April 1, 1930. J. A. MEYER 1,752,568

DRUM

Filed Aug. 25, 1927

Fig. 1.

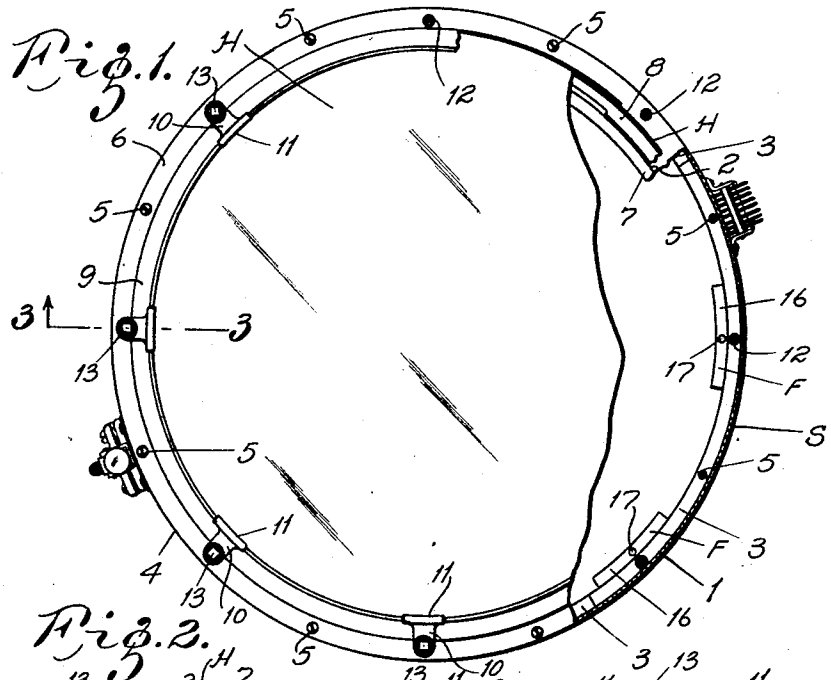


Fig. 2.

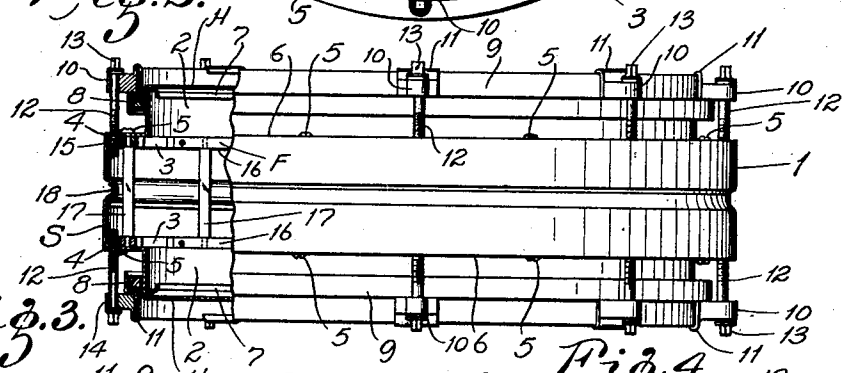


Fig. 3.

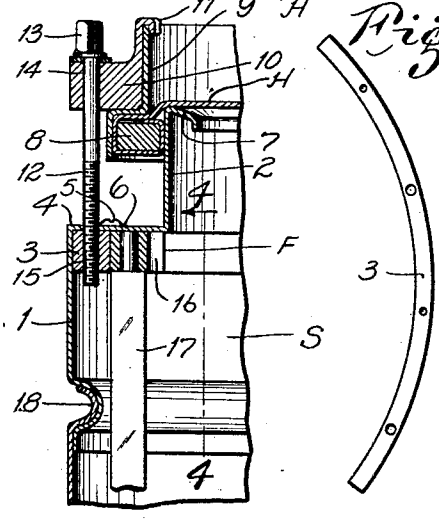
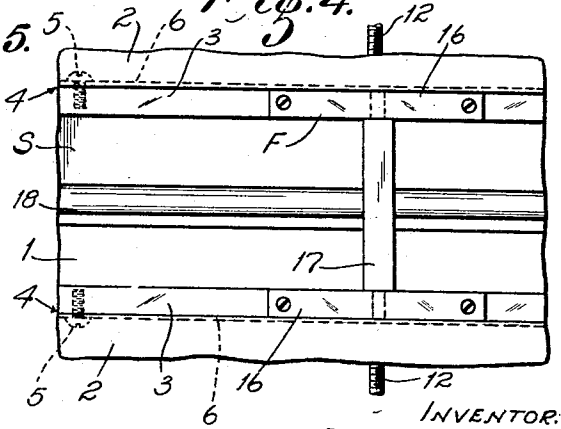


Fig. 5.

