arc of a circle centered at the point of contact of the tail end 10 with the shoulder of the user. A quick movement is employed and the user permits the article to slide from his hand when it reaches the desired point.

My new article of equipment is designed particularly for this type of throwing. The outer diameter of the body portion 1 is smooth and has no obstruction on it so that it may slide easily from the hand of the user. If feathers such as are used on arrows were provided, it would not be possible to use my new method of throwing. The diameter of the body portion must be such that it may be easily grasped in the hand of the user.

It is important also in order to permit proper flight to have the center of mass of my article adjacent the head thereof. This balance is obtained by using the light weight tubular material in combination with the heavier head or spike member. The center of mass is considerably below the point at which the article is grasped by the user so that when the user swings the article in throwing, considerably greater velocity is imparted to the center of mass and the head of the article than to the portion grasped by the user causing a longer flight.

When properly balanced with the center of mass near the head, the article flies through the air without tumbling and hits the ground head first, the spike 6 penetrating the ground and per-

mitting the article of equipment to stand upright.

When the article of equipment is thrown, there may be a slight tendency because of the swinging motion for the article to tumble over and over in the air. This is corrected by the user who, just as he releases the tail end of the article from his hand, slightly raises it to give proper direction to the article and its flight.

The specifications of an article to give the desired performance are as follows: The tube 1 should have an inside diameter of one inch and a wall thickness of three thirty-seconds of an inch. The wooden dowel or plug 2 is seven inches in length. The spike member 5 is three-eighths of an inch in diameter with an over all length of eight inches, five inches of which project as the spike and three inches of which are threaded into the bore 3 of the plug 2. A steel washer 8 is preferably one and three-sixteenths inches in diameter and one-eighth of an inch thick.

The overall length of the article of equipment is four feet. This length permits the average man to place the tail 10 behind his shoulder and provides adequate clearance to permit the arc-like movement above described without interference from the ground. A clearance of about seven to nine inches is desirable.

As above pointed out, the plug or dowel 2 is tapered at the end 4 in order to assist the article in resisting the shocks and strains resultant upon use. When the article is thrown it proceeds head first. When the spike 6 enters the ground, it is at an angle of about 45 degrees from the vertical. The momentum of the body portion of the article of equipment tends to throw it forward to an upright position. This exerts considerable stress on the spike 6 which must be made sufficiently strong to withstand these strains. The tapering of the dowel eliminates the sharp fulcrum which otherwise would exist at that point and relieves the danger of breakage of the body portion 1.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. An article of athletic equipment for throwing consisting of a fibre tube, a dowel fitted in

one end thereof and having its inner end tapered to a diameter less than the inner diameter of said tube, and having a bore extending axially thereof, a metal spike having one end sharpened to penetrate the ground and having its other end fitted into said bore.

2. An article of athletic equipment for throwing comprising a head having a sharp relatively slender spike to penetrate the ground and a body portion extending from said head to the tail end of said article comprising a tube of light weight, stiff, tough, resilient material and having its outer walls free from projections and being of a diameter to be grasped in the hand of a user, said article having an overall length such that when its tail end is placed behind the shoulder of the user with the head extending downwardly and with the body grasped in the hand of the user, it clears the ground to permit an arc-like throwing movement, said article having its center of mass adjacent said head.

3. An article of athletic equipment for throwing comprising a head having a spike to penetrate the ground and a tubular body portion extending from said head to the tail end of said article and having its outer walls free from projections and being of a diameter to be grasped in the hand of a user, said article having an overall length such that when its tail end is placed behind the shoulder of the user with the head extending downwardly and with the body grasped in the hand of the user, it clears the ground to permit an arc-like throwing movement, said article having its center of mass adjacent said head.

4. An article of athletic equipment for throwing consisting of a tube, a head having one end sharpened to penetrate the ground and having at its other end a male member fitted into said tube and forming a bendable joint between the male member and the tube whereby the male member presents no sharp fulcrum to the inner wall of the tube, so that the tendency of the tube to break at the head when on throwing the head enters the ground and the tube tends to swing around the head as a pivot is minimized.

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