G. A. SMITH.

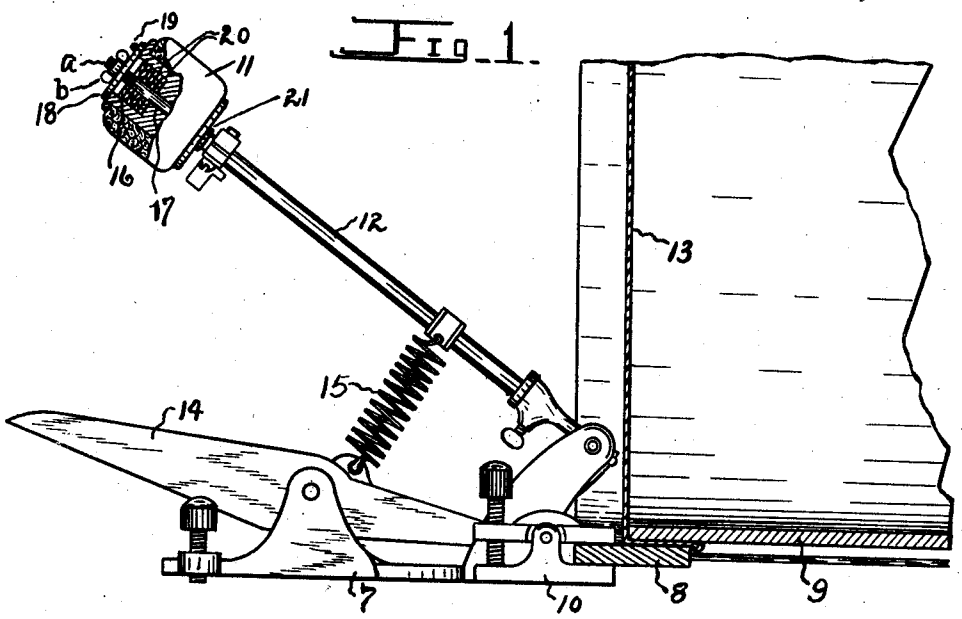
DRUM BEATER.

APPLICATION FILED NOV. 7, 1918.

1,343,164.

Patented June 8, 1920.

Fig. 1.



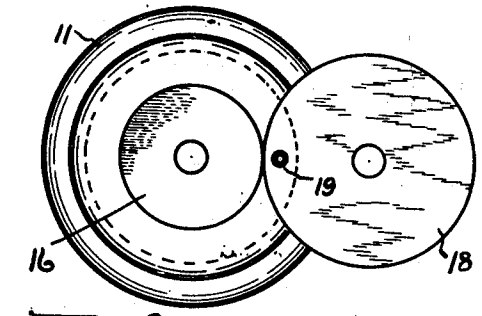


Fig. 2.

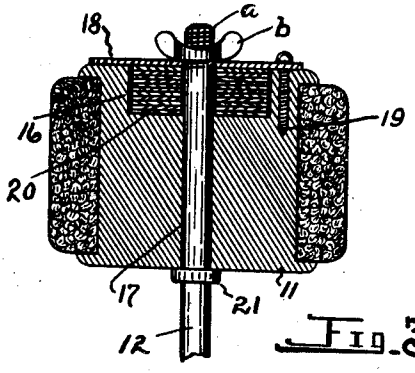


Fig. 3.

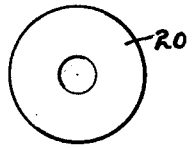


Fig. 4.

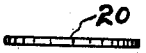


Fig. 5.



Fig. 6.

Inventor

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UNITED STATES PATENT OFFICE.

GEORGE A. SMITH, OF OMAHA, NEBRASKA.

DRUM-BEATER.

1,343,164. Specification of Letters Patent. Patented June 8, 1920.

Application filed November 7, 1918. Serial No. 261,534.

To all whom it may concern:

Be it known that I, GEORGE A. SMITH, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Drum-Beaters, of which the following is a specification.

