

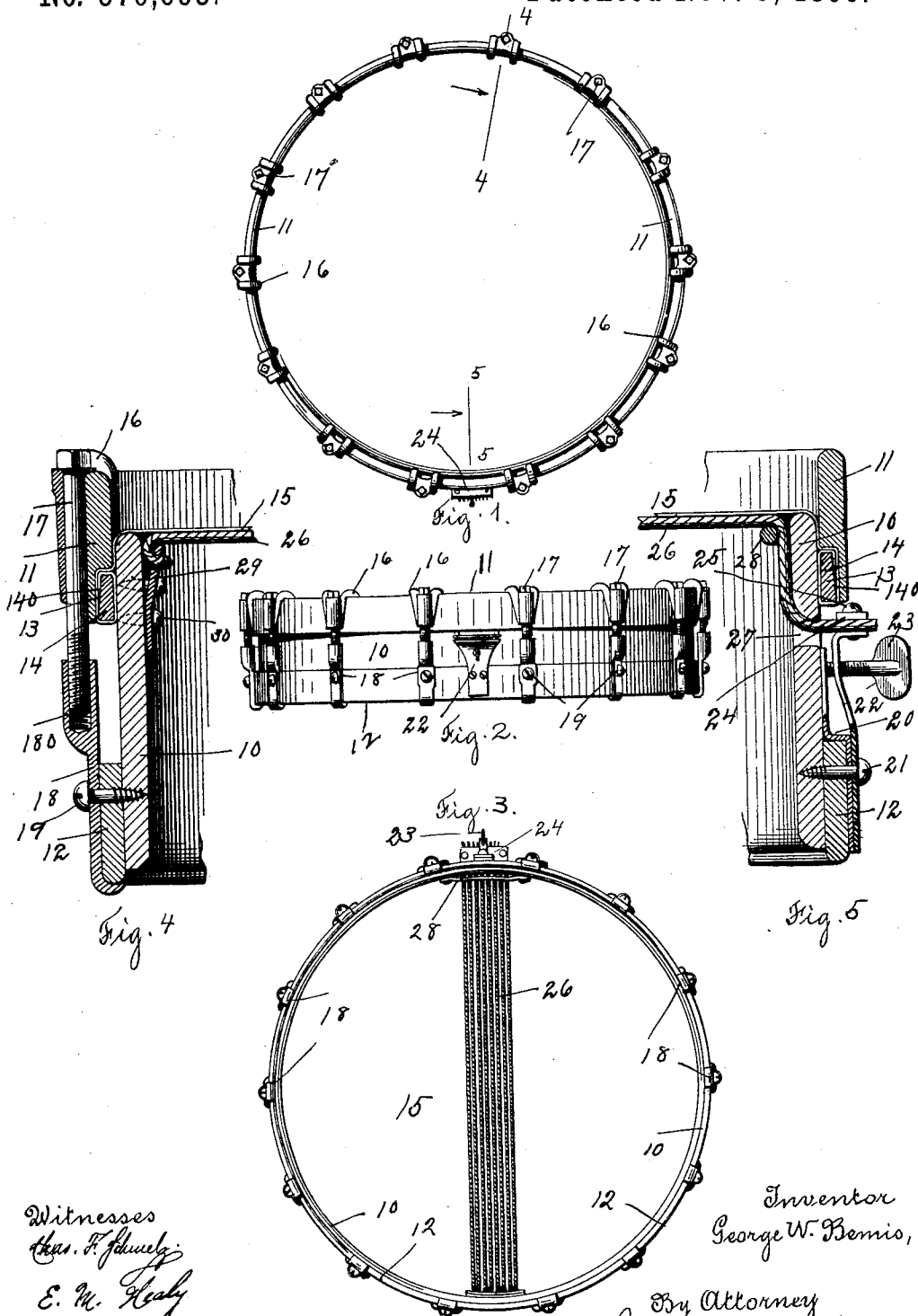
(No Model.)

2 Sheets—Sheet 1.

G. W. BEMIS.
DRUM.

No. 570,693.

Patented Nov. 3, 1896.



