

(No Model.)

3 Sheets—Sheet 1.

J. A. BRILL.

GONG OR BELL FOR STREET RAILWAY CARS.

No. 370,602.

Patented Sept. 27, 1887.

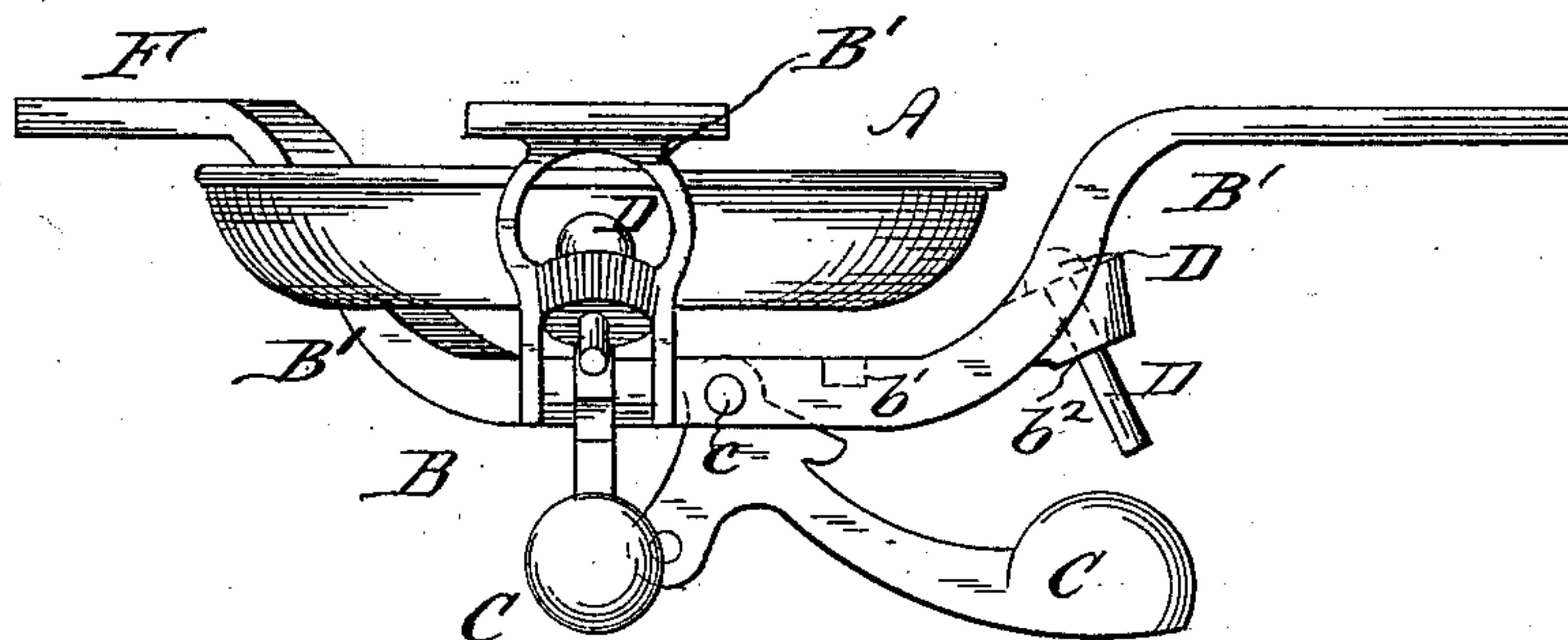
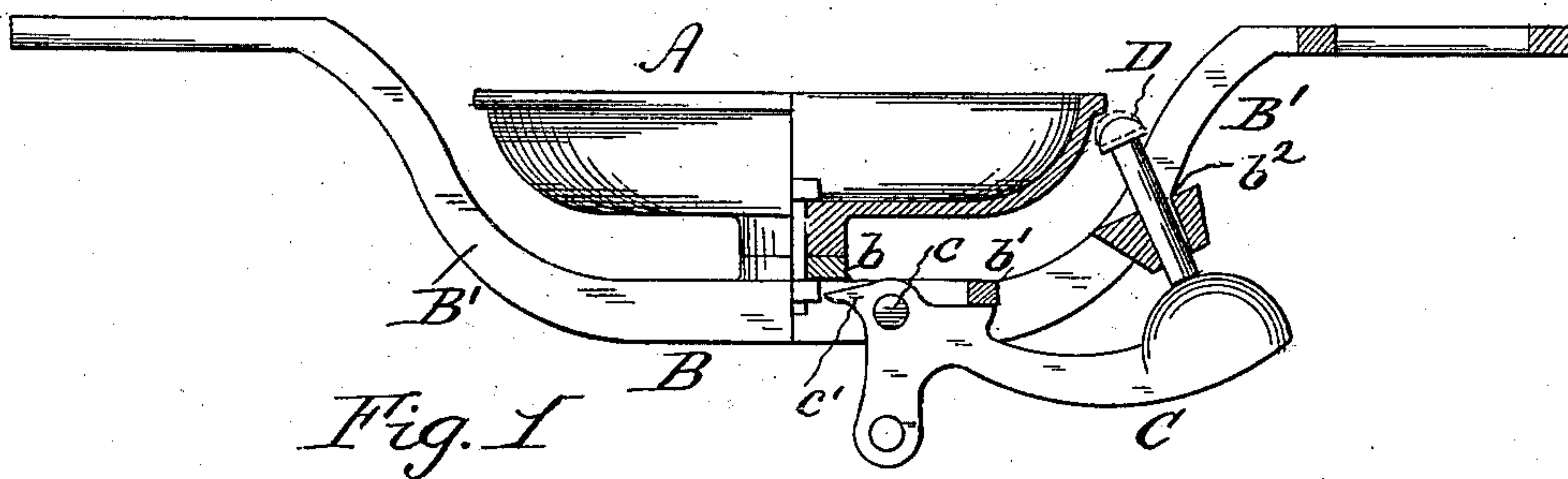


Fig. 2

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By S. J. VanStavoren

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(No Model.)