This invention relates to improvements in drum beaters, and has for its principal object to provide such a construction for the head of the beater-rod that its weight may be conveniently adjusted, this feature being desirable to adapt it for use in connection with various kinds of music. The invention consists of the novel construction, combination and arrangement of parts as described herein and claimed, and as illustrated in the accompanying drawing, wherein,—

Figure 1 is a broken away view showing a part of a drum and a pedal frame connected therewith, the head of the beater-rod actuated by the pedal, being partly in section. Fig. 2 is a plan view of the head of the beater-rod, the closure-cap being swung to an open position. Fig. 3 is a view of the beater-head in longitudinal section. Fig. 4 is a plan view of one of the weight-members. Fig. 5 is an edgewise view of the same and Fig. 6 is a view of the same in section.

The invention is illustrated in connection with a pedal-frame 7 attached to the rim 8 of a drum-shell 9, by means of a clamp 10, the head 11 of the beater-rod 12 together with said rod, being reciprocated in a circle's arc, as usual, for a contact of the beater-head with the drum head 13, the movement in one direction being caused by actuation of the pedal 14, and retracted by operation of the spring 15.

It will be appreciated that where, in one instance, the music requires very limited intervals between the strokes of the beater-rod, and in another instance the music requires strokes at longer intervals, it would be an advantage to either change the weight of the head 11 or change the mechanism which actuates the beater-rod, and therefore the invention discloses utility, means being shown whereby the weight of the head 11 may be readily decreased or increased, as may be required. Also in the rendition of certain kinds of music it is desirable that the impacted force of the beater-head against the drum head, during operation, shall be less than ordinary, and the practice of the invention is useful in that respect.

To attain the objects of the invention, I provide a recess 16 opening upon the upper end of the beater-head, this recess preferably being circular in plan, and having its side wall disposed concentric with the aperture 17 which centrally traverses the head 11 and receives the upper end portion of the beater-rod, the latter, in the present instance, extending entirely through the recess and head 11 and having a threaded terminal, as indicated at *a* for a mounting thereon of a suitable keeper or wing-nut *b*.

Numeral 18 indicates a closure-cap pivotally mounted upon the top of the head 11 by means of the keeper 19. Numerals 20 indicate weight-members, and preferably centrally apertured disks are employed for these weights. They are adapted to be disposed in the recess 16, upon the beater-rod, and, in operation, access to the recess may readily be made by sliding the head 11 upwardly, after the wing-nut has been removed and the cap 18 has been swung transversely, for removing the weight-members or for depositing weight-members therein, as may be required for decreasing or increasing the weight of the head, and, as is obvious, the cap may be swung to a closed position, and by use of the wing-nut, said cap may be pressed firmly against the top of the head 11 for maintaining the weights within the recess, the stresses occasioned by said pressure being directed to the collar 21 of the beater-rod, and during operation, vibration or noise occasioned by the weight-members, will not be appreciable.

The weights 20 may be of any desired number, may be constructed of any suitable material, and, in plan, may have any desired form, and changes in size, proportion and minor details may be made, as found to be of advantage, since the scope of the invention is determined by the claims.

What I claim as new and desire to secure by Letters Patent is,—

1. A beater-head provided with a recess, a beater-arm traversing the head and said recess, apertured weight-members in the recess upon the beater-arm, and a cap mounted on the beater-head for making a closure of the recess.

2. The combination with a beater-arm, of a beater-head having a recess opening on one of its ends and mounted on said arm, a plurality of weight-members adapted to be disposed in the recess, a closure-cap mounted

on the beater-head and movable to one position for maintaining the weight-members within the recess, and movable to another position to permit removal of the weight-members from said recess.

3. The combination with a beater-rod, of an apertured ball provided with a recess opening on one of its ends and said aperture and removably mounted on the rod, a plurality of apertured disks adapted to be disposed in the recess upon the beater-rod, and means for maintaining the disks in said recess.

4. The combination of an apertured ball provided with a recess opening on one of its ends and its aperture, a beater-arm traversing the ball and said recess, apertured disks in the recess upon the beater-arm, and a cap outwardly of the recess adapted to have a swinging movement and connected with said ball.

5. The combination with a beater-head having a recess opening on one of its ends, of a beater-arm traversing the beater-head and said recess, a plurality of apertured weight-members adapted to be disposed in said recess upon the beater-arm, a cap pivotally mounted upon the beater-head and adapted to be moved for covering the recess, and means for maintaining the cap in engagement with the beater-head after it has been moved.

In testimony whereof, I have affixed my signature in presence of two witnesses.

GEORGE A. SMITH.

Witnesses:

HIRAM A. STURGES,

ARTHUR H. STURGES.