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2,284,069

INSTRUMENT SUPPORTING CORD

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Fig. 1.

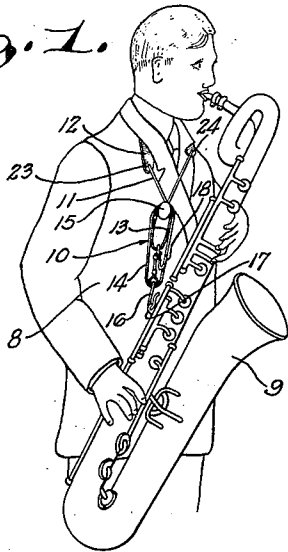


Fig. 4.

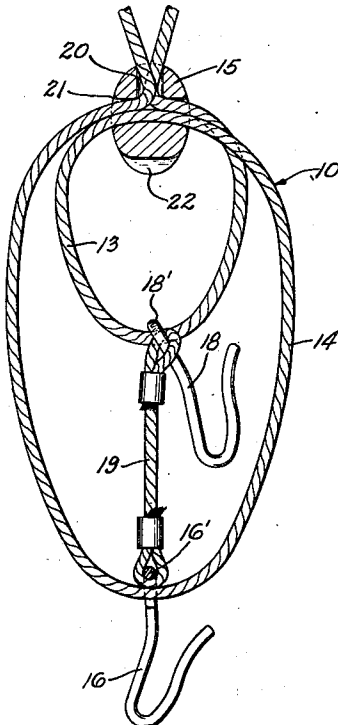
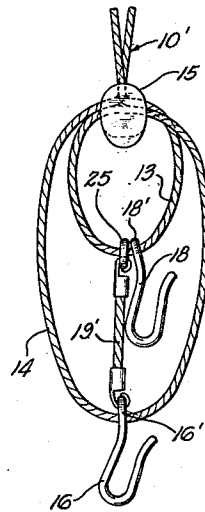


Fig. 3.

Fig. 5.

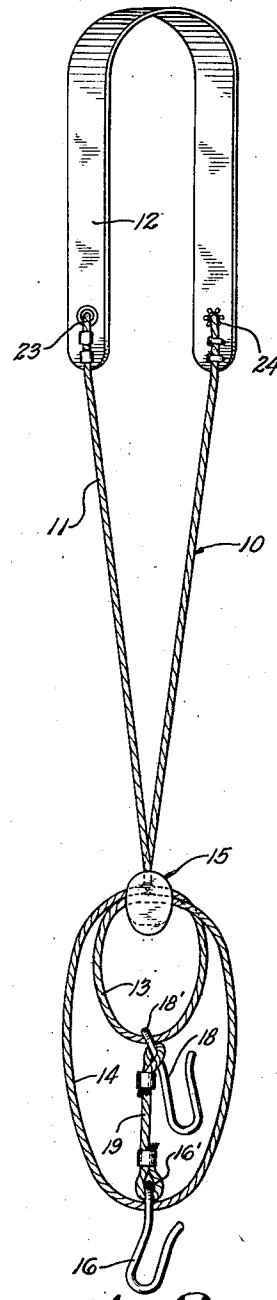


Fig. 2.

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UNITED STATES PATENT OFFICE

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INSTRUMENT SUPPORTING CORD

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1 Claim. (Cl. 224-5)

This invention relates to improvements in instrument supporting cords, and more particularly to an adjustable supporting cord adapted to encircle and depend from the neck of a musician, for the purpose of supporting a wind instrument.

Wind instruments such as saxophones require the use of both of the player's hands for the manipulation of the valves, and it is therefore customary to aid in the support of the instrument by releasably engaging it with the lower end portion of a looped cord which encircles and depends from the neck of the player.

In my prior U. S. Patent No. 2,100,088 I have illustrated and described an instrument supporting cord of the type under consideration wherein an endless cord is arranged in loop formation to provide a single loop and a pair of double loops, said looped portions being separated by a manipulatable slide locking block. In the construction disclosed in said prior patent, a hook for engaging the musical instrument is depended from both portions of the double loop, and the loops forming the double loop are of substantially the same size, and both strands pass through the eye of the hook which engages the instrument. While this arrangement is normally satisfactory where it is desired to use the supporting device with only one size instrument, it is found that it is somewhat inconvenient if the musician desires to interchangeably use several instruments, as for instance a bass saxophone and a tenor saxophone. The several instruments thus interchangeably used by the musician are of varying sizes, and this necessitates, besides the usual initial adjustment of the supporting cord, a further adjustment each time a shift is made from one instrument to another. It is, therefore, a primary object of the present invention to provide an instrument supporting cord having depended therefrom in vertically spaced-apart relation a pair of instrument supporting hooks, whereby the supporting cord, after being positioned on the musician, can be used for supporting several different sized instruments without the need of further adjustments.

