Nov. 8, 1932. D. W. MERRIMAN 1,887,033

ATHLETIC STANDARD

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Fig.1

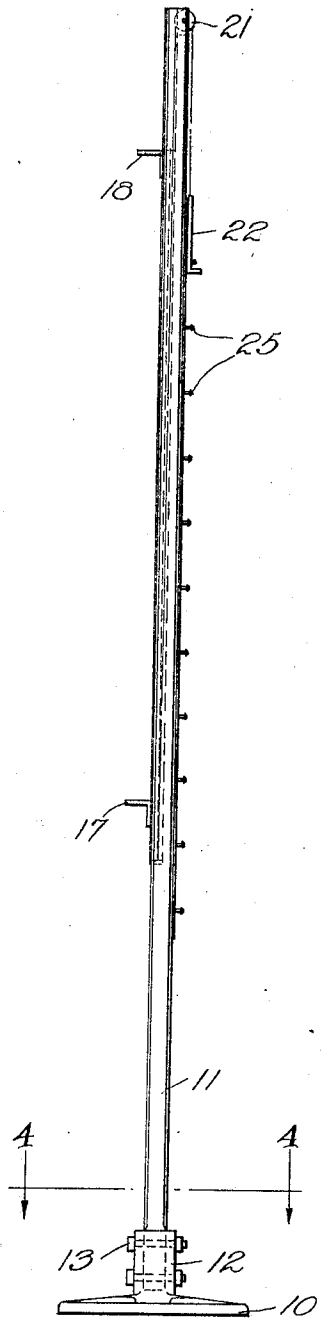


Fig.2

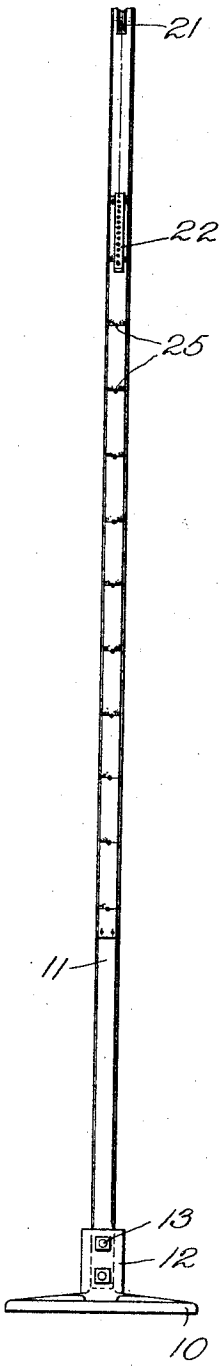


Fig.3

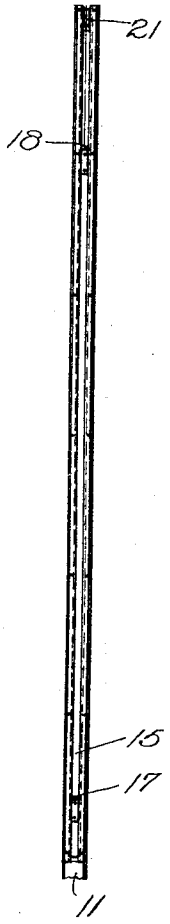
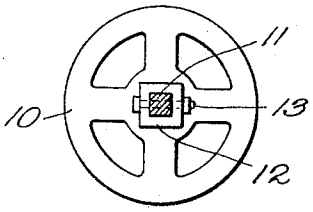


