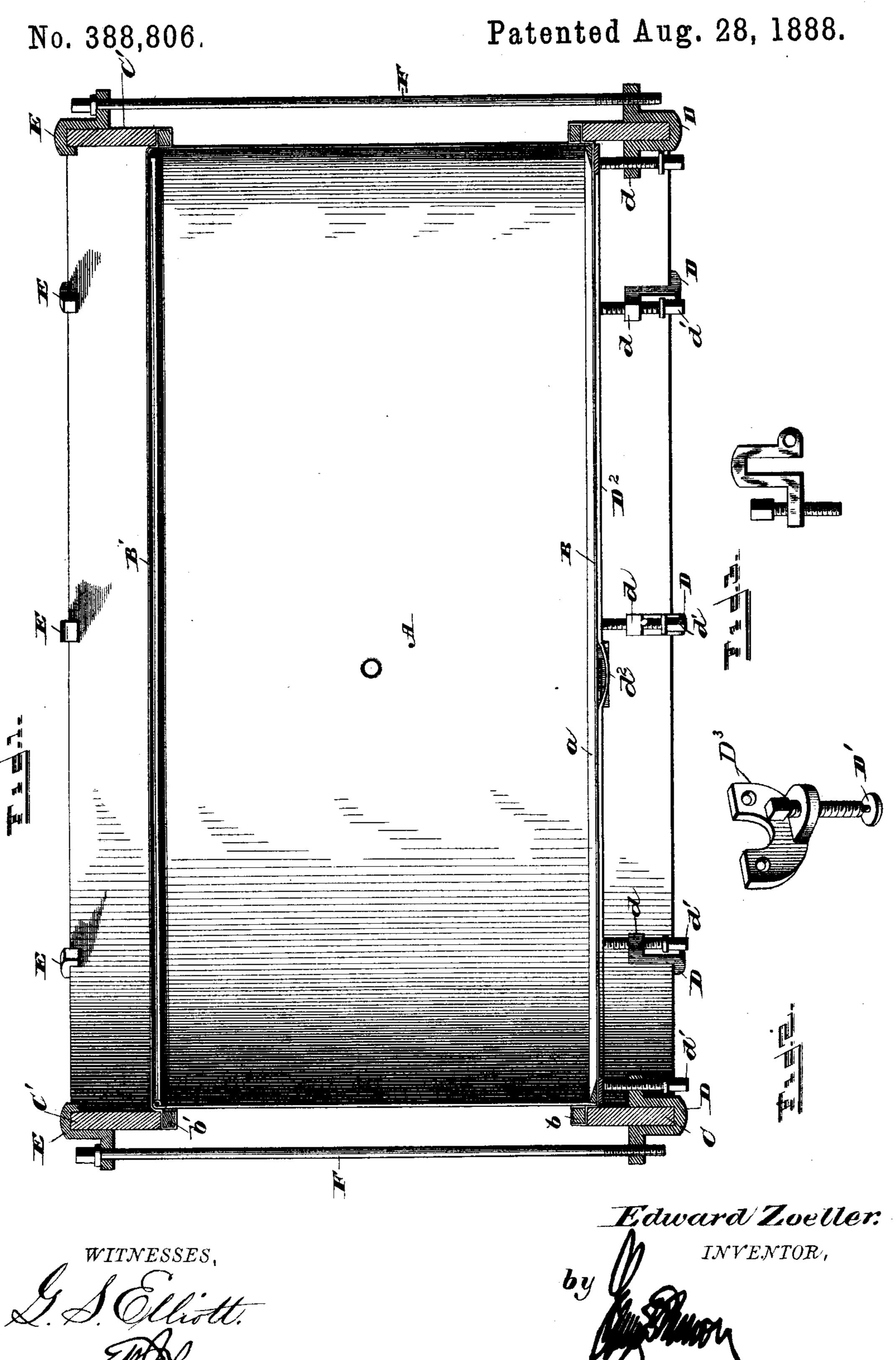
(No Model.)

## E. ZOELLER.

DRUM.



## United States Patent Office.

EDWARD ZOELLER, OF LOUISVILLE, KENTUCKY.

## DRUM.

SPECIFICATION forming part of Letters Patent No. 388,806, dated August 28, 1888.

Application filed June 21, 1888. Serial No. 277,709. (No model.)

To all whom it may concern:

Be it known that I, EDWARD ZOELLER, a citizen of the United States of America, residing at Louisville, in the county of Jefferson 5 and State of Kentucky, 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 invention, such as will enable others skilled in the art to to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to adjusting advices for drum-heads.

Heretofore the tension of the drum-heads has generally been adjusted by drawing the rims toward each other by means of ropes or 20 screw-rods, an equal pressure being exerted on each head, thus necessitating the use of a skin for the snare head as thick, or nearly so, as for the batter-head. It is important that the snarehead of a drum be as thin as possible and of 25 less tension than the batter-head, and to secure this end it has been proposed to provide the drum-barrel centrally with posts, each carrying at its outer end a tube threaded interiorly at each end to receive the adjusting-screws for 30 the respective heads of the drum. This arrangement adds materially to the weight of the drum, and can only be used successfully with what is known as a "rod-drum."

The object of my invention is to enable the 35 heads of a drum to be tightened or adjusted independently or simultaneously, whether screwrods or a rope be used as the adjusting means.

With this object in view the invention consists in novel features of construction and 40 combinations, to be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a diametrical section of a snare-drum fitted with my adjusting means. Fig. 2 is a perspective 45 view showing modifications of one of the snarehead brackets. Fig. 3 is a side elevation of a snare-head bracket adapted for use with a drum having a rope-tightener.

While the improvements hereinafter de-50 scribed are applicable to all kinds of drums, the snare-head.

I will, for the sake of perspicuity, confine myself to a description thereof as applied to a snare-drum.

A drum ordinarily consists of a shell or barrel, A, snare and batter heads B B', head-hoops 55 b b', rims C C', and brackets and tightening rods or ropes D E F.

In carrying out my invention I provide one end of the shell or barrel with an inwardlyprojecting annular flange, a, the outer face of 60 which lies flush with the end of the shell to form a rigid abutment beneath the edge of the snare-head B. The snare-head brackets D are V-shaped, as shown, the inner lug, d, which overhangs the head, being provided with a 65 tapped hole to receive an adjusting screw, d', the lower end of which, in order to avoid abrading the snare-head, may either be fitted with a flat swivel-plate, D', (see Fig. 2,) or rest upon a flat ring, D<sup>2</sup>, adapted to rest upon the snare- 70 head and be supported by the rigid flange a of the shell, as shown in Fig. 1. This ring D<sup>2</sup> is provided at opposite sides with a bend or arch,  $d^2$ , to bridge the snares and permit of their adjustment.

In order to adapt my improvement to drums now in use without discarding the usual brackets, E, (shown at the top of Fig. 1,) I contemplate securing within the rim C, which surrounds the snare-head, small brackets D<sup>3</sup>, hav-80 ing the tapped  $\log d$  to receive the adjusting-

screw, as shown in Fig. 2. In practice, the parts of the drum are properly assembled and the adjusting rods or ropes F are manipulated to give the snare-head the 85 proper tension, it being understood that during this operation both heads are operated on equally and simultaneously. The snare-head screws d' are now adjusted to bear firmly upon the ring D2, (or swivel-plate D', as the case may 90 be,) the latter being supported by the flange a of the shell A. In this position the further tightening of the adjusting rope or rods F will have no influence on the snare-head, as the pressure of the brackets D is supported en- 95 tirely by the rigid flange a of the shell A. The batter-head may, therefore, now be tightened to any desired extent by means of the adjusting rods or rope without affecting the tension of

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

1. As a new article of manufacture, a bracket for drums, consisting of a body provided at one end with a tapped lug to overhang the drum-head and receive a set-screw, and at the other end with a lug to engage the head-tightening devices, substantially as described.

scribed, of a drum the rim at one end of which is provided with brackets having tapped lugs overhanging the head, set-screws seated in said lugs, and means interposed between the inner ends of the screws and head to protect the latter from abrasion.

3. The combination, substantially as described, of a drum the rim at the snare end of which is provided with brackets having tapped lugs overhanging the head, set-screws

seated in said lugs, and a ring seated loosely upon the head beneath the screws and arched at opposite sides to bridge the snares.

4. The combination, substantially as described, of a drum cylinder or barrel provided at one end with an inwardly-projecting flange, on which the snare head rests, the heads, the rims, the brackets, one set of which is provided with tapped lugs to overhang the snare-head, the tightening means, set-screws fitting the tapped lugs, and means interposed between the lower ends of said screws and the snare-head to protect the latter from abrasion.

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

## EDWARD ZOELLER.

Witnesses:

E. J. MANN,

P. J. Dowling.