April 12, 1932. R. C. SIGLER 1,853,466

DRUM MUFFLING AND SNARE TENSIONING DEVICE

Filed June 21, 1929

Fig. 1.

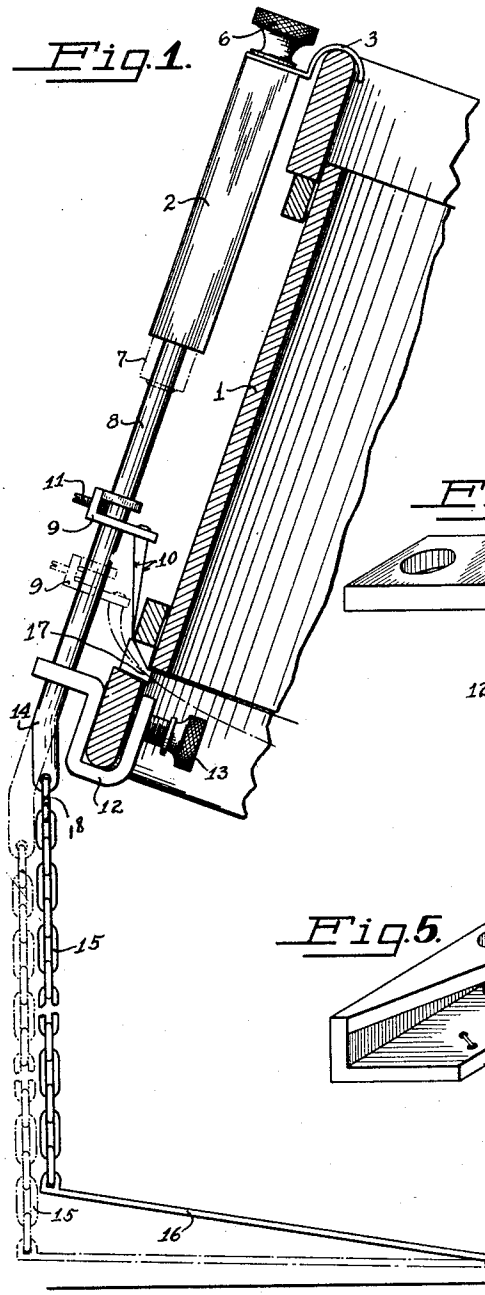


Fig. 2.

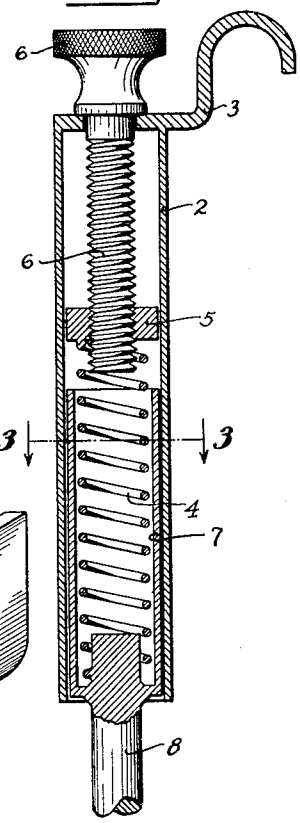


Fig. 3.

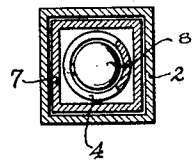


Fig. 4.

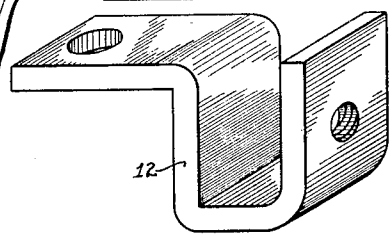
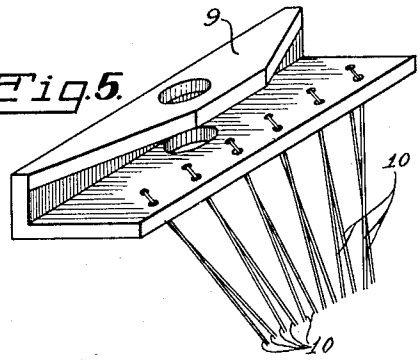


Fig. 5.



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Patented Apr. 12, 1932 1,853,466

UNITED STATES PATENT OFFICE

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DRUM MUFFLING AND SNARE TENSIONING DEVICE

Application filed June 21, 1929. Serial No. 372,645.

This invention relates to improvements in a pedal controlled muffler and snare tensioner for drums and has for its particular objects means by which a drummer may easily muffle his instrument or tension the snares without material interference in the efficient playing of the instrument.

In the appended drawings I show a preferred form of my invention, but it will be observed that many modifications may be indulged in without departing from the spirit of the invention or the scope of the claims.

The objects mentioned are attained by the device illustrated in the drawings in which:

Figure 1 is an elevation of the invention attached to the drum, only a fragment of which is shown in cross-section. Normal movement of the parts of my device is shown in dotted lines.

Figure 2 is a cross-sectional view of the casing containing the adjustable spring member and showing the adjustment means.

Figure 3 is a cross-sectional view of the casing member taken on the lines 3—3 of Figure 2, looking downward into the same.

Figure 4 is a perspective view of an elbow bracket member used as a guiding means for the rod secured to the adjustable spring member, and

Figure 5 is a perspective view of the snare terminal which is mounted on the rod.

Similar numerals refer to similar parts throughout the views.

