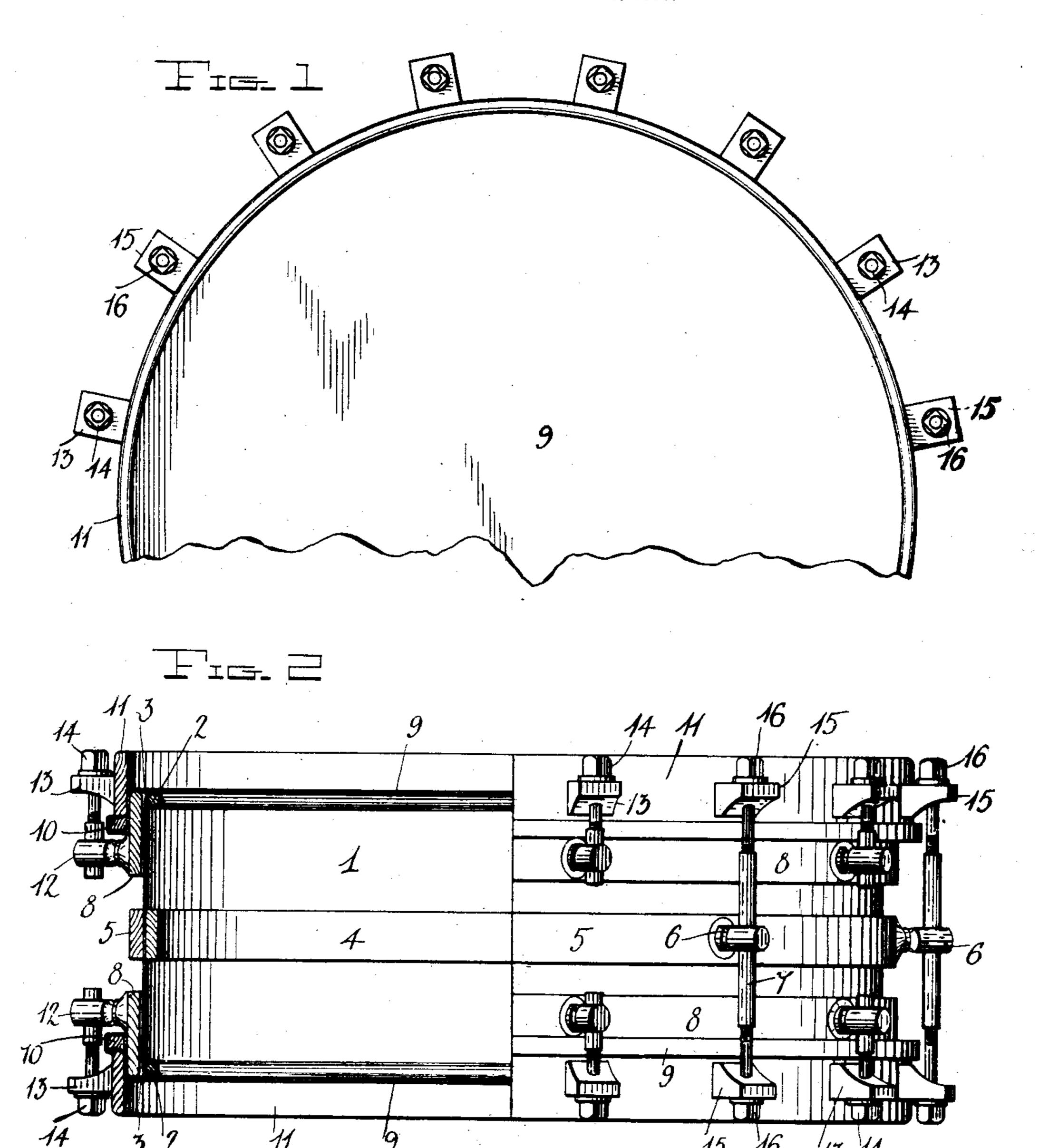
E. ZOELLER. DRUM.

APPLICATION FILED NOV. 20, 1905.



Witnesses De Michael B. H. Guesbauer Edward Loeller Inventor by Benj G. Cowl his Allorney.

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWARD ZOELLER, OF LOUISVILLE, KENTUCKY.

DRUM.

No. 830,952.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Edward Zoeller, a citizen of the United States, residing at Louisville, in the county of Jefferson and 5 State of Kentucky, have invented new and useful Improvements in Drums, of which the following is a specification.

My invention relates to improvements in drums, particularly with reference to means to for tightening the drumheads without danger of straining or tearing the same; and it consists in the combination of a drum-shell, a hoop movable thereon, a drumhead stretched on the end of the drum-shell by the 15 movement of the said hoop and extended to the outer side of the latter, a rim on the said hoop and connected to the drumhead, and means to adjust the rim with relation to the said head to effect a primary tightening of 20 the drumhead.

My invention further consists in the construction, combination, and arrangement of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is 25 partly a top plan view of a snare-drum embodying my improvements, and Fig. 2 is partly an elevation and partly a sectional view of the same.

The drum-shell 1 is here shown as made of 3° sheet metal and wired at its ends, as at 2, to provide rounded edges 3 and to also strengthen the construction of the shell. On its inner and outer sides at its center are hoops 4 5, respectively. Brackets 6 are at-35 tached to and project radially from the outer hoop 5 and are provided with sleeves 7 of tubular form, and which are internally screwthreaded at and at a suitable distance from their ends. On the outer side of the drum-4° shell, at the ends thereof, are hoops 8, that are freely movable on the drum-shell. The drumheads 9 are stretched over the ends of the drum-shell, but come in contact therewith only at the rounded edges 3 thereof. 45 The said heads are attached to the hoops and are tightened over the ends of the drumshell by the movement of the said hoops and are entirely prevented from coming in contact with and binding on the outer side of the 5° drum-shell. Within the scope of my invention the drumhead may be attached to the hoops 8 by any suitable means and in any suitable manner, and any suitable means may be employed for adjusting the said

55 hoops, so as to tighten the drumheads, as

heads as provided with the flesh-hoops 10, around which the edges of the drumheads are passed and to which flesh-hoops the said edges of the drumheads are secured, and I 60 also show rims 11, which bear on the outer sides of the portions of the drum-heads, which are on the outer sides of the hoops 8 and which abut against the flesh-hoops.

The hoops 8 are provided with radially- 65 projecting brackets 12, and the rims 11 are provided with suitable radially-projecting brackets 13. Screws 14 connect the brackets 12 and 13 and are shown as provided with angular heads adapted to enable the 7. said screws to be turned by means of suitable keys or wrenches to enable the rims to be adjusted with relation to their respective hoops 8, as may be required to primarily stretch the drumheads over the edges of the hoops 8 75 and to subject all portions of the drumheads to the same tension. The rims are also shown as provided with brackets 15, which register with the brackets 6 on the drumshell hoop 5 and are connected thereto by 80 means of adjusting-screws 16, which engage the sleeves 7 of said brackets 6 and when turned serve to move the hoops 8, together with the rims, the flesh-hoops, and the edges of the drumheads, so as to cause the drum- 85 heads to be tightened on the end of the drumshell.

It will be understood that inasmuch as the drumheads engage only the rounded edges at the ends of the drum-shell, which rounded 90 edges minimize the friction between the said drumheads and the drum-shell, the adjustment of the hoops 8 to tighten the drumheads to the required extent may be effected without danger of injuring or tearing the 95 drumheads.

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

1. The combination of a drum-shell, a hoop 100 movable thereon, a drum-head stretched on the end of the drum-shell by the movement of the said hoop, extended to the outer side of the latter and having a flesh-hoop, a rim on the first-mentioned hoop and bearing on 105 the flesh-hoop, and means to adjust the rim with relation to the first-mentioned hoop to effect primary tightening of the drumhead.

2. The combination of a drum-shell, a hoop movable thereon, a drumhead stretched on 110 the end of the drum-shell by the movement may be required. I here show the drum- lof the said hoop and extended to the outer

side of the latter, a flesh-hoop attached to the edge of the head and disposed on the outer side of the first-mentioned hoop, a rim on the first-mentioned hoop and bearing upon the flesh-hoop, means to adjust the rim on the first-mentioned hoop to primarily stretch the drumhead, and means to adjust the first-mentioned hoop on the drum-shell and adjust the rim also with said first-men-

side of the latter, a flesh-hoop attached to tioned hoop to stretch the drum end on the the edge of the head and disposed on the end of the drum-shell.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD ZOELLER.

Witnesses:

GEO. WEISSENGER SMITH, ERNEST W. SPRAGUE.