No. 775,711. PATENTED NOV. 22, 1904.

E. T. TURNEY.

DRUM.

APPLICATION FILED MAY 2, 1904.

NO MODEL.

Fig. 1.

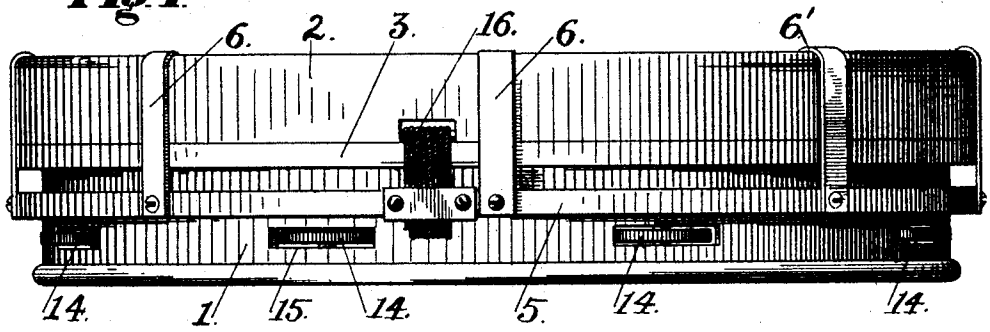


Fig. 2.

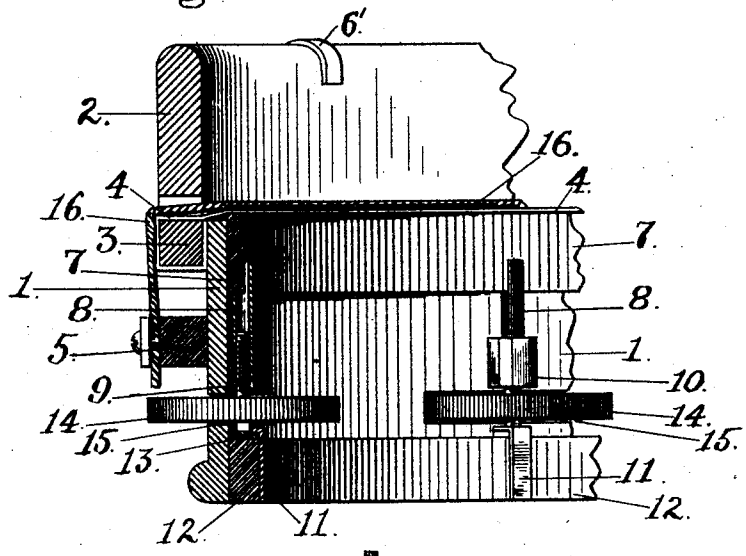
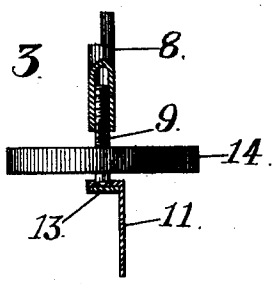


Fig. 3.



Witnesses.
Arthur L. Lee.
Walter D. Cane.

Inventor.
Eugene T. Turney
by Wm. F. Booth
his Attorney.

No. 775,711. Patented November 22, 1904.

UNITED STATES PATENT OFFICE.

EUGENE T. TURNEY, OF SAN RAFAEL, CALIFORNIA, ASSIGNOR TO KOHLER & CHASE, OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF CALIFORNIA.

DRUM.

SPECIFICATION forming part of Letters Patent No. 775,711, dated November 22, 1904.

Application filed May 2, 1904. Serial No. 205,872. (No model.)

To all whom it may concern:

Be it known that I, EUGENE T. TURNEY, a citizen of the United States, residing at San Rafael, Marin county, State of California, have invented certain new and useful Improvements in Drums; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the class of musical instruments and to the subclass of drums.

The object of my invention is to tighten the head of the drum by means adapted to apply the tension uniformly and without warping strain, said means being simple in character, easily accessible, and requiring no separate or independent operating-key.

