(No Model.)

E. J. CUBLEY.

DRUM.

No. 407,579. Patented July 23, 1889.

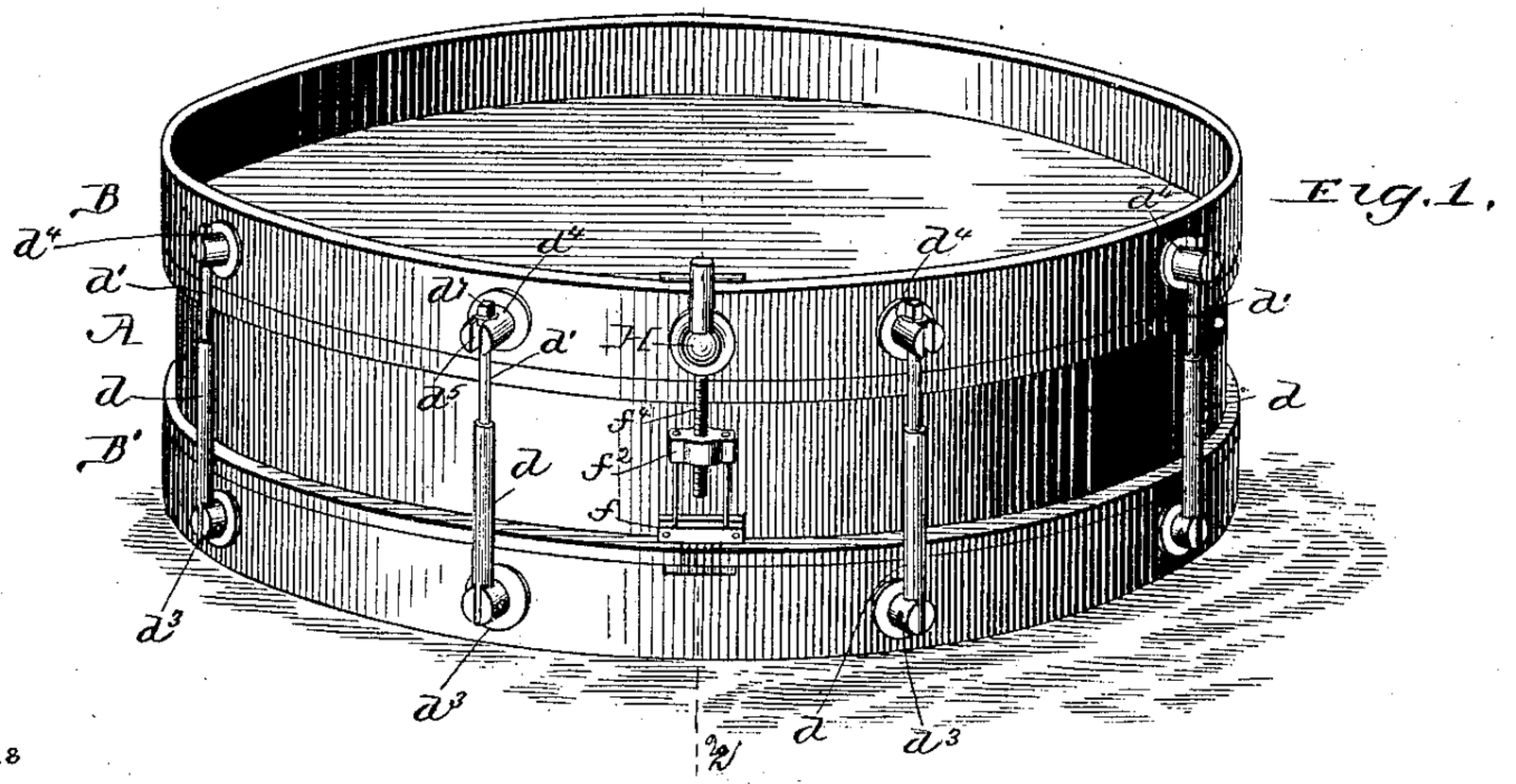
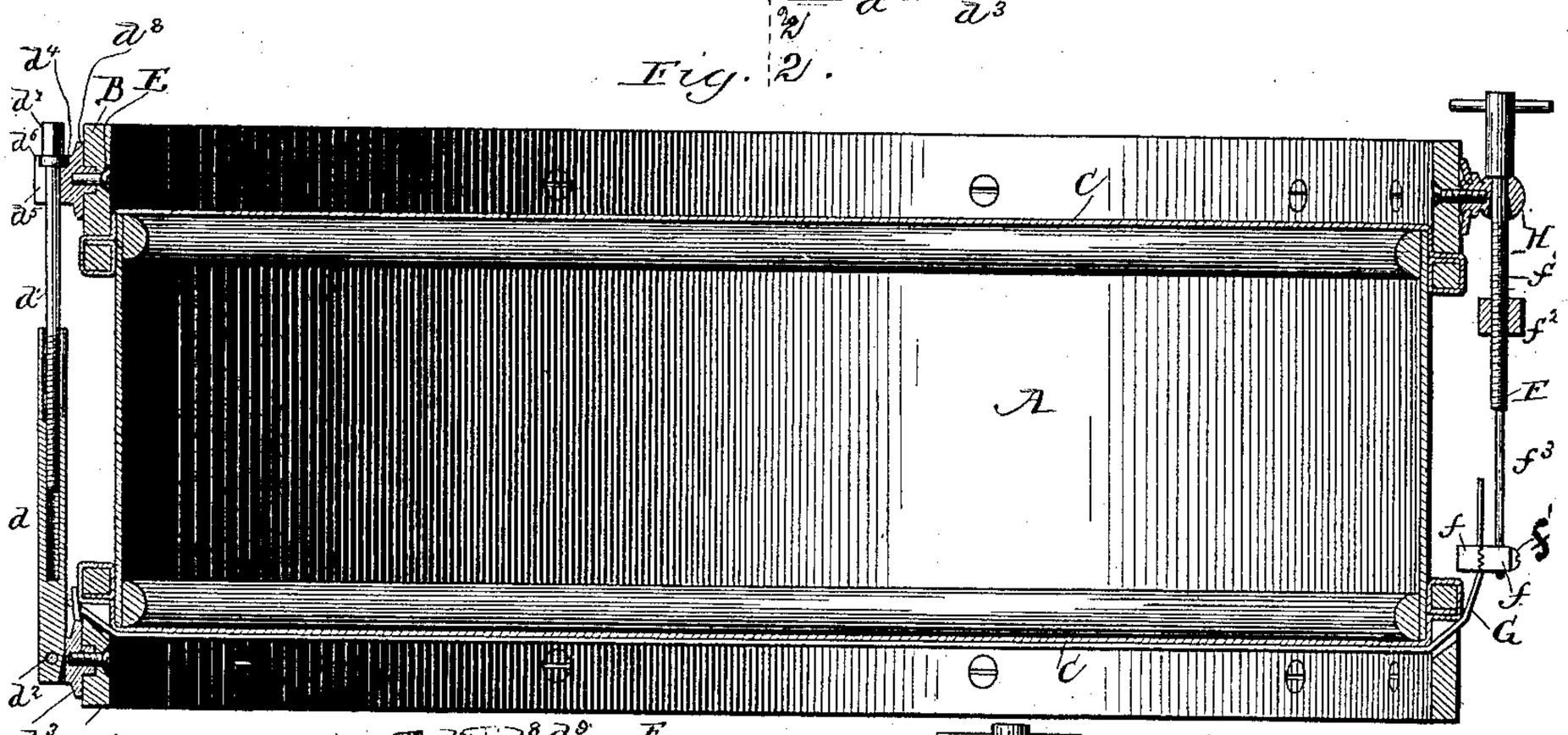


