March 3, 1931. G. H. LOGAN 1,794,969

SNARE STRAINER FOR DRUMS

Filed July 3, 1926 2 Sheets-Sheet 1

Fig. 1.

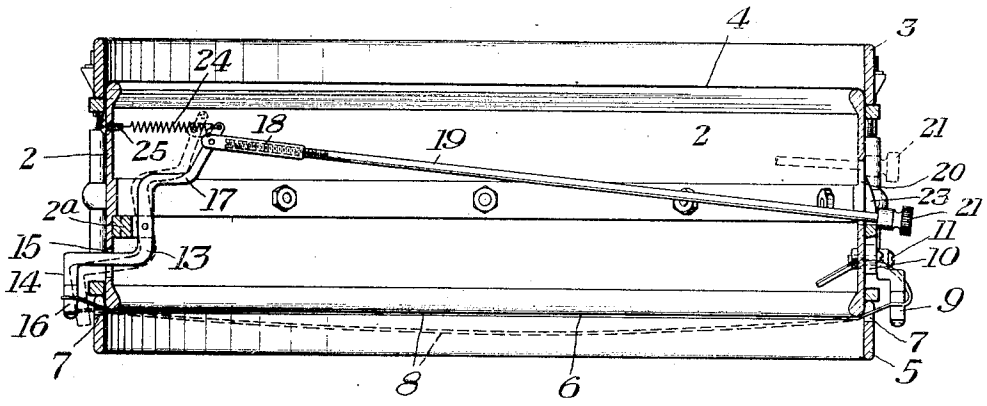


Fig. 2.

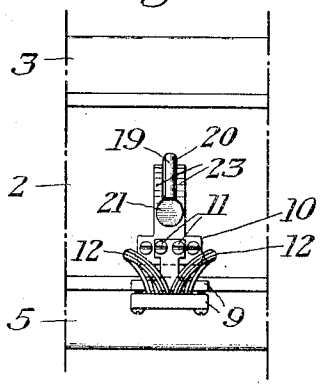
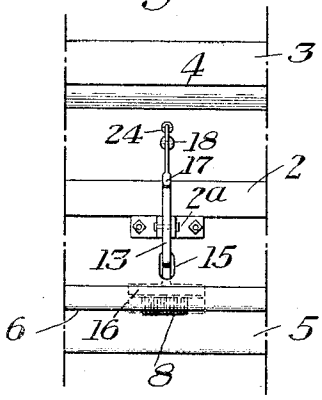


Fig. 3.



INVENTOR

George H. Logan

by his attorneys

Lyons, Stebbins & Kennedy

March 3, 1931. G. H. LOGAN 1,794,969

SNARE STRAINER FOR DRUMS

Filed July 3, 1926 2 Sheets-Sheet 2

Fig. 4.

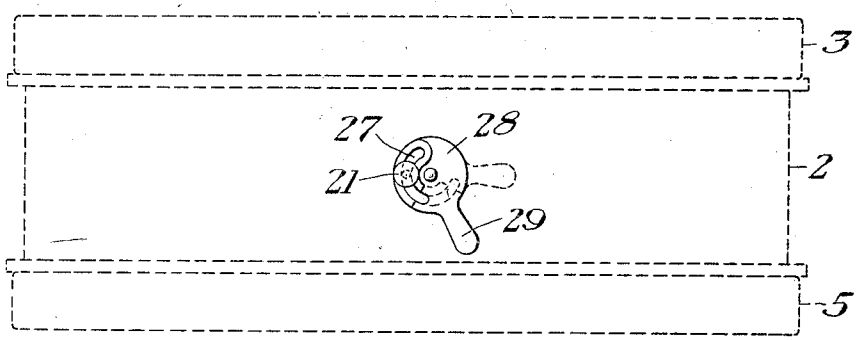


Fig. 5.