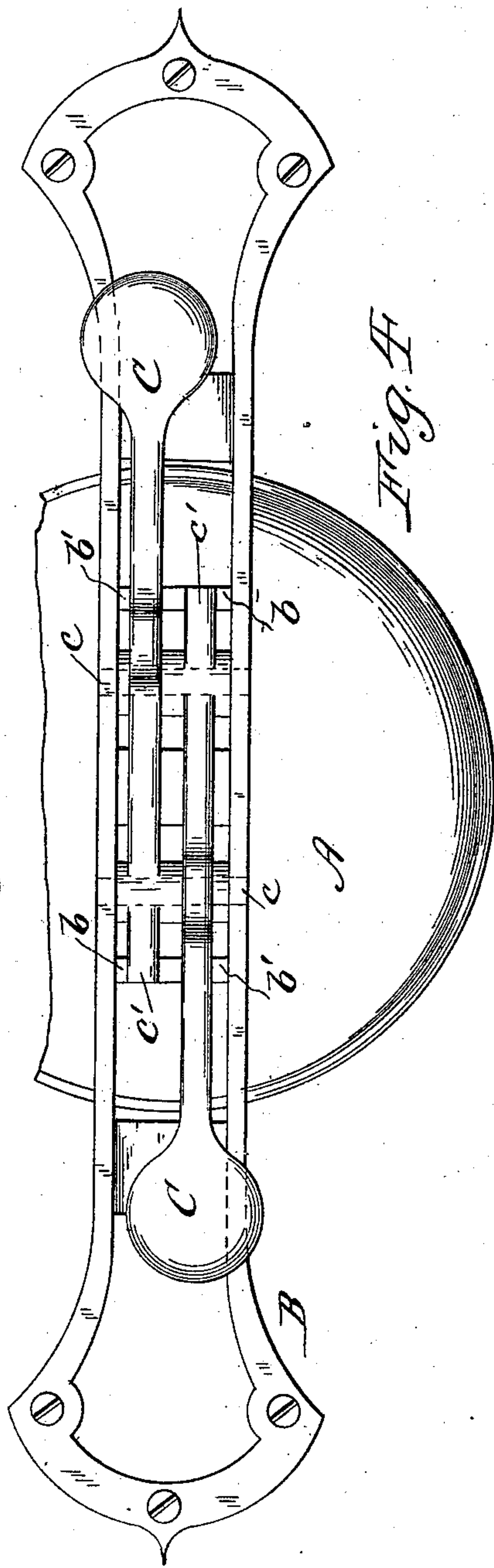
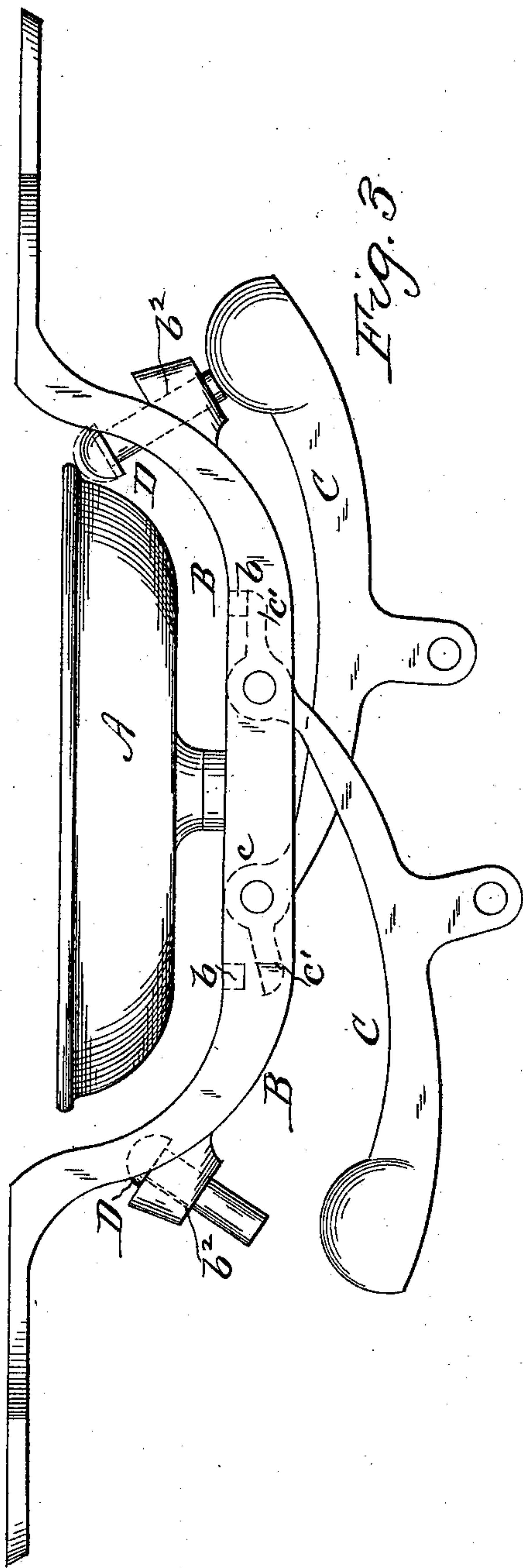
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