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MEANS FOR PREVENTING DROPPING OF SAXOPHONES AND LIKE MUSICAL INSTRUMENTS

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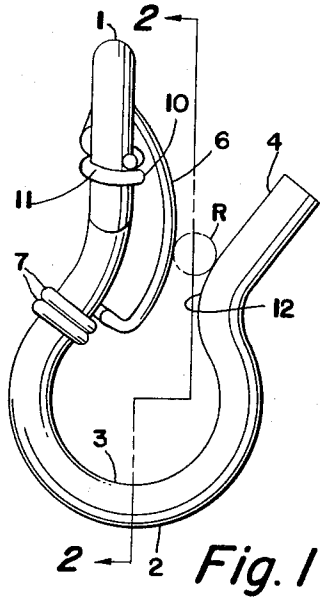


Fig. 1

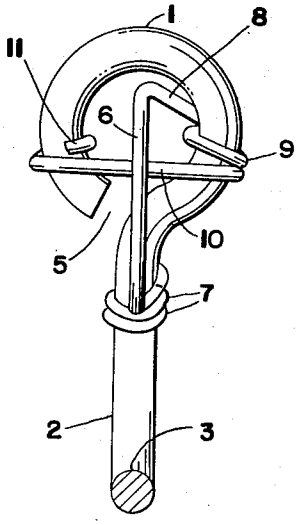


Fig. 2

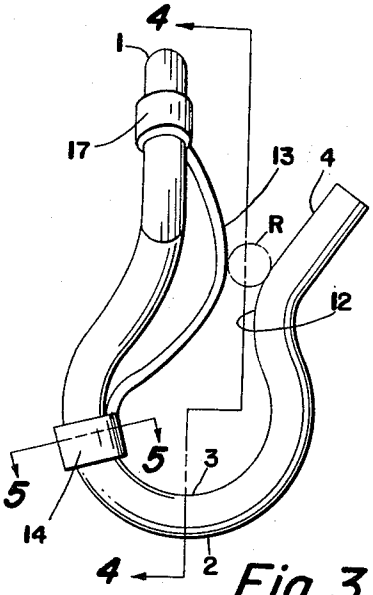


Fig. 3

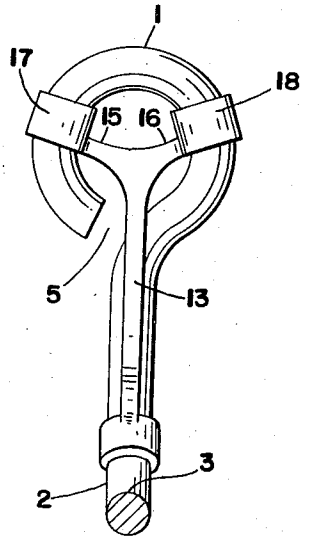


Fig. 4



Fig. 5

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MEANS FOR PREVENTING DROPPING OF SAXOPHONES AND LIKE MUSICAL INSTRUMENTS

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ABSTRACT OF THE DISCLOSURE

The invention is concerned with a snap hook for detachably supporting the ring of a saxophone or like musical instrument, and which hook is characterized by the use thereon of a resilient generally T-shaped longitudinally bowed spring having means on the ends thereof for removably securing the spring to the hook to form with the free end of the hook a throat for snappingly guiding the ring into the bight of the hook, one end of the spring being slidably mounted on the shank of the hook so as to allow the bowed portion of the spring to flex to allow the ring to be snappingly received in the bight as well as received from the hook.

This invention relates, as indicated, to means for preventing or avoiding the dropping or falling of saxophones or like musical instruments by students and other players.

When a student is seated with a saxophone resting on his right thigh, and leaning forwardly to play it, the conventional hook, which is suspended from this neck, has a tendency to fall out of the ring which is attached to the rear of the saxophone, and which normally rests on the hook, when the student is standing.

Since the student is usually unaware that the hook has become disengaged from the ring, he exerts a very loose grip on the instrument, so that when he swings the instrument over to play, the instrument may fall or drop onto the floor, with consequent damage to the instrument, as well as interruption in the playing thereof.

The present invention has as its principal object the provision of spring means associated with a conventional hook of the character described, which spring means is effective to prevent the ring from becoming disengaged from the hook, except upon exertion of a slight pressure by the player, but in which the resistance offered by the spring means is so light as to permit the ring to be quickly and easily disengaged from the hook.

Another object of the invention is to provide spring means of the character described, which may be completely removed from the hook under circumstances deemed necessary by the individual musician, yet may be quickly and easily reinstalled on the hook.

A further object of the invention is to provide means of the character described, which will enable the musician to have more freedom of movement of his instrument, as, for example, in marching bands, without fear of dropping the same.

Other objects and advantages of my inventoin will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification, and in which like numerals are employed to designate like parts throughout the same,

FIG. 1 is a view, in side elevation, of a hook such as is conventionally used for supporting the ring of a saxophone, and showing one form of the spring means attached thereto;

FIG. 2 is a cross-sectional view, taken on the line 2—2 of FIG. 1;

FIG. 3 is a view similar to FIG. 1, but showing a modified form of spring means;

FIG. 4 is a cross-sectional view, taken on the line 4—4 of FIG. 3, and

FIG. 5 is a cross-sectional view, taken on the line 5—5 of FIG. 3.

Referring more particularly to FIGS. 1 and 2, there is disclosed a conventional hook such as is commonly used for supporting the ring R of a saxophone, the cross-section of the ring being shown in broken lines.