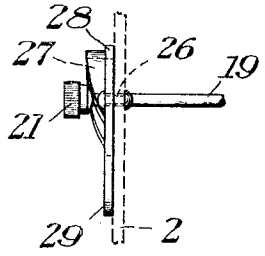
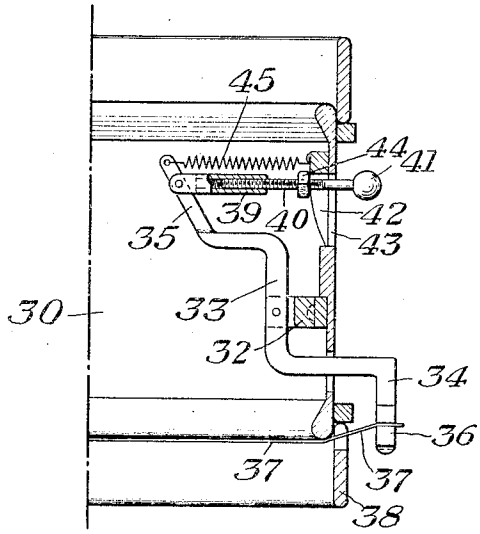


Fig. 6.



INVENTOR

George H. Logan

by his attorneys

Byrnes, Stebbins & Parmelee

Patented Mar. 3, 1931 1,794,969

UNITED STATES PATENT OFFICE

GEORGE H. LOGAN, OF PITTSBURGH, PENNSYLVANIA

SNARE STRAINER FOR DRUMS

Application filed July 3, 1926. Serial No. 120,401.

This invention relates to drums, and is for a snare strainer therefor.

In the playing of a drum, the drummer frequently has occasion to loosen the snares for a short period of time in order to get a peculiar tone quality for the drum, after which the snares are again tightened to restore the normal tone. Various devices have heretofore been proposed for loosening the snares quickly, or for moving the snares away from the drum head. Some disadvantages of such devices reside in the fact that they make it difficult to adjust the tension of the snares, and they also generally have a considerable mechanism outside the body of the drum which is undesirable.

The present invention proposes to provide a snare strainer of unique construction wherein most of the operating parts are contained inside the drum and wherein the snares may be instantly moved out of contact with the drum head or snapped back into contact therewith and provide in connection therewith means by which the tension on the snares may be easily varied.

The invention may be readily understood by reference to the accompanying drawings which illustrate certain embodiments of my invention and in which:

Figure 1 represents a transverse vertical section through a drum having one form of my invention applied thereto;

Figure 2 is a side elevation of a portion of the drum showing the operating handle for the strainer;

Figure 3 is a front elevation of a portion of the inside of the drum showing the mounting for the operating lever of the snare strainer;

Figure 4 is a side elevation of that portion of the drum illustrated in Figure 2 showing a slightly modified construction of operating mechanism;

Figure 5 is a detail side elevation of the operating device shown on the drum in Figure 4;

Figure 6 is a transverse vertical section through a part of a drum showing still a further modification in the construction of the strainer.

In the construction shown in Figures 1 to 3 of the drawings, 2 designates the circular body of the drum, 3 is the upper hoop, 4 is the upper drum head, 5 is the lower hoop and 6 is the lower drum head. The hoop 5 has diametrically opposite slots 7 therein through which the snares, designated 8, pass. The snares are clamped at one side of the drum in a clamp element 9 removably carried on a block 10 secured to the side of the drum, the clamp 9 being secured to the block 10 by means of screws or bolts 11. It will be noted that the clamp 9 is disposed almost in the plane of the drum head 6 so that the snares are not bent at any sharp angle over the sides of the drum. The loose ends of the snares, which extend beyond the clamp 9 may be projected through holes 12 in the body 2, as illustrated in Figures 1 and 2.