A fragment of a snare drum of common type is illustrated in cross-section as at (1) showing a shell, flesh hoops and top and bottom hoops which are held in position by the usual strainer brackets (not shown). At (2) is shown the rectangular casing feature of my device supported by the hook (3) attached to the top hoop of the drum. The casing (2) contains an adjustable spring member (4), as shown in Figure 2, rigidly secured to the threaded nut (5), in which reception is provided for the threaded portion of the thumb screw (6). The threaded nut 5 is square in shape, corresponding to the rectangular casing 2, and therefore rotation of the former within the latter is prevented. A positive and free movement of the spring member within the casing is assured by use of the sleeve member (7) bearing on the inner surface of the casing (2). The rod (8), which is also rigidly secured to the spring (4), as well as the sleeve member (7), carries an adjustable terminal (9) to which are attached the snares (10). The snare terminal shown is substituted for the usual terminal found secured to the shell of the drum. This snare terminal may be adjusted in its position on the rod (8) by the set screw (11). Lateral movement of the rod (8) is prevented by the elbow bracket (12) through which it passes, the bracket being removably attached to the bottom hoop of the drum by a thumb screw as at (13).

The rod (8) is angled at its lower end as at (14) since it has been found through experiments that a more direct and centered stroke is obtained than were the pedal connecting means directly in alignment with the rod (8). I have also found that by providing the chain (15) in lieu of a more rigid member, the device may be operated even when the foot pedal (16) has been inadvertently removed from its normal position.

I show an S-shaped hook (18) as a desirable form of connection between the angled end (14) of the rod (8) and the chain (15). In this manner it is possible for the drummer to regulate the height of the drum stand and at the same time make the corresponding adjustment in the length of the chain (15). The numeral (15) denotes a chain as the preferred form of connecting means for the rod (8) and the foot pedal (16), it will be observed, however, that such a flexible member is not absolutely essential to the operation of my device, for it may suit the fancy of some to substitute a rod or other rigid member for this connecting means.

To permit complete muffling of the drum I have provided a rectangular opening in the bottom hoop of the drum as at (17) in order that the snares may be completely pulled away from the flesh head and thus overcome any noises that would normally occur were the tension on the gut snares simply loosened and they be permitted to rest against the head.

To assemble my device on a snare drum of

the usual type, which has been prepared by cutting a rectangular opening (17), if it does not already exist, the operator first passes the snares through holes in the snare terminal (9), which have been provided for the purpose, and then fastens the opposite end of the snares to a terminal provided on the opposite side of the drum, (not shown). The elbow bracket (12) is then screwed to the bottom hoop directly under the snare opening (17) and the rod (8) is passed downwardly through the dual openings in the snare terminal (9) and the hole in the elbow bracket (12). The rectangular casing (2) is then placed over the spring member (4) as a housing therefor, and hooked to the top hoop of the drum by the hook (3). A preliminary connection and adjustment is then made with the thumb screw (6). The operator may then find that the snare terminal (9) should be adjusted on the rod (8) and the slack in the snares taken up in this manner, rather than rely upon an adjustment obtained by turning the thumb screw (6) which, it will be observed, provides for a much shorter movement. The chain (15) is then attached to the angled end (14) of the rod (8) by means of the S-shaped hook (18) and secured to the foot pedal (16).

The operation of my device will thus be seen to be that by pressing the foot pedal (16), the snares are dropped far enough away from the drum head to clearly muffle the same, and while this operation is taking place the rectangular casing (2) remains in a rigid position. When the foot pressure is released the tension spring member (4) will return to its normal position within the casing (2) and the snares are drawn back to their original adjustment in relation to the bottom head of the drum. It will be observed that the drummer can in this way change his instrument from a snare drum to a muffled drum instantaneously and without interruption to the playing of the instrument since both hands are left free for manipulation of the drumsticks and other drummers' accessories.

I have found, in my experience, that considerable difficulty accompanies the playing of snare drums when the particular music being rendered calls for crescendoes and diminishes. For example, it has heretofore been necessary for the drummer to start the roll near the rim of the drum and gradually work toward the center of the head for the crescendo and vice versa. This method causes unevenness in playing and occasionally the quality of the soft notes is poor. It will be observed that with my device the soften notes may be obtained by pressing the foot-pedal to its lowest position and that the crescendo is reached by gradually releasing this pressure. Under this method of tone control the drummer may roll directly upon the center of the head, thereby producing tones of the desired quality and evenness.

I claim:

1. In an adjustable snare tensioning device for snare drums whereby the drum may be muffled by withdrawal of the snares from the lower surface of the drum, a detachable tensioning member adapted to be hooked on the upper head ring or hoop of the drum, a rod depending from said tensioning device, a terminal member to which one end of the snares are attached adjustably mounted upon said rod, and foot operated means for displacing said rod to cause withdrawal of the snares from the lower surface of the drum.

2. In an adjustable snare tensioning device for snare drums whereby the drum may be muffled by withdrawal of the snares from the lower surface of the drum, a detachable tensioning member adapted to be hooked on the upper ring or hoop of the drum, comprising a casing member adapted to be hooked over the upper hoop of the drum, a threaded member supported by the upper end of said casing and extending through a hole in the upper end of said casing, an internally threaded member within said casing held against rotation relatively to said housing, a rod carrying a snare terminal member and a spiral spring fastened at one end to the upper end of said rod and fastened at its other end to said internally threaded member.

3. A device as claimed in claim 2 comprising a casing member of non-circular section, and an internally threaded member of corresponding section arranged within said casing, and a sleeve member of section corresponding to said casing fastened to the upper end of said rod and arranged to fit closely within but slide freely in said casing, the casing and sleeve serving to enclose said spiral spring.

ROBERT C. SIGLER.