Fig.4



INVENTOR

D. W. Merriman

BY Siggers & Adams

ATTORNEYS

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Fig. 5

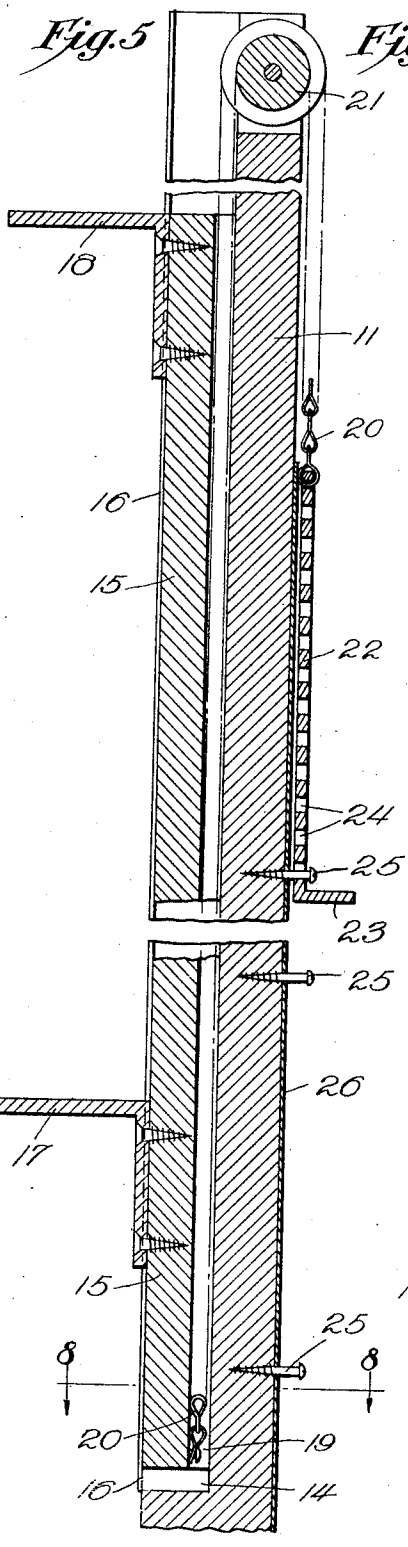


Fig. 6

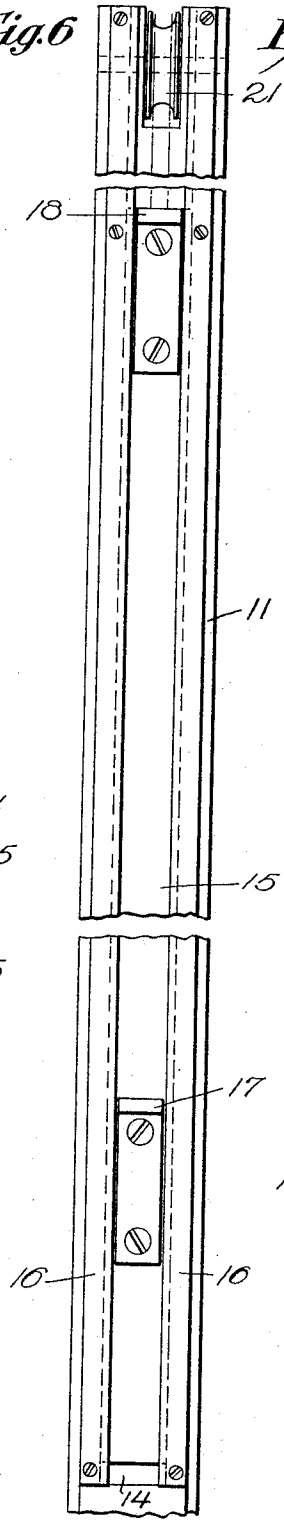


Fig. 7

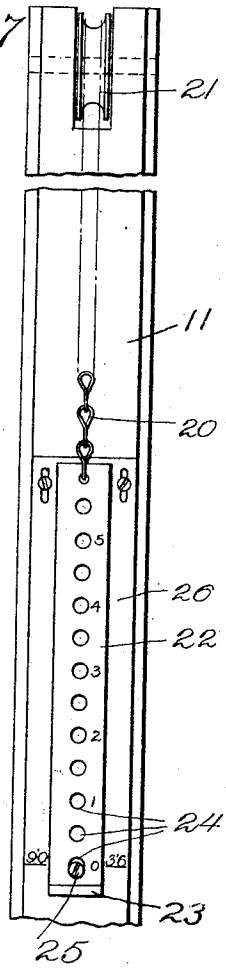
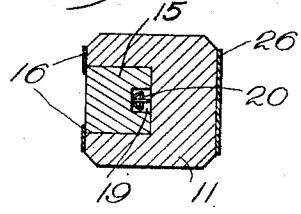


Fig. 8



INVENTOR
D. W. Merriman

BY Siggers & Adams
ATTORNEYS

Patented Nov. 8, 1932 1,887,033

UNITED STATES PATENT OFFICE

DAVID W. MERRIMAN, OF BEAVER FALLS, PENNSYLVANIA

ATHLETIC STANDARD

Application filed September 19, 1930. Serial No. 483,107.