Fig. 1.

Fig. 2.



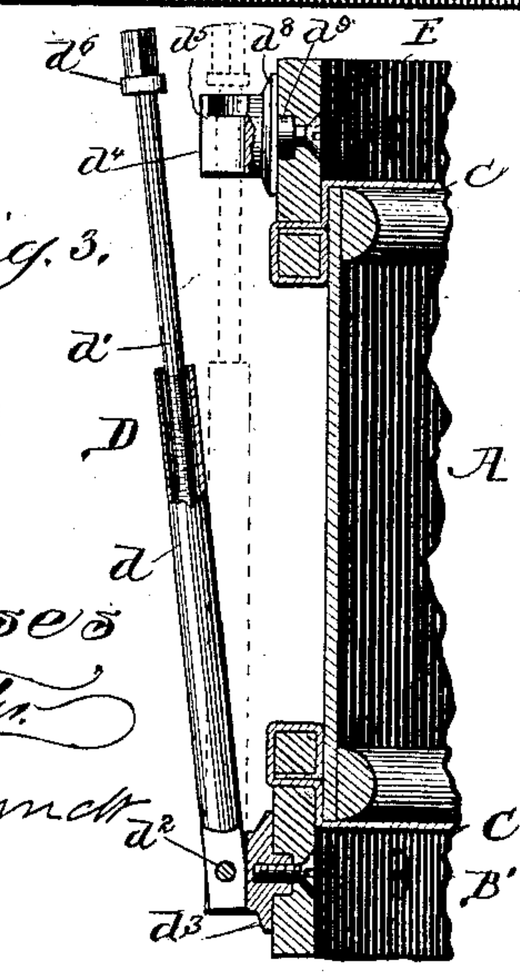


Fig. 3.