Fig. 4.



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UNITED STATES PATENT OFFICE

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DRUM

Application filed August 25, 1927. Serial No. 215,461.

The present invention has relation to improvements in drums and consists in the novel features of construction more fully set forth in the specification and pointed out in the claims.

The objects of the invention are to provide a drum having an enlarged shell with respect to the drum head; and one in which the tension screws are screwed into a ring, or a plurality of ring sections, so that there will be no tendency for the tension screws to be pulled out of line such as commonly happens when the tension screws are screwed into a bracket mounted on the outside of the drum shell. A further advantage is to provide a drum that is of simple construction and may be manufactured at a minimum cost, and one that possesses further and other advantages better apparent from a detailed description of the invention in connection with the accompanying drawings, in which:

Figure 1 is a plan view looking at the drum head with parts broken away; Fig. 2 is a side view of the drum with part broken away so as to show other parts in section; Fig. 3 is an enlarged sectional detail taken on the line 3—3 of Fig. 1; Fig. 4 is a view looking at the inside of the drum shell showing the brace members for stiffening the shell; and Fig. 5 is a detail of one of the tension screw ring sections.

Referring to the drawings, S represents the shell of the drum, said shell comprising an intermediate cylindrical portion 1 outwardly from which the flanges 2, 2 project, said flanges being of a smaller diameter than that of the intermediate portion 1. A plurality of ring sections 3, 3 etc., are positioned in opposite corners 4, 4 of the intermediate portion 1, each of said ring sections being held in place by two screws 5, 5 passed through the elements 6 of the intermediate portion 1. The outer end of each flange 2 is turned inwardly as shown at 7, and the drum head H, the margin of which is wrapped around the flesh hoop 8, is stretched over the top of flange 2, a counter hoop 9 being positioned over the flesh hoop 8. A plurality of lugs 10, having hooks 11 on their outer edges for the purpose of engaging the counter hoop 9, are evenly spaced around said counter hoop, and a tension screw 12 having a square head 13 is passed through an opening 14 in each lug 10, the tension screw then being screwed into a threaded opening 15 in one of the tension screw ring sections 3. Obviously, both heads of the drum are constructed alike and a description of the parts for holding one of these heads in place is equally applicable to the other. When it is desired to increase the tension on the head H, the tension screws are screwed downwardly into a ring section 3, thus forcing the counter hoop 9 inwardly as well as the flesh hoop 8. The force exerted on the tension screws of the drum head would have a tendency to rotate the ring sections 3 and bend inwardly the elements 6 were not some measure adopted to avoid this. In this present instance, I overcome this tendency toward distortion by inserting within the shell S a plurality of reinforcing frames F. Each frame comprises parallel members 16, 16 connected by a cross member 17 in the form of the letter H, and is disposed behind a tension screw 12 with the members 16, 16 in contacting relation with ring sections 3, 3.

To facilitate the manufacture of the drum, the shell S is preferably made in two similar sections, said sections being crimped together to form an annular inwardly turned bead 18. This bead also serves to stiffen the shell.

It will be observed that the diameter of the intermediate portion 1 of the shell S is considerably larger than the diameter of the drum head H, the shell thus serving as a resonating chamber to add volume to the tone of the drum. Thus, the advantage of the sharp staccato tone of a small head is retained without sacrificing volume.

While I show ring sections 3 for receiving the tension screws 12, a non-sectional ring may be used if desired. However, a sectional ring is preferable since the threads in one or more of the openings 15 may become stripped in which event it is a comparatively simple matter to insert a new section whereas if the ring is non-sectional, it may be considerably more difficult. It is also within the scope of the present invention to substitute for the

ring sections 3, some other means of stiffening the shell S and merely provide nuts for receiving the tension screws 12. I, therefore, do not wish to be restricted to the specific details herein shown.

Having described my invention, I claim:

1. A drum comprising a shell having an enlarged intermediate portion to serve as a resonating chamber, heads stretched over the margins of the shell, counter-hoops engaging the margins of the heads, a plurality of tension screws carried by the counter-hoops, and a sectional reinforcing ring within the resonating chamber for receiving the tension screws.

2. A drum comprising a shell having an enlarged intermediate portion to serve as a resonating chamber, said shell comprising complementary sections crimped together along a medial plane through the resonating chamber, heads adapted to be stretched over the margins of the shell, and a suitable stiffening frame within the resonating chamber.

3. A drum comprising a shell having an enlarged intermediate portion to serve as a resonating chamber, said shell comprising complementary sections crimped together along a medial plane through the resonating chamber, and heads adapted to be stretched over the margins of the shell.

In testimony whereof I hereunto affix my signature.

JULIUS A. MEYER.