Witnesses
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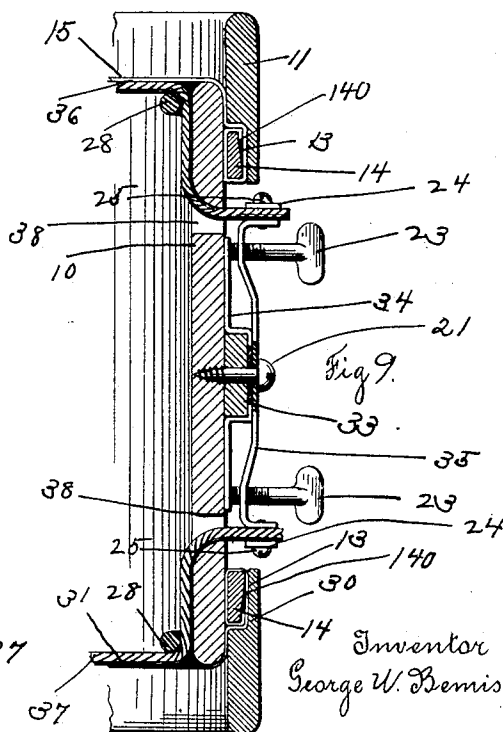
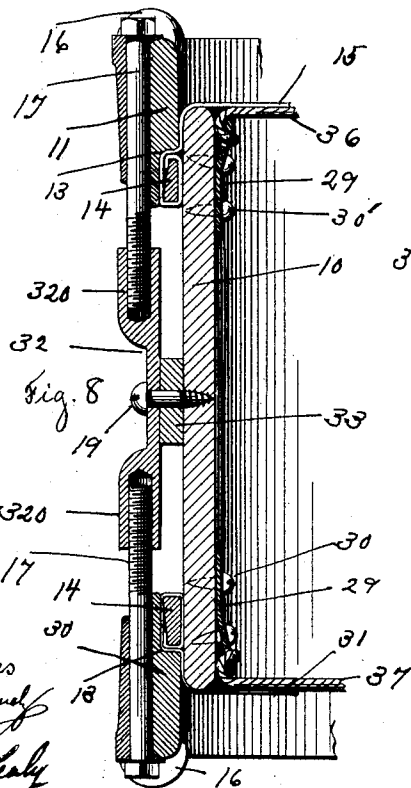
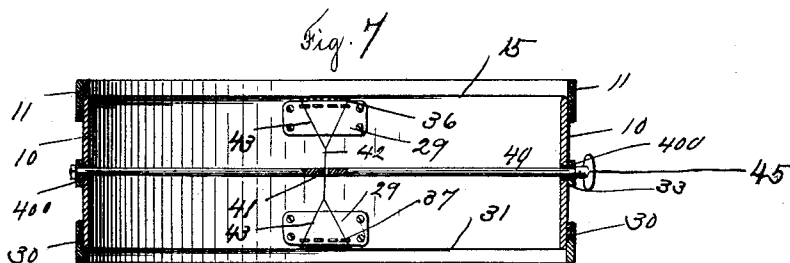
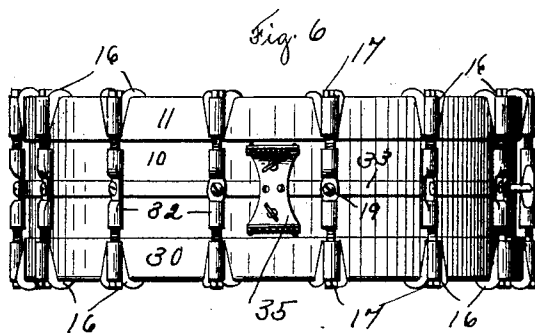
(No Model.)

2 Sheets—Sheet 2.

G. W. BEMIS.
DRUM.

No. 570,693.

Patented Nov. 3, 1896.



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UNITED STATES PATENT OFFICE.

GEORGE W. BEMIS, OF WORCESTER, MASSACHUSETTS.

DRUM.

SPECIFICATION forming part of Letters Patent No. 570,693, dated November 3, 1896.

Application filed March 15, 1893. Serial No. 466,028. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. BEMIS, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Drums, of which the following is a specification.

The aim of this invention is to improve the arrangement of parts either in a single-headed or a double-headed drum; and to this end the invention consists of the devices described and claimed in this specification, and illustrated in the accompanying two sheets of drawings, in which—

Sheet 1 illustrates a single-headed drum with my improvements applied thereto, and Sheet 2 illustrates a double-headed drum with my improvements applied thereto.

In the drawings, Figure 1 is a top plan view of a single-headed drum with my improvements applied thereto. Fig. 2 is a side elevation of the same. Fig. 3 is a bottom plan view. Fig. 4 is an enlarged sectional view on the line 4 4 of Fig. 1, illustrating one of the tighteners for the head. Fig. 5 is an enlarged sectional view on the line 5 5 of Fig. 1, illustrating the snare-tightener. Fig. 6 is a side elevation of a double-headed drum with my improvements applied thereto. Fig. 7 is a sectional elevation of the drum shown in Fig. 6. Fig. 8 is a sectional elevation, on an enlarged scale, of the tightener used for the heads; and Fig. 9 is a sectional elevation, also on an enlarged scale, illustrating the snare-tightener used with a double-headed drum.