Fig. 5.

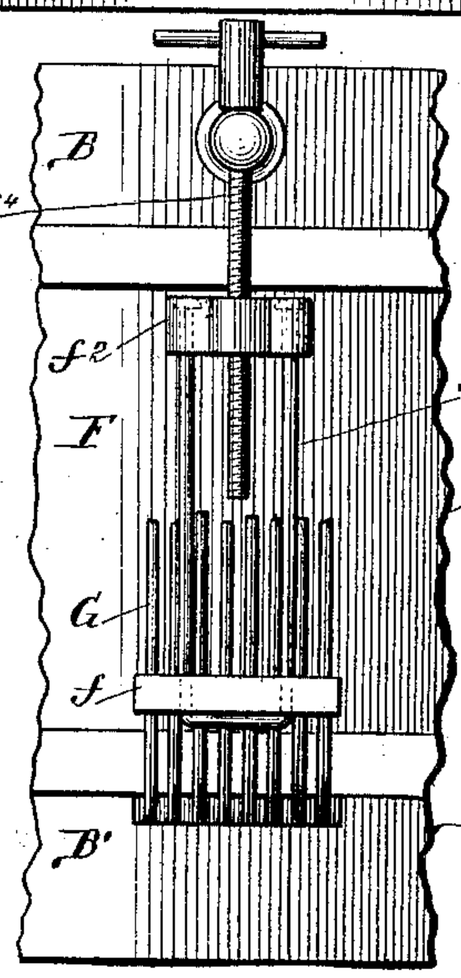


Fig. 4.

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DRUM.

SPECIFICATION forming part of Letters Patent No. 407,579, dated July 23, 1889.

Application filed September 28, 1888. Serial No. 286,667. (No model.)

To all whom it may concern:

Be it known that I, EDWIN J. CUBLEY, a citizen of the United States, residing at Ravenswood, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Drums, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 represents in perspective a drum with my improvement applied thereto. Fig. 2 represents, on a larger scale, a section taken through the drum on line 2 2, Fig. 1, it being observed, however, that portions of the drum-head strainer therein shown and of the snare-holder are in elevation. Fig. 3 is a sectional detail illustrating one of the straining-rods detached at one end from the drum. Fig. 4 represents the snare-holder in elevation and shows a portion of the drum. Fig. 5 shows a section through a bracket, which may be regarded either as one of the brackets d^3 or one of the brackets d^4.

My invention, while susceptible of application to drums in general, is particularly designed to provide a highly efficient and satisfactory orchestra-drum, which, as well known to players, involves requirements not absolutely essential in the ordinary field-drum.

The first part of my invention relates to means for straining the drum-heads, and the second part of my said invention relates to the snare-holder, the objects and advantages of said two parts of my invention being hereinafter fully set forth.

In said drawings, A indicates the body, and B B′ the hoops, of a drum, which may be furnished with heads C in any known or suitable way.

The strainers or tighteners for tightening the drum-heads are arranged at proper intervals around the drum, and consist of longitudinally-adjustable tightening-rods D, (that is to say, rods made adjustable in length,) which said rods are pivoted or hinged upon one hoop and temporarily connected with the other hoop, whereby, while the rods can be adjusted in length to tighten the heads, they can be manipulated so as to break connection between the hoops in case it should be desired to remove either or both of the latter. As a simple and convenient construction of rod or bolt, each rod consists of two parts or sections, whereof the section d has a threaded socket, in which a threaded portion of the section d' is screwed. By said arrangement the length of rod as a whole can be varied by properly turning the rod-section d'. The rod-section d is at one end hinged upon one of the hoops, to which end it is herein attached by a pintle or pivot d^2 to a bearing d^3, which latter is in turn rigidly secured to the hoop.

As a means for temporarily attaching the rod-sections d to the opposite hoop and for permitting the rotation of said rod-sections for purposes of adjustment preparatory to securing them in their connection with said hoop, the hoop is provided with a series of recessed bearings or brackets d^4, one for each extensible rod. Each bracket d^4 is provided with a notch or recess d^5, adapted to receive the section d' of the adjustable rod that is allotted to it, whereby the rod can be swung from its position shown in Fig. 3 toward the drum, so as to bring its portion d' into the recess of the bracket, as in Figs. 1 and 2.

The rod-section d' is shouldered adjacent to one end, as at d^5, and beyond each shoulder the rod is adapted to be engaged by a wrench or other appliance suitable for turning it, the more convenient way being to square the end portion of the rod, as at d^7, or otherwise render it polygonal, whereby it can be readily engaged by a small wrench or key.

