(No Model.)

E. BOULANGER.

DEVICE FOR ADJUSTING DRUM SNARES.

No. 480,064. Patented Aug. 2, 1892.

Fig. 1

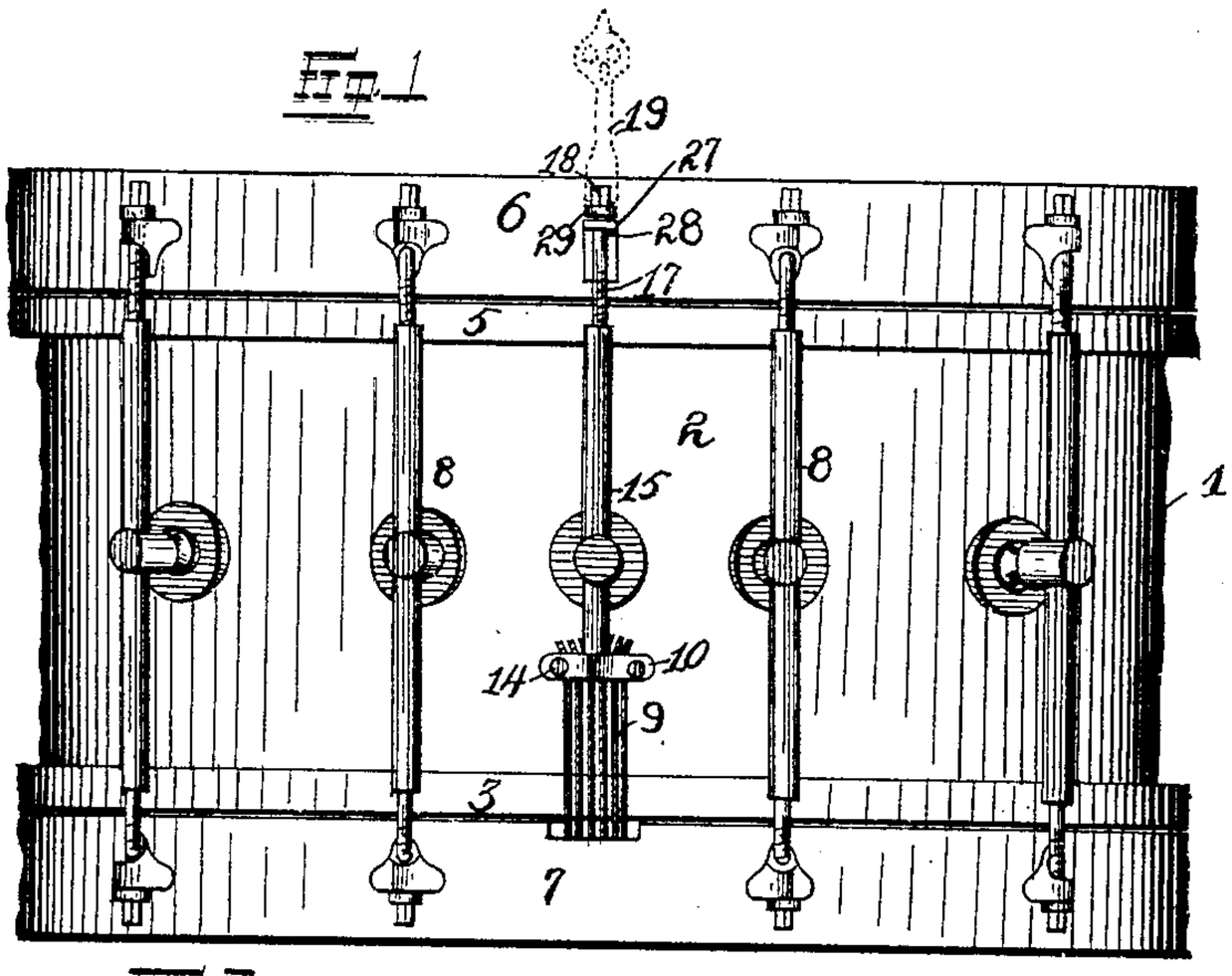


Fig. 2

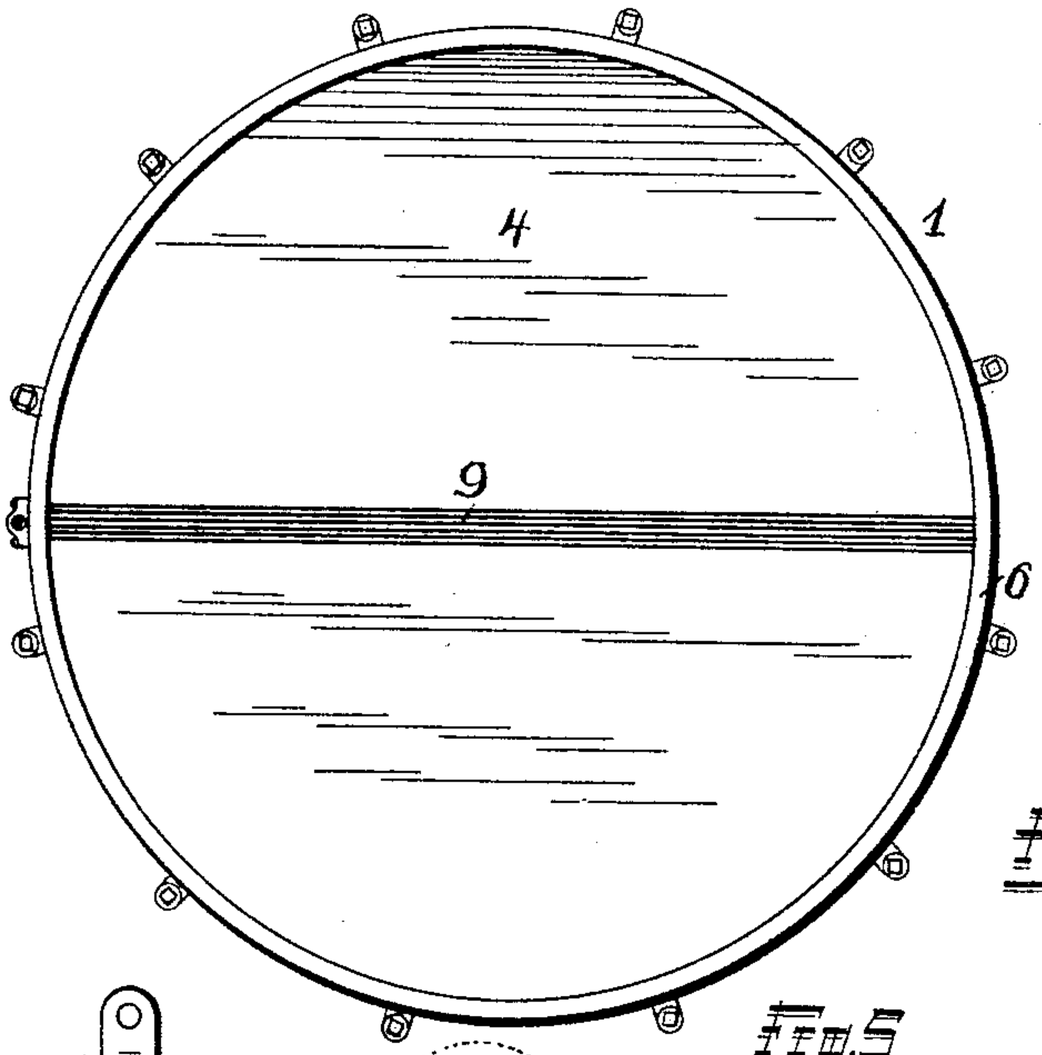


Fig. 3

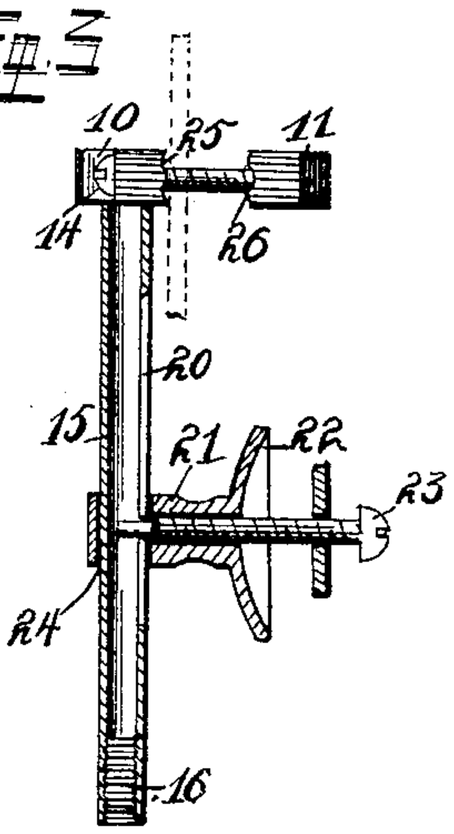


Fig. 4

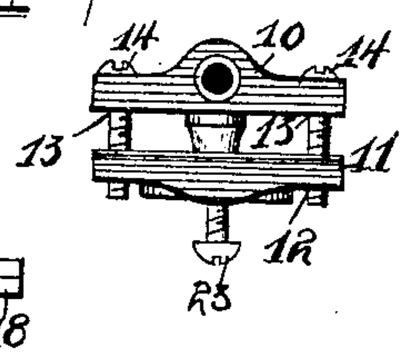


Fig. 5

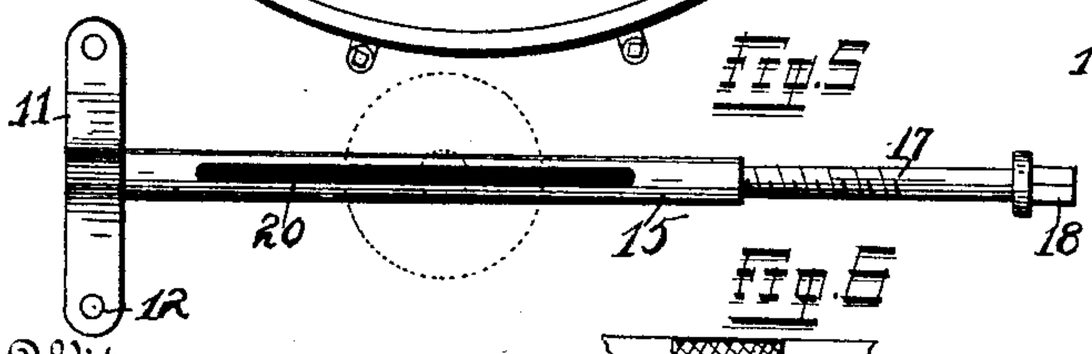
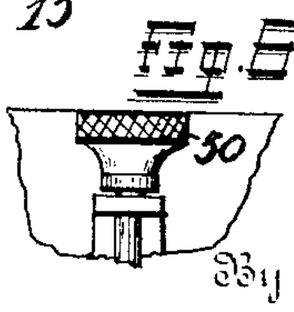


Fig. 6



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UNITED STATES PATENT OFFICE.

EMIL BOULANGER, OF ST. LOUIS, MISSOURI.

DEVICE FOR ADJUSTING DRUM-SNARES.

SPECIFICATION forming part of Letters Patent No. 480,064, dated August 2, 1892.

Application filed May 10, 1892. Serial No. 432,493. (No model.)

To all whom it may concern:

Be it known that I, EMIL BOULANGER, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Devices for Securing and Adjusting Drum-Snare Strings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in devices for securing and adjusting drum-snare strings; and it consists in the novel arrangement and combination of parts, as will be more fully hereinafter described, and designated in the claims.