This invention relates to standards for pole vaulting and high jumping and, among other objects, aims to provide a standard which may be used either for pole vaulting or high jumping or both without any change in its construction. Other objects are to provide a standard of simple and sturdy construction which will measure accurately the height of the cross bar over which the jump is made and which will facilitate the work of officials at track meets in adjusting the heights of the cross bars. The invention has other objects which will appear in the following description of a preferred embodiment.

In the accompanying drawings forming a part of the specification,

Fig. 1 is an elevation of a composite high jump and pole vault standard embodying the invention;

Fig. 2 is an elevation from the right side of Fig. 1;

Fig. 3 is a fragmentary view of the upper part of the standard showing the left side thereof, as viewed in Fig. 1;

Fig. 4 is a section on the line 4—4 of Fig. 1;

Fig. 5 is a longitudinal section on an enlarged scale, the base of the standard being omitted;

Fig. 6 is an elevation on the scale of Fig. 5 showing the same portion of the standard, the view being of the left side of Fig. 5;

Fig. 7 is a fragmentary elevation showing the right side of the standard of Fig. 5; and

Fig. 8 is a section on the line 8—8 of Fig. 5.

Referring particularly to the drawings, there is shown a base 10 which may be of cast iron or other suitable material for supporting the standard 11 in a vertical position relative to the ground. The base 10 has a socket 12 receiving the standard 11 and is secured thereto by means of bolts 13 passing through the base of the standard, as shown in Figs. 1 and 4.

The upper part of the standard 11 has a channel or groove 14 for slidably receiving the stick 15, which is, therefore, adjustable longitudinally relative to the standard. The groove 14 is preferably of rectangular cross section, as best shown in Fig. 8, and the stick 15 is of generally similar section but fits with sufficient looseness so that sliding is easily effected. The standard and stick may be of hardwood or of some light metal such as duralumin. The stick is retained in the channel or groove by means of strips 16 secured to one face of the standard 11 and projecting over the channel or groove 14. The strips 16 are readily removable when desired.

Secured to the stick 15 are two cross bar rests 17 and 18. These cross bar rests are preferably located five or six feet apart, the lower one being provided for high jumps and the upper one for pole vaulting. Both rests project at right angles to the longitudinal axis of the stick 15 and both provide smooth upper surfaces on which the cross bar (not shown) rests so that the bar may be knocked off the rest by the athlete without likelihood of breakage. The rests are shown as angle pieces secured by screws to the stick and may be moved up and down relative thereto, if desired, but this will ordinarily be unnecessary as the stick itself is longitudinally adjustable by means to be described. Ordinary straight round pins may be employed instead of the angle pieces shown.

On the inner face of the stick 15 a channel 19 is provided, as shown in Figs. 5 and 8, and within the channel 19 is a chain 20 which extends for the full length of the stick lying within the channel 19 and is trained up over a grooved pulley 21 journaled at the top of the standard, the opposite end of the chain being secured to a plate 22 which is secured at various points along the stick. The chain 20 is one example of a flexible but longitudinally inextensible means connecting the lower end of the stick with adjustment means mounted on the standard. The chain is secured to the lower end of the stick so that the stick may be moved upwardly until the major part of its length projects above the standard, thus elevating the cross bar rest 18 for very high pole vaulting.

The plate 22, as best shown in Figs. 5 and 7, has a handle 23 and a series of perforations 24 extending longitudinally thereof and spaced at regular intervals. Preferably the perforations 24 are spaced apart ½ inch center to center, but if desired a double row of

perforations could be provided, the two rows being staggered relative to each other so as to permit ¼ inch spacing and a corresponding adjustment of the stick 15. The plate 22 is appropriately marked with insignia indicating the extent of adjustment effected by the upward and downward movement. The perforations 24 are designed to receive one of a series of screws 25 fixed in the standard 11 and projecting at right angles therefrom preferably on the face opposite the one from which the cross bar rests project. The screws 25 are preferably spaced exactly 6 inches apart center to center and the plate is preferably about 7 inches long so as to admit of a 5½ inch adjustment, as the insignia shown in Fig. 7 indicate.