I will first describe my improvements as applied to a single-headed drum as shown in Sheet 1 of the drawings.

Referring to the first sheet of drawings and in detail, 10 represents the usual circular drum-body, upon which is loosely fitted the upper collar 11 and tightly fitted the lower collar 12. The upper collar 11 is recessed or cut out to have an internal annular groove, as 13, and fitting in this annular groove 13 is the ring 14, which is slightly slabbed off, as at 140, as shown, on the side where the same comes against the upper collar 11.

15 represents the head of the drum, which may be made in the usual manner. This

head is turned around the upper edge of the drum-body 10, and then is wound around the ring 14, as shown, the final edge of the head fitting into the recess 140, as shown. By this means the head will be tightly held between the upper collar 11 and the ring 14, and there will be no projecting end to the head.

A number of double-pronged hooks 16 are fitted on the upper edge of the ring 11, and these hooks extend down, as shown, to nearly the lower edge of the upper collar 11, whereby when the hooks are put under tension the lower parts of the same will tend to draw the lower edges of the collar 11 in toward the ring 14, and thus will prevent the lower edge of the upper collar 11 from springing out of place. Each of the double hooks 16 has a hole drilled through the same, as shown, and fitting in these holes are the bolts 17.

Arranged on the lower collar 12 are a number of hooks 18, which are extended, as shown, so as to form a nut, and these hooks 18 may be held in place by suitable screws 19. The upper part of these hooks are tapped out, as at 180, as shown, and fitting into these tapped extended portions of the hooks are the bolts 17, before referred to. By this means I provide a simple and efficient tightening device for the head, and it will be seen that as the bolts 17 are adjusted in either direction, the ends of the same will not project below the drum, as is the case with the ordinary construction, whereby the bottom of the drum is always left smooth and round. I arrange a set of snares below this head, so as to bear directly on the same, and the preferred way for arranging these snares is as follows: On the lower collar 12 and extending up on the body portion 10 is arranged a plate 20, and bearing on this plate is a piece of spring metal 22, which may be held in place by screws 21, passing through the same, through the plate 22, and into the collar and drum-body, as shown. This string-tightener 22 has tapped therein a suitable screw 23, the end of which bears on the plate 20, as shown, and arranged on the end of this spring-tightener is a clamp 24, which is secured to the tightener by screws 25, and the ends of the snares 26 are inserted between this spring-tightener 22 and the clamp 24, and are tightly held in place thereon by

means of the screws 25. From this clamp the snares pass in through a hole 27 in the side of the drum, up over a guide 28, which is fitted in the inside of the drum, as shown, across
 5 under the head to a suitable clamp 29, which is held in place by means of the screws 30. By this means it will be seen that the snares are arranged directly under the beating-head and that the snares can be nicely adjusted by
 10 means of the screw 23; also it will be seen that the tightener 22 normally tends to move toward the drum-body, whereby the screw 23 will be pressed against the plate 20, and when the tightener is moved so as to release
 15 the snares, the end of the spring-tightener is moved in toward the drum, thereby forcing the snares in; also it will be seen that the spring-tightener, tending at all times normally to approach the drum-body and being
 20 held therefrom by the screw, will never be loose and rattle as the drum is used.

By arranging the snares directly under the beating-head the drum will give a very snappy and clear-cut vibration.

25 Referring now to the second sheet of drawings, I will describe my double-headed drum, it being understood that this double-headed drum can be made of any length desired.

10 represents the drum-body, 11 the upper
 30 collar, and 30 the lower collar. These two collars 11 and 30 are made similarly to the collar 11 of the single-headed drum, and both are loose on the drum-body. Both these collars 11 and 30 are recessed, as at 13, and fitting in these recesses 13 are the rings 14,
 35 which are slabb'd out as in the previous device, and 15 represents the upper head, which is wound around the upper ring 14, and 31 represents the lower head, which is wound
 40 around the lower ring 14, whereby the heads are nicely secured in place and can be nicely tightened, as before described in connection with the single-headed drum. The upper
 45 head 15 is made out of heavy material, and the lower head 31 is made out of light material, for a purpose hereinafter described.

Fitting on the collars 11 and 30 are the hooks 16, similar to the hooks 16 of the previous device, and passing through these hooks
 50 are the bolts 17.

Formed or secured to the drum-body 10 is a rib or collar 33, and secured to this rib or collar 33 are the double nuts 32 for the bolts 17, these double nuts each having two extended portions 320, and the nuts 32 may be
 55 held to the drum-body by means of screws 19, as shown. By this means the drum-heads can be nicely held in the collars 11 and 30 and can be tightened and adjusted as desired, and
 60 the hooks 16, bearing for a considerable distance upon the collars, will prevent the same from springing out.