In the drawings, Figure 1 is an elevation of an ordinary snare-drum with my complete invention attached thereto. Fig. 2 is a view of the ordinary snare-head of a drum, showing the relative position of the snare-strings attached across same. Fig. 3 is a detail longitudinal section view of the snare-strainer. Fig. 4 is a transverse section view of the clamping-jaws designed to secure the snare-strings. Fig. 5 is a plan view of the snare-strainer complete, showing the means by which it is adjusted. Fig. 6 is a modification view of a device for adjusting the strainer-rod.

The object of my invention is to construct a device for adjusting the snare-strings on snare-drums and at the same time provide means for tightening the same without affecting the relative position and tension of the hoops over which the snare-head is stretched.

Referring to the drawings, 1 indicates a snare-drum of ordinary design and construction, having a shell 2, a hoop 3, over which the snare-head 4 is stretched, a hoop 5, over which the beating-head is stretched, an upper rim 6, and a lower rim 7, with braces or rods, such as 8, all being of such designs as are ordinarily used in drum construction.

9 indicates a number of snare-strings, such as are generally used to impart a quality of tone to a snare-drum. The ends of said strings are passed through and secured between a fixed jaw 10 of a clamp and an adjustable clamping-jaw 11. Said movable jaw 11 has in each end screw-threaded perforations 12. The fixed jaw 10 is also provided with perforations 13, coinciding in position with those in movable jaw 11. Said perforations 13 are similar to the perforations 12, except that they are not interiorly screw-threaded. Adapted to fit in these perforations are screw-headed bolts 14, the screw on same fitting into the screw-threaded perforations 12 and the screw-head of said bolt fitting over the outer edge of the fixed jaw 10. (See Fig. 4 for illustration.) Fitting into said fixed jaw 10 at its transverse center is a hollow tube 15, having its opposite end 16 interiorly screw-threaded.