Opposite each of the screws 25 is a notation of the elevation in feet and inches of the rests 17 and 18 respectively. As shown in Fig. 7, the notation on the left side indicates the elevation of the rest 18 and the notation on the right side gives the correct elevation of the rest 17. In this instance, the two rests are exactly 5½ feet apart. The illustrated adjustment is for exactly 9 feet for the pole vault and 3 feet 6 inches for a high jump. If it is desired to set the standard for a high jump of 3 feet 11 inches or a pole vault vault of 9 feet 5 inches, the plate 22 is disengaged from the screw 25 with which it is shown engaged, and is pulled downwardly by means of the handle 23 until the perforation opposite the 5 inch mark registers with the same screw. Then the plate is pushed inwardly to effect engagement of the 5 inch perforation with the screw and the rest will then be properly adjusted for a high jump of 3 feet 11 inches or a pole vault of 9 feet 5 inches, as the case may be.

The insignia indicating the adjustments effected by engagement of the plate 22 with the several screws 25 are preferably marked on a brass plate 26 secured to the face of the standard on which the pins 25 are provided. The plate 26 is secured by screws, as shown in Fig. 7, and hence is readily removable, if desired. Because a downward pull on the plate 22 elevates the cross bar rests, the scale marked on the plate 26 reads downwardly in an ascending series. In other words, the 13 foot mark is 4 feet below the 9 foot mark. The scale for the high jump preferably extends from 3 ft. 6 in. to 7 ft. while the scale for the pole vault provides for vaulting between 9 and 14 feet.

As the standards may be supplied to high schools, playgrounds and colleges, it may be desirable to provide the brass plates 26 with shorter scales where younger competitors are to use the standard. This can be easily done since the brass plates 26 are readily removable. If desired, the plates may be longitudinally adjustable so as to correct any slight inaccuracies which may arise from the fitting of the standard 11 in the socket 12. This could easily be done by means of longitudinal slots for the screws which secure the plate 26 to the standard 11.

It will be clear that the higher the jump or vault, the lower the plate 22 is moved. The plate 22 is never more than about 8 feet above the ground and hence is always within easy reach of the officials and the insignia of the scale can be read accurately at all times. Most of the time the plate 22 will be within 5 or 6 feet of the ground and for very high vaulting or jumping will be within 3 or 4 feet of the ground. Thus the work of the officials is greatly facilitated.

While the standard has been described as a compound one for both high jumping and pole vaulting, it is obvious it will be used for but one form of competition at a time and if desired one of the cross bar rests may be omitted entirely thus making the standard entirely suitable for a high jump alone or for pole vault alone. However, as the cross bar rests do not interfere in any way with each other, it is preferred to supply both with each standard thus making it possible to employ the standard for either high jumping or pole vaulting without any change whatever in the construction.

Obviously, the present invention is not restricted to the particular embodiment thereof herein shown and described.

What I claim is:—

1. A standard comprising, in combination, a base; an upright fixed to the base; said upright having a longitudinal groove in one face; a stick slidable in the groove; readily removable means on the upright to retain the stick in the groove; means secured to the outside face of the stick and projecting at right angles to provide a support for a cross-bar; the stick-retaining means providing a longitudinal slot through which the cross-bar supporting means extends; and flexible means secured to the stick and detachably securable to the upright to effect longitudinal adjustment of the stick relative to the upright.

2. A standard comprising, in combination, a base; an upright fixed to the base; a stick slidably mounted longitudinally of said upright; a cross-bar rest secured to the stick and projecting outwardly therefrom; a flexible, inextensible member secured at one end to the bottom of the stick; a pulley at the top of the upright over which said flexible member is trained; a longitudinally perforated plate secured to the other end of the flexible member; and a series of regularly spaced pins projecting from the upright and engageable in the perforations of the plate.

3. A standard comprising, in combination, a base; an upright fixed to the base; said upright having a longitudinal groove in one face; a stick slidable in the groove; said stick being substantially rectangular in cross-sec-

tion and having a longitudinal channel in the face opposite the one which is outermost, so that a space is provided between the stick and the upright inside the standard; a flexible, inextensible member secured at one end to the lower end of the stick; a pulley at the upper end of the upright and guiding said flexible member, which extends around the pulley and down alongside the upright within said channel; a longitudinal perforated plate secured to the opposite end of the flexible member; regularly spaced pins on the upright for connection with the perforated plate to effect longitudinal adjustment of the stick relative to the upright; and a readily removable and longitudinally adjustable scale-bearing member secured to the same face of the upright from which the pins project; the plate having insignia co-operating with the insignia of the scale to indicate the height of the cross-bar rest above the ground.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

D. W. MERRIMAN.