In the type of supporting cord shown in my prior patent, the strands of both sections of the double loop pass through the single eyelet of the hook, and it has been found that this may unduly bind or restrict free movement of the hook and may cause improper disposition of portions of the supporting device.

A further object of the present invention is to eliminate the last mentioned difficulty by pro-

viding, in an instrument supporting cord, a depending double loop portion wherein the loops are separated and are of different sizes and wherein it is necessary that only one loop pass through the eye of one supporting hook, whereby binding of the cords and restriction of free movement of the hook is entirely eliminated.

A further object of the invention is to provide an adjustable supporting cord for instruments wherein spaced-apart and different sized depending loop portions are freely movably connected by a flexible member, this arrangement preventing tangling and undesired twisting of the cord strands.

A further object of the invention is to provide an instrument supporting cord which is readily adjustable as to length and wherein instrument engaging supporting hooks are carried by the cord at different elevations.

A further object of the invention is to provide an instrument supporting cord in which twisting and knotting tendencies of the cord are minimized so that the cord will always hang neatly and properly with the hook portions disposed for proper engagement with an instrument.

A further object of the invention is to provide an instrument supporting cord of the character described which is of very simple construction, which is inexpensive to manufacture, which is strong and durable, and which is well adapted for the purposes set forth.

With the above and other objects in view, the invention consists of the improved instrument supporting cord and its parts and combinations as set forth in the claim, and all equivalents thereof.

In the accompanying drawing in which the same reference characters indicate the same parts in all of the views:

Fig. 1 is a view of the musician, showing a saxophone supported on one of the hooks carried by the improved adjustable cord;

Fig. 2 is an enlarged perspective view of the cord;

Fig. 3 is a fragmentary view, on a larger scale, showing the lower looped portions of the cord, with the adjusting block through which the cord passes being shown in longitudinal section;

Fig. 4 is a detail fragmentary view of the lower loop portion of the supporting cord illustrating a modified form of the invention; and

Fig. 5 is a similar fragmentary view illustrating a second modification of the invention.

Referring now more particularly to the drawing, it will appear that a saxophone player or

musician is indicated by the numeral 8, and he is represented as playing a saxophone 9 which is supported by the improved adjustable cord, indicated generally by the numeral 10.

The adjustable cord is arranged with an upper loop 11, adapted to encircle the neck of the player, and including a collar strap 12, and a pair of different sized noncoinciding, lower loops 13 and 14. Portions of the cord forming all of the loops extend slidably and adjustably through an adjusting block 15. The lower portion of the larger loop 14 extends slidably through the eye 16' of a lower hook 16. The lower hook is adapted to be engaged with a standard eye 17 projecting from an intermediate portion of the instrument 9, which is presumably a bass or larger sized saxophone. The smaller loop 13 has its lower portion extended slidably through the eye 18' of an upper hook 18. It will be noted, that due to the marked difference in size between the loops 13 and 14, the hook 18 is carried at an elevation considerably above that of the hook 16. The hook 18 hangs freely in an out-of-the-way position, but should the musician desire to change from the large instrument 9 to a smaller instrument, the raised or elevated hook 18 is at a proper elevation for supporting a smaller instrument.

The lower end portion of the smaller loop 13 is adjustably associated with the lower end portion of the larger loop 14 by means of a flexible cord or connector 19. In the principal form of the invention the upper end of this connector 19 is secured within the eye 18' of the upper hook 18, and the lower end portion of said connector is secured within the eye 16' of the lower hook 16. This connector maintains a desired relationship between the small and large loops from which the respective hooks are depended.

The adjusting member 15 is shown in detail in Fig. 3, and it is similar to the adjusting member shown in my prior Patent No. 2,100,088. It is in the form of a block of any suitable material having a general oval shape. A bore 20 extends from the upper end of the block longitudinally inwardly to meet a transverse bore 21. The lower peripheral portion of the block is provided with a groove or recess 22.