After a straining-rod such as set forth has been brought into position alongside the drum, so as to place one of its portions within the recess of its allotted bracket, the rod-section can be turned so as to bring its shoulder down upon the bracket, a continuance of the turning of the rod then serving to draw the hoops toward one another, and hence tighten up the drum-heads. By thus adjusting the rods their shoulders will be caused to bind upon the brackets d^3, so that by no possibility will the rods become accidentally detached therefrom. Should it be desired to release the rods from the brackets d^4, so as to permit, for example, a new head to be put on the drum, such releasement of the rods can be readily effected by turning their sections d' in a proper direction. In the last-mentioned instance it will be observed that after a head has been put on the drum no difficulty will be experienced in again connecting the hoops together

by the aforesaid tension or straining devices, since the rods all remain pivoted to one hoop, while, on the other hand, the brackets d^4 retain permanent positions on the other hoop. Each bracket d^4 has a recessed body portion having a base-flange d^8, which sets against the hoop, so as to afford a broad bearing between the bracket and the hoop, and as a simple and reliable way of securing the bracket to the drum the bracket is further provided with a centrally-arranged threaded bore, which extends through a boss or neck d^9, formed at the base or rear side of the bracket. Said neck is countersunk in the hoop, and is engaged by a screw E, which is introduced from the inner side of the hoop. The flange steadies the bracket, and the neck not only steadies and absolutely prevents any lateral displacement of the bracket, but also provides an extended bearing for the screw.

The bearings or brackets d^3 for the hinged ends of the adjustable rods are constructed and applied like the brackets d^4, it being seen that the recesses in the brackets d^3, which correspond to the recesses in the brackets d^4, serve to receive the hinged or pivoted ends of the rod-sections d, which can be held therein by ordinary pins or pivots. In this construction it will be seen that Fig. 5 shows a construction of bracket similar to the bracket d^3 and the bracket d^4.

The snare holder and tightener F for engaging the snares G at one end comprises in its construction a pair of jaws f, between which the snares are clamped and firmly held by suitably drawing the jaws together, for example, by screws f'. One of said jaws f is connected with a block or nut f^2 by means of a wire f^3, which is bent into staple shape, so that by providing a couple of holes through the jaw it can be slipped upon the legs of the staple-shaped wire and brought closely down to the bends, as in Fig. 4, where, by forcing portions of the bends into the holes of the jaw, the latter will obviously be firmly held.

The block or nut f^2 is provided with a couple of holes or bores, whereby it can be slipped upon the wire, which latter will then have its terminals suitably bent or headed, so as to prevent the nut from slipping off the wire. The nut is further provided with a centrally-arranged threaded bore for the adjusting-screw f^4, which engages in said threaded bore of the nut. This adjusting-screw f^4 has an unthreaded portion f^5, which extends through a bracket H, and above said portion f^5 the screw is shouldered and enlarged and desirably provided with a cross-piece or laterally-arranged arms f^6, so that it can be readily taken hold of and manipulated.

The bracket H is secured to one of the hoops and has its bore through which the shank of the screw passes enlarged relatively to said shank, so as to permit a slight swing on the part of the screw, whereby the snare-holder may as a whole swing or yield laterally to an extent to allow it readily to adapt it to the situation and at all times exert a straight pull on the snares.

The formation of the nut and jaws permits them to be cut from bars, which involves considerable economy, while the wire, which can obviously be readily bent into staple shape, constitutes a light, simple, and strong connection between the jaws and the nut.

What I claim as my invention is—

1. A straining-rod hinged at one end to a bracket that is applied to one of the hoops of a drum, substantially as and for the purpose set forth.

2. The longitudinally-adjustable straining-rod hinged at one end to a bracket that is applied to one of the hoops of a drum, substantially as described.

3. The combination, with the straining-rod made adjustable in length and pivoted to a bracket upon one hoop, of a bracket applied to the opposite hoop and having a recess to receive the free end of said straining-rod, substantially as set forth.

4. The combination, with the straining-rod D, made adjustable in length, of the bracket d^3, to which one end of said rod is pivoted, and the bracket d^4, adapted for engagement with the opposite end of the rod, substantially as and for the purpose set forth.

5. The snare-holder consisting of a pair of jaws connected with a nut by a bent rod or wire, such as set forth, and a screw engaging the nut, for the purpose described.

6. The combination, with the bracket H, secured to one of the hoops, of a swinging snare-holder comprising a nut and a pair of jaws suitably connected together, and a screw engaging the nut and having a shank portion which is extended loosely through an opening in the bracket and provided with a stop or shoulder above the same, said opening in the bracket being enlarged relatively to the shank portion of the screw that passes through it, whereby the snare-holder can have a limited swing, substantially as and for the purpose described.

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