A suitable plate 34 is arranged on the side of the drum, as shown, and is fitted over the
 65 rib 33, and may be held in place by means of screws 21. Secured to this plate 34, as by means of the screws 21, is the double tightener

35, which extends both above and below the rib 33, and tapped into both ends of this tightener 35 are the screws 23, which bear on the plate 34, as shown. This tightener carries at
 70 the ends thereof clamps 24, which are secured to the ends of the same by screws 25. I preferably arrange two sets of snares, as the upper snares 36 and the lower snares 37, and these snares pass in from the tightener
 75 through suitable holes 38 over guides 28 to suitable clamps 29, which are held in place by means of screws 30', as in the single-drum before described. By this means the snares can
 80 be nicely tightened and adjusted relatively to their heads.

It will be seen that the snares are arranged inside of the drum, and sometimes it is desired to muffle the drum or to use the same with-
 85 out the snares acting on the head. To accomplish this, I journal a shaft 40 in the drum-body 10, and this shaft 40 is mounted in suitable split bushings 400, so as to turn tightly in said bushings, whereby the same cannot
 90 rattle as the drum is used. This shaft 40 has a suitable hole 41 in the center of the same, and passing through this hole is a band or string 42, which is tied around each set of
 95 snares, as shown at 43, and this shaft 40 may have a suitable handle, as 45, whereby the same can be operated. Now when it is desired to use the drum without the snares acting the snare-tighteners are loosened and the
 100 shaft 40 is turned, whereby the snares will be pulled away from their heads.

It is evident, of course, that one half of this muffler device could be applied to the single-headed drum before described, in which the
 105 snares are arranged directly on the under side of the beating-head. This double drum shown is a very important improvement in the art, as by making one head course and one head light, and by mounting the snares on the inside of
 110 such heads, I have two beating-heads for the drum, whereby the drummer can use one head for outside work and the other head for inside work and get two different tones. This makes
 115 a single drum capable of a great variety of uses and adds much to the efficiency of the instrument.

The details herein shown and described may be applied to different kinds of drums, and the same may be varied by a skilled mechanic without departing from the scope of my invention as expressed in the claims.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A drum consisting of a drum-body having
 125 two heads arranged thereon, and a set of snares arranged on the inside of each head, whereby either head of the drum may be used as a beating-head, as desired, substantially as described.

2. A drum consisting of a drum-body having
 130 a thick and a thin head on opposite ends thereof, and a set of snares arranged on the inside of each of said heads, either head being

adapted to be used as a beating-head, substantially as described.

3. A drum consisting of the drum-body 10, having a collar 11 loosely fitted thereon, said collar being recessed as at 13, a ring 14 fitting into this recess, and being slabbed off as at 140, and the drum-head 15, the edge of which is wound around the ring 14, and the end tucked into the slabbed portion 140 of the ring, substantially as described.

4. In a drum, the combination of the drum-body, the drum-head, a set of snares, and a snare-tightener, consisting of a piece of spring metal, to which the ends of the snares are secured, of a screw tapped into this piece of spring metal, adapted to adjust the same, the piece of spring metal normally tending to spring toward the body of the drum, whereby the adjusting-screw will be pressed tightly against the drum-body, substantially as described.

5. The combination in a drum having two sets of snares, of the tightener consisting of the piece of spring metal 35 secured to the drum, and to the ends of which, the ends of the two sets of snares are secured, the two screws 23 tapped in the ends of said tightener 35, and bearing on the drum-body or a suitable plate secured thereto, substantially as described.

6. The combination in a drum of the drum body and head, a set of snares bearing on the inside of the head, and means for moving and

holding said snares away from the drum-head, substantially as described.

7. The combination in a drum of the drum-body having two heads arranged thereon, a set of snares arranged on the inside of each head, and means for positively holding said snares away from the heads, whereby the drum can be muffled, substantially as described.

8. The combination in a drum of the drum-body, the head, the set of snares arranged on the inside of the head, the shaft mounted in the drum-body, and having a cord attached thereto, which cord passes around the snares, whereby, by turning said shaft, the snares can be pulled away from the head, substantially as described.

9. The combination in a drum of the drum-body having two heads arranged on the ends thereof, a set of snares arranged on the inside of each of said heads, the shaft 40 mounted in the drum-body, and the cord connected to this shaft 40, and passing around each set of snares, whereby, by turning the shaft 40, the snares can be pulled away from their heads, and the drum muffled, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEORGE W. BEMIS.

Witnesses:

LOUIS W. SOUTHGATE,
E. M. HEALY.