To this end my invention consists in a tension-ring and a series of jacks inside the drum operated from the exterior by means of thumb-wheels protruding through the drum-shell, in connection with an arrangement of skin, shell, and hoops, as I shall now fully describe by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of my drum. Fig. 2 is a vertical cross-section, enlarged, of one side. Fig. 3 is a detail view of the adjusting-jack.

1 is the shell of the drum.

2 is the main hoop, below which, around the shell, is the flesh-hoop 3, to which the head or skin 4 is attached.

Around the shell 1, a little below the flesh-hoop 3, is secured the hoop 5, to which the lower ends of the ties 6 are secured, the hooked upper ends 6′ of said ties engaging the top of the main hoop 2. By these ties the main hoop, the flesh-hoop, and the shell are held rigidly together. Upon the inside of the shell is fitted the tension-ring 7. This ring, though resting against the shell, is not secured to it, but is free to move up and down, and it bears directly up against the head or skin 4, as seen in Fig. 2. The tension-ring 7 is moved by means of a series of jacks consisting of nuts 8, the upper ends of which are notched upon or otherwise bear against the under edge of the ring, and screws 9, threaded into the lower ends of the nuts. The screws and nuts are seated in bearings 10, secured to the inner surface of the shell. The lower ends of the screws are best made pointed to reduce friction, and said pointed ends pass through holes in brackets 11, secured to an inner hoop 12 on the lower edge of the shell, and bear against steel plates 13, secured on top of said hoop under the brackets. The plates receive the wear, while the holes in the brackets 11 steady and guide the screws. Upon each screw is secured a thumb-wheel 14, a portion of the circumference of which projects through a slot 15 in the shell, so that it can be readily turned from the outside to operate the jack, a convenience of importance in double-headed drums particularly.

16 represents the snare-strainers.

It will now be seen that by turning the wheels 14 the jacks will be operated to press the tension-ring 7 up to tighten the head or skin, or to relieve it when necessary, and this operation can be effected readily and with accuracy without any warping strain and without the use of a special key. In this construction there are no outside rods and metal parts which tend to mar the tone of the instrument. The main hoop does not move, as in the usual construction, but is rigid with the shell, and the operation of tightening can be accomplished in a much shorter time than is customary.

The invention, though here shown as applied to a single-head drum, is equally applicable to a double-head drum.

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

1. In a drum, the combination with a shell, a skin and means for securing the skin to the shell, of a movable tension-ring inside the shell bearing against the skin, a series of jacks inside the drum for setting said ring, and thumb-wheels on said jacks, projecting through slots in the shell, for operating said jacks from the outside.

2. In a drum, the combination with a shell, a skin and means for securing the skin to the shell, of a movable tension-ring inside the shell bearing under the skin, nuts bearing on

the ring to set it, screws bearing on the shell and operating the nuts, and thumb-wheels on the screws, projecting through slots in the shell to the exterior.

3. In a drum, the combination of the shell, the upper main hoop, the lower hoop and ties binding the shell and hoops together, the skin, and a flesh-hoop upon the shell below the main hoop and carrying the skin, the movable tension-ring within the shell, bearing against the skin, a series of jacks inside the drum for setting said ring, and thumb-wheels on said jacks, projecting through slots in the shell for operating said jacks from the outside.

4. In a drum, the combination of the shell, the upper main hoop, the lower hoop and ties binding the shell and hoops together, the skin, and a flesh-hoop upon the shell below the main hoop and carrying the skin, the movable tension-ring within the shell, bearing against the skin, and means for setting said ring consisting of the nuts, the screws and the thumb-wheels on the screws projecting through slots in the shell for operating said screws from the outside.

5. In a drum, the combination of the shell, having the upper main hoop, the lower tie-hoop and the intervening ties, said shell having on its inner lower edge a fixed hoop, the skin and its carrying-hoop encircling the shell below the main hoop, the movable tension-ring within the shell bearing against the skin, the nuts engaging said ring, the screws engaging the nuts and having thumb-wheels projecting exteriorly through the shell, and the brackets and wearing-plates on the lower inner hoop of the shell in which the lower ends of the screws are stepped.

In witness whereof I have hereunto set my hand.

EUGENE T. TURNEY.

Witnesses:
WALTER F. VANE,
D. B. RICHARDS.