17 indicates a screw-threaded adjusting-rod, having one end 18 squared, such construction being adapted to receive a key 19, by means of which the snare-strainer is adjusted.

20 indicates a slot in the outer periphery of said tube 15.

21 indicates a bracket having a flat surface 22, adapted to fit the outer shell 2 of the drum and secured to said shell by means of a screw-headed bolt 23. Said screw-headed bolt 23 has its screw-headed end constructed to engage in the elongated slot 20 in the tube 15. (See Fig. 3 for illustration.) The end of this bolt 23 passes beyond the inner periphery of a perforation 24 in the bracket 21 and engages the slot of the hollow tube 15. The inner face 25 of the fixed jaw 10 of the clamp has irregular depressions and projections running longitudinally along its surface, coinciding with similar depressions and projections upon the inner face 26 of the adjusting-jaw 11, and is so constructed as to guarantee the security of the snare-strings when they are clamped therein. The screw-threaded adjusting-rod 17 is adapted to screw into the screw-threaded end of the tube 15.

27 indicates a shoulder or bracket secured to the rim and having therein a perforation 28 through the projecting shoulder 27, adapted to bear against the collar 29 on the rod 17. The milled thumb-screw 30 is formed with or attached to the adjusting-rod 17 and serves as a means of adjusting said rod in place of the key 19.

Having fully described the mechanical construction and briefly stated the object of my invention, I will now proceed to describe the operation of same.

I apply my complete invention to a snare-

drum of the ordinary design and constructed of parts as herein described. A number of snare-strings are fastened between the rim and hoop over which the snare-head is stretched, said snare-strings being fastened therein in any suitable and mechanical manner. Said snare-strings pass transversely across the snare-head and through between the rim and the hoop and are fastened near their ends in the adjustable clamping-jaws 10 and 11.

Secured on the shell 2 by means of a screw 23 is a bracket 21, said bracket being stationary upon the side of said shell, and through the part of said bracket which extends beyond the shell is a perforation 24, through which the hollow tube 15 is adapted to pass and be secured. Through the shoulder or bracket 27, secured to the rim, is a perforation 28, adapted to receive the screw-threaded adjusting-rod 17. When it is desired to tighten up the snares in order to impart a quality of tone to the snare-drum, (it being prefaced that the snares are already secured between the jaws of the clamp,) the key 19 is placed upon the squared ends of the adjusting-rod 17, by means of which the snares are either tightened or loosened. The elongated slot 20, engaging the end of the screw-headed bolt 23, allows the free adjustment of said clamp. In this adjustment by means of my invention the strain and forcing outward of the rim 6 is dispensed with.

Another advantage obtained by use of my invention is that the snares are held in an even tension while the screw is being adjusted, there being no motion to the clamp except a vertical motion. Thus it will be seen that by the use of my invention there are several advantages gained: first, the outward strain and consequent loosening of the beating-head is omitted; second, in the same manner the pressure given the beating-head by the rim 6 is even all around; third, the tension of the snare-strings secured in the locking-jaws of the clamp is perfectly even, as the clamp in which they are secured is upon the end of the hollow tube, which is held in a stationary vertical position by means of the bolt, the end of which engages in the elongated slot of the hollow tube 15, and thus prevents any side movement of the jaws holding the snare-strings.

The use of the milled thumb-screw shown in the modification view Fig. 6 does away with the use of the key 19.

Having fully described my invention, what I claim is—

1. A device for securing and adjusting drum-snare strings, consisting of an interiorly-screw-threaded tubular rod carrying a clamp at one end, a guide-bracket encircling said rod and carrying a projection engaging said slot, and an adjusting-screw working in the tubular rod, substantially as and for the purpose set forth.

2. A device for securing and adjusting drum-snare strings, having a bracket 21, secured to the shell 2 by screw-headed bolt 23, said bolt having its end fitted to engage in the elongated slot in the hollow tube 15, substantially as set forth.

3. A device for securing and adjusting drum-snare strings, having a hollow tube, one end of which is secured in a fixed clamping-jaw, the opposite end interiorly screw-threaded and having in its outer periphery an elongated slot adapted to engage the end of a screw-headed bolt, substantially as set forth.

4. A device for securing and adjusting drum-snare strings, having a hollow tube secured to a fixed clamping-jaw, the opposite end of the tube interiorly screw-threaded and said tube constructed with an elongated slot fitted to engage and travel on the end of a screw-headed bolt, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EMIL BOULANGER.

Witnesses:

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C. K. JONES.