The hook comprises a vertical body portion or loop 1, which is adapted to be suspended from a strap supported by the neck of the musician, and a hook portion 2, formed integrally with the loop 1, and which lies generally in a plane perpendicular to the general plane of the loop, and which is adapted to receive the ring R, in a manner such that the ring rests on the bottom 3 of the hook. The hook 2 terminates in a forwardly extending straight portion 4 over which the ring R slides. The loop 1 is provided with an opening or gap 5, which serves a purpose to be presently described.

The hook has removably secured thereto a spring which is preferably formed from a single length of fine wire (spring stock) bent to provide a curved body portion 6, which is coplanar with the plane of the hook 2, and which terminates at its lower end in a series of convolutions 7, which embrace the rear portion of the hook 2 at a point below the loop 1.

The wire is bent above the body portion 6 to provide a portion 8 which extends laterally and is bent to provide a convolution 9 which is wrapped around one side of the loop, a transverse portion 10, which extends across the front of the loop, and a terminal convolution 11, which is wrapped around the other side of the loop.

The spring which has been thus described may be removed from the hook by sliding the convolution 11 downwardly to the gap or opening 5 of the loop and out of this gap or opening, after which the entire spring may be slid downwardly along the hook and removed by then sliding it upwardly and off the straight portion 4 of the hook. The spring may be installed by the use of a procedure which is the reverse of that employed for removing it.

The spring construction is thus such as to permit the springs to be manufactured as a separate or accessory item, which may be purchased for installation on a conventional hook, which the musician already owns, or the hooks may be sold with the springs already attached.

With the spring installed on the hook, in the manner shown in FIGS. 1 and 2, the curved portion 6 of the spring is spaced from the point 12 of the hook a distance which is only slightly less than the diameter of the cross-section of the ring R, so that when the ring is moved through the space between the portion 6 and the point 12, a slight pressure is required to move the ring through this space, the portion 6 yielding to permit passage of the ring through the space, but resuming its original unstressed condition after the ring has moved through this space. Upon removal of the ring from the hook, a similar slight pressure is required to move the ring upwardly through the space in question, the portion 6 yielding to permit passage of the ring through the space, but resuming its original unstressed condition after the ring has moved through this space.

The spring is thus effective to prevent the ring from becoming disengaged from the hook, except upon exertion of a slight pressure by the player, yet the resistance of the spring to such pressure is so light as to permit the ring to be quickly and easily disengaged from the hook. As a result, the musician has more freedom of movement of his instrument, without fear of dropping or falling of the instrument, due to inadvertent disengagement of the ring from the hook.

In FIGS. 3, 4 and 5, a modification is shown in which the spring is made, in a single piece, of plastic or strip metal, which is formed to provide a curved body portion 13 which is substantially coplanar with the plane of the

hook **2**, and which terminates at its lower end in a clip **14** which is snapped onto the rear portion of the hook. The body portion terminates at its upper end in arms **15** and **16**, which respectively carry clips **17** and **18** which are similar to the clip **14**, and snapped onto the loop **1**, at opposite sides of the loop.

The modified spring which has been thus described may be removed from the hook by merely unsnapping the clips **14**, **17** and **18** from the hook, and the construction is such as to permit the springs to be manufactured as a separate or accessory item, which may be purchased for installation on a conventional hook, which the musician already owns, or the hooks may be sold with the springs already attached.

With the spring installed on the hook in the manner shown in FIGS. 3, 4 and 5, the curved portion **13** of the spring is spaced from the point **12** of the hook a distance which is only slightly less than the diameter of the cross-section of the ring R, so that when the ring is moved through the space between the portion **13** and the point **12**, a slight pressure is required to move the ring through this space, the portion **13** yielding to permit passage of the ring through the space, but resuming its original unstressed condition after the ring has moved through this space. Upon removal of the ring from the hook, a similar slight pressure is required to move the ring upwardly through the space in question, the portion **13** yielding to permit passage of the ring through the space, but resuming its original unstressed condition after the ring has passed through this space.

The modified form of spring is thus also effective to prevent the ring from becoming disengaged from the hook, except upon exertion of a slight pressure by the player, yet the resistance of the spring to such pressure is so light as to permit the ring to be quickly and easily disengaged from the hook, with the result that the musician has added freedom of movement of this instrument, without fear of dropping or falling of the instrument, due to inadvertent disengagement of the ring from the hook.

It is to be noted that in both forms of the invention, which have been described, the effective portions **6** and **13** of the springs are spaced from the point **12** of the hook a distance which is only slightly less than the diameter of the cross section of the ring R, and that each spring has portions which are effective to cam the ring R towards this space, thus greatly facilitating both placement of the ring in the hook, and removal of the ring from the hook. These advantages are not inherent in hooks of smewhat similar construction, such, for example, as hooks used for supporting keys or key rings.

It is to be understood that the forms of my invention, herewith shown and described, are to be taken as preferred examples of the same, and that various changes may be made in the shape, size and arrangement of parts thereof, without departing from the spirit of the invention or the scope of the subjoined claim.

Having thus described my invention, I claim:

A generally J-shaped snap hook for detachably supporting the ring of a saxophone or like musical instrument, said hook comprising a loop, adapted to be suspended from a strap supported by the neck of a musician, a ring engaging bight having an outwardly flared free end portion, a shank interconnecting said loop and said bight, and a resilient generally T-shaped longitudinally bowed spring having means on the ends thereof for removably securing the spring to said loop and said shank to form with said flared free end a throat for snappingly guiding the ring into the bight, said shank engaging spring securing means being slidably mounted thereon so as to allow the bowed portion of the spring to flex so as to allow the ring to be snappingly received in the bight.

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