The loops 11, 13 and 14 are all formed from a single length of cord. One end of said cord is secured to an end of the collar strap 12 as at 23, and then the cord extends downwardly therefrom and passes through the bore 20 of the block and is brought out of the block through one end of the bore 21. This portion of the cord then extends downwardly to form the small loop 13, being passed through the eye 18' of the upper hook 18; and it is then continued upwardly and passed through the opposite end of the bore 21 and entirely through the same; and it is then continued downwardly and arranged in the form of the large lower loop 14, passing through the eye 16' of the lower hook 16. The cord portion forming the large loop 14 is continued upwardly and enters the opposite side of the transverse bore 21 and is then passed upwardly through the bore 20 and out of the block with its upper end portion being secured to the other end of the strap 12 as at 24. Obviously the portions of the cord above the block, including the strap 12, form the upper loop 11, and it should be noted that the cord is unbroken throughout and is not made fast at any point to any portion of the adjusting block 15, nor to the hooks 16 and 18.

The effective length of the cord may be varied

very easily and expeditiously. When the upper loop encircles the neck of the musician, the cord depends as shown, and by holding the lower hook 16 lightly with one hand, the block 15 may be engaged with the other hand to be slid upwardly or downwardly, with the cord somewhat slack. An upward movement of the block serves to shorten the effective length of the entire cord, and when this is accomplished, the upper loop 11 is made smaller, and the lower loops are enlarged, but the latter are enlarged to a considerably less extent than the former is lessened. In a reverse manner, when the block is lowered, the effective length of the cord is increased. In making these adjustments there is relative sliding movement between the engaged parts of the block and cord and between the engaged portions of the loops 13 and 14 and the eyes of the hooks 18 and 16. Furthermore, changes in the adjustment of the effective length of the entire cord maintain a proper relationship between the disposition of the hooks 18 and 16.

When the proper adjustment has been made and the cord is in use and is sustaining the weight of an instrument, either on the hook 16 or on the hook 18, the friction of the cord through the portion of the block and its binding engagement with portions of the block is sufficient to prevent the adjusting block from shifting its position, and the cord will maintain its proper length. The hooks 16 and 18, being freely carried by the lower end portions of the loops 14 and 13, will of course find their proper position at the lower ends of said loops regardless of the adjustment of the same, and a proper relationship between said loops is maintained by the connector 19.

A slight modification of the invention is illustrated in Fig. 4 wherein the upper hook 18 has its eye 18' freely receiving the smaller loop 13, and the smaller loop 13 is connected to the larger loop 14 by a flexible connector 19' whose lower end is secured to the eye of the lower hook 16. However the upper end of the connector 19' carries a ring 25 through which the upper loop 13 slidably extends, with the result that the upper hook 18 is actually free of the connector 19'.

A second modification is illustrated in Fig. 5, and in this form of the invention an upper hook may or may not be carried by the loop 13. The connector between the upper loop 13 and the lower loop 14 is in the form of a flexible chain 19''. The lower end portion of this chain is secured to the eye 16' of the lower hook 16, and the upper end portion of this chain carries a ring 25 through which the upper loop 13 slidably extends.

The improved instrument supporting cord is susceptible of easy and quick adjustments and additionally provides the novel and desirable expedient of permitting interchangeable support of different sized instruments. When one supporting hook is being used, the other supporting hook is disposed in a non-interfering position. The device is furthermore of simple and novel construction and is well adapted for the purposes described.

What is claimed as the invention is:

1. An instrument supporting member, comprising an endless flexible cord constructed to present a variable size upper loop adapted to encircle the neck of a player, and a pair of variable size lower loops of different lengths, a securing and

adjusting member through which portions of the

cord pass and movable to vary the effective length of the cord as well as the sizes of the several loops, a connector between the separated depending portions of the lower loops and slidably connected with both of the same to keep the difference between the lengths of said lower loops, when said loops are stretched as by supporting an instrument, within a predetermined maximum amount, and an instrument carrying

5 hook slidably depended from a lower portion of each of said lower loops and attached to opposite ends of said connector, said hooks being normally maintained at elevations differing by the length of the connector through cooperation between said connector and said adjusting member.

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