Pivotally mounted inside the body 2 on a bracket 2a diametrically opposite the clamp 9 is a lever 13 having an offset end portion 14 which projects through a slot 15 in the body of the drum and which carries a snare clamp 16 at its free end. The other end of the lever is offset at 17 and has a connector 18 pivotally connected thereto, this connector being internally threaded, as shown in Figure 1. Screwed into the connector 18 is the threaded terminal of a rod 19 which extends across the interior of the drum. The end of this rod projects through a slot 20 in the body of the drum and is provided with an operating knob 21. The metal block 10 to which the clamp 9 is secured has a bifurcated extension 23 thereon, the slot in the bifurcated portion registering with the slot 20, while the bifurcated part itself is inclined to provide a cam surface. Connected to the terminal of the end portion 17 of the lever is a tension spring 24 whose other end is secured to the drum body in any suitable way at 25. It will be noted that the snare clamp 16, which is diametrically opposite the clamp 9 is in substantially the same plane as the clamp 9 so that it is not necessary for the snares to bend over this side of the drum at any sharp angle.

The operation of the device may now be followed. Assume first that it is desired to put the snares on the drum. The hoop 5 is removed, after which the snares are clamped

at one end in the clamp 16. The other ends of the snares are clamped in the clamp 9 after being drawn taut. The hoop 5 is then put back in place. The knob 21 on the rod 19 is positioned on the highest part of the cam provided by the bifurcated portion 23, and the knob 21 is turned, screwing the rod 19 into the connector 18. This tends to rock the lever 13 to draw the snares 8 to the desired degree of tension. If it is desired to suddenly release the snares to change the tone of the drum, the operator merely pushes the knob 21 up to the dotted line position, shown in Figure 1. In moving up, the knob moves down the inclined cam surface 23, so that the spring 24 can function to rock the lever 13 and loosen the snares, which then take the bowed position, indicated in dotted lines in Figure 1. In this position the snares are out of contact with the head 6 of the drum. To tighten the snares the drummer merely pushes down on the knob 21 bringing it back to the full line position shown in Figure 1. In this way the snares can be quickly released and set without varying the effective length thereof, and the effective length can be varied by turning the rod 19 to change the tension on the snares. The two adjustments are thus provided by a common operating knob, and any operation and adjustment can be easily and quickly made. Furthermore, practically all of the operating parts of the snare are contained inside the drum so that they are out of the way and are not unsightly. Due to the fact that the snares are not bent at a sharp angle over the edges of the drum, the snares can adjust themselves more readily to the surface of the drum. The replacement of the snares can be easily made by removing the hoop 5 and detaching the clamp 9 by removing screws 11.

In the modification shown in Figure 4 the general construction of the snare strainer is similar to that described in Figures 1 to 3, but instead of having the terminal of the rod 19 pass through a slot in the body 2 of the drum, the rod 19 passes through a hole 26 in the side of the drum and extends through a slot 27 in a pivoted circular cam 28. The cam 28 has a suitably arranged operating handle 29. By merely rotating the cam 28 the snares can be relaxed or brought into operative position very quickly and easily, while an adjustment in the tension of the snares is made by turning the knob in the manner hereinbefore described.

Figure 6 illustrates a form of device generally similar to that shown in Figure 1, but in this construction the rod which is substituted for the rod 19 is reversely arranged. In this figure, 30 designates the body of the drum and on the interior thereof is a bracket 32 in which is pivotally supported a lever 33 of the shape shown in Figure 1, this lever having oppositely offset end portions 34 and 35. On the end portion 34 is a snare clamp 36 in which the ends of the snares 37 pass. The hoops for the drum are designated 38, and the lower hoop is slotted to give clearance to the snares, as described in connection with Figure 1. Attached to the other end 35 of the lever 33 is a connector sleeve 39 which is internally threaded, and screwed into this sleeve is a threaded rod 40 having an operating knob 41 thereon outside the drum. Inside the drum is a bifurcated cam member 42 through which the rod 40 passes, the body of the drum being slotted at 43 to permit the rod to be moved down from the position shown in Figure 6. This rod 40 carries a nut or other suitable abutment 44 for cooperation with the cam 42.

When the knob 41 is moved down, the inclined cam 42 will allow the lever 33 to rock under the influence of the tension spring 45, moving the snare clamp 36 toward the body of the drum, thereby loosening the snares. To restore them to normal position the knob 41 need only be pulled back to the position shown in Figure 6. To adjust the tension of the snares the knob 41 is turned, causing the rod 40 to screw into or out of the connector 39.

The advantages of the invention reside principally in the use of a cam and lever for loosening and tightening the snares. Further advantages reside in the provision of an adjustment whereby the operating knob can be operated to vary the tension on the snares and also be operated to move the snares into and out of operative position. The entire arrangement simplifies the mechanism of the drum and provides an arrangement which is extremely convenient to operate. The construction of the strainer is very simple so that it can be cheaply manufactured and can be easily built into the drum.

While I have illustrated certain preferred embodiments of my invention, it will be understood that these are merely illustrative of the general idea of the invention and that various changes and modifications may be made therein and that the invention may be otherwise embodied within the spirit and scope of the appended claims.

I claim:

1. In a drum, a snare strainer including a lever pivotally mounted within the drum having a snare clamp at one end thereof and having a cam engaging member at the other end thereof, and a cam on the drum positioned for cooperation with the cam engaging member.

2. In a drum, a snare strainer including a lever having a snare clamp at one end thereof and having a cam engaging member at the other end thereof, a cam on the drum positioned for cooperation with the cam engaging member, said cam engaging member being adjustably connected with the lever.

3. In a drum, a drum body, a lever pivotally supported on the body, snares connected with one end of the lever, an operating rod for the lever and an adjustable connection between the rod and lever.

4. In a drum, a drum body, a lever pivotally supported within the body and having an offset end portion projecting through the body, snares connected with said offset end portion, and an operating element for the lever operatively connected therewith.

5. In a drum, a drum body, a lever pivotally mounted within the body and having an offset end portion projecting through the body, snares connected with the said offset end portion of the lever, an operating connection connected with the lever and passing through the body, and a cam element on the body of the drum with which the operating connection cooperates.

6. In a drum, a drum body, a lever pivotally mounted within the body and having an offset end portion projecting through the body, snares connected with the said offset end portion of the lever, an operating connection connected with the lever and passing through the body, a cam element on the body of the drum with which the operating connection cooperates, said operating connection being adjustably connected with the lever.

7. In a drum, a drum body, a lever pivotally mounted within the body and having an offset end portion projecting through the body, snares connected with the said offset end portion of the lever, an operating connection connected with the lever and passing through the body, and a cam element on the body of the drum with which the operating connection cooperates, said operating connection being adjustably connected with the lever through a threaded coupling.

8. A drum having a body, a lever pivotally mounted inside the body, said lever having an offset terminal portion projecting through the body, a snare clamp on said offset terminal portion of the lever, a rod, a threaded union connecting the rod and the lever, said rod projecting through the body of the drum, a cam on the body of the drum, and an abutment on the rod cooperating with the cam.

9. A drum having a body, a lever pivotally mounted inside the body, said lever having an offset terminal portion projecting through the body, a snare clamp on said offset terminal portion of the lever, a rod, a threaded union connecting the rod and the lever, said rod projecting through the body of the drum, a cam on the body of the drum, an abutment on the rod cooperating with the cam, said lever having a spring connected thereto tending to rock it in one direction.

10. In a drum, a snare strainer including a lever, snares connected with the lever, said lever being movable into and out of snare loosening position, means for moving the lever instantaneously into and out of said position, said means being adjustably connected with the lever for varying the effective tension of the snares.

11. A drum including a body, a snare clamp removably carried on one side of the body, a lever inside the body opposite the said clamp and having an offset terminal portion projecting through the body with a snare clamp thereon, a rod connected with the lever through a threaded coupling, an abutment on the rod, said rod projecting through the body of the drum, and an element having a high point thereon with which the abutment on the rod engages for holding the lever in one predetermined position.

In testimony whereof I have hereunto set my hand.

GEORGE H. LOGAN.