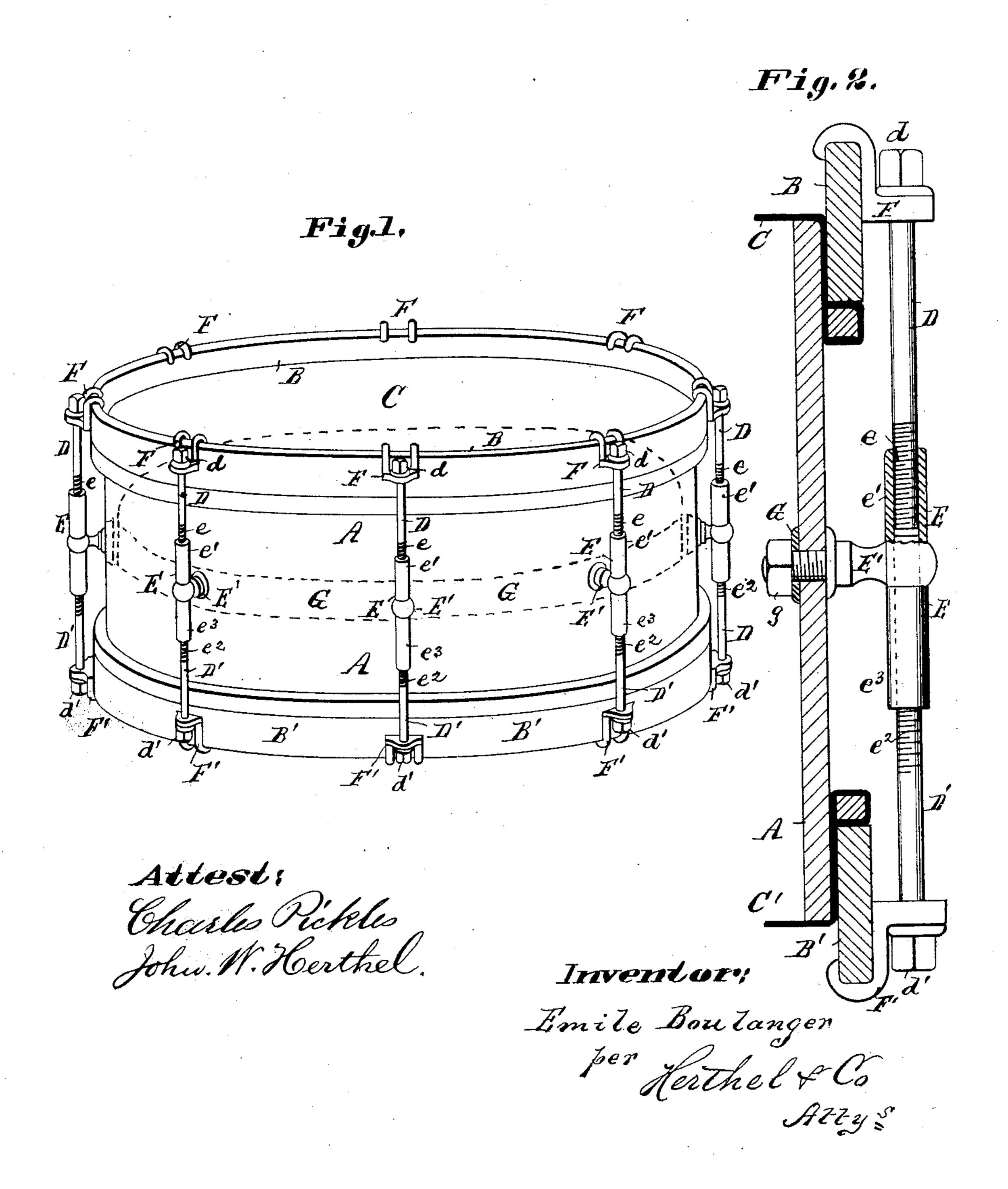
(No Model.)

E. BOULANGER.

DRUM.

No. 274,900.

Patented Apr. 3, 1883.



United States Patent Office.

EMILE BOULANGER, OF ST. LOUIS, MISSOURI.

DRUM.

SPECIFICATION forming part of Letters Patent No. 274,900, dated April 3, 1883.

Application filed August 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, EMILE BOULANGER, a citizen of the United States, residing at St. Louis, and State of Missouri, have invented a new and useful Improved Tension-Rod for Drum-Heads, of which the following is a specification.

My invention relates to improvements in drums in which a series of hooks and rods are employed instead of the system of cords and sliding knots of leather to obtain the tension for the drum-heads.

The objects of my improvements are to provide means whereby the tension of the respective drum-heads can be achieved independently of each other—that is to say, the "batter-head" can be tightened and its tension regulated independent of the means employed to similarly operate the "snare-head," or the latter can be tightened and regulated independently of the batter-head and otherwise by my improvement the tension, straining, or tightening of both said drum-heads can be achieved to suit the operator. I attain these objects by the means illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a drum having my improvement applied thereto. Fig. 2 is an enlarged sectional elevation, showing 30 the drum-shell in section, the upper and lower rims, the tension-rod applied thereto, part of the latter being in section to show how the screw ends of the rods screw into the center piece or coupling, and the latter is shown by its center screw rigidly fastened to the drumshell.

Similar letters refer to similar parts throughout the several views.

A represents the drum-shell; BB', the respective upper and lower rims; CC', the respective drum-heads, the former being the batter-head, the latter the snare-head.

My improvement consists in the system of the like tension-rods, constructed to operate in the manner following: Each tension-rod consists of the upper and lower half-rods, D D', the outer ends of which are made with keyheads d d', as shown. The inner end of the half-rod D, I provide with screw-threads e, to screw into or be unscrewed from the screw-threaded socket e' of the coupling E, and similarly the inner end of-the half-rod D' has screw-

threads e^2 , to engage the opposite end, e^3 , of the coupling E, as shown.

F F' are the usual sliding hooks fitted on 55 the outer end of each half-rod D D', the said hooks properly engaging respectively the rims or hoops of the drum, as shown.

The skins (or batter and snare heads) are attached to the drum in manner ordinary. 60 The center piece or coupling, E, I secure rigidly by its screw E' to the drum-shell. For this purpose I secure to the inner face of the drum-shell a hoop, G, extending completely around the interior face of the drum and located centrally. (See dotted lines in Fig. 1.) Through the said drum-shell and inside hoop, G, the center screw, E', passes and the end thereof is tightened by a nut, g, as clearly shown in Fig. 2.

As shown in Fig. 1, I apply a system of the like-constructed tension-rods equidistant from each other around the drum, the hooks F all properly engaging the upper and lower rims of the drum, the half-rods engaging by their 75 screw-threads the coupling, and the latter rigidly fastened to the drum-shell, all as before described.

The parts thus constructed and arranged, it is apparent that by screwing both of the 80 half-rods D and D' of the entire system of tension-rods deeper into their couplings the hooks F, in following up the said movements on the part of the respective rods, draw upon the rims or hoops B B', and these upon the respective 85 drum-heads, by means whereof both of said heads can be tightened to suit the operator.

The batter-head can be tightened independently of the snare-head. This is done by simply screwing the entire system of the upper 90 half-rods (marked D) into the socket of the couplings. Likewise the snare-head can be tightened independently of the batter-head by screwing the system of lower half-rods (marked D') deeper into the coupling.

By the use of my improvements the weakness of the snare-head (being thinner than the batter-head) can be better guarded and protected. The batter-head can be as tight as wanted, the snare-head as loose as wanted. In short, the drum is rendered more serviceable, and is better adapted to meet the demands of drummers, musicians, &c.

What I claim is—

1. In a device for stretching the head of a drum or similar instrument, the combination of the half-rods, each having screw-threads to engage the screw ends of couplings, the latter secured rigid to the drum-shell, and the sliding hooks, by means whereof both the drum-heads can be tightened, also each of said heads can be tightened independently of the other, as and for the purposes set forth.

the hoop G, the center screw, E', and nut g, by means whereof couplings E can be secured rigid, as and for the purposes set forth.

3. As an improvement in drums, the combination of the upper and lower rims, B B', the hooks F F', the tension-rods consisting of the

half-rods D D', having screw-threads $e e^2$, the couplings E, center screw, E', the hoop G', and nut g, all constructed and arranged to operate as and for the purposes set forth.

4. In combination with drum-heads, the system of rods D D', having threads ee^2 , engaging the ends of a rigid coupling, E, as shown and described, the hooks F F', and the rims B B', all said parts operating substantially in the manary and for the purposes set forth.

In testimony of said invention I have hereunto set my hand.

EMILE BOULANGER.

Witnesses:

NICHOLAS LEBRUN, WILLIAM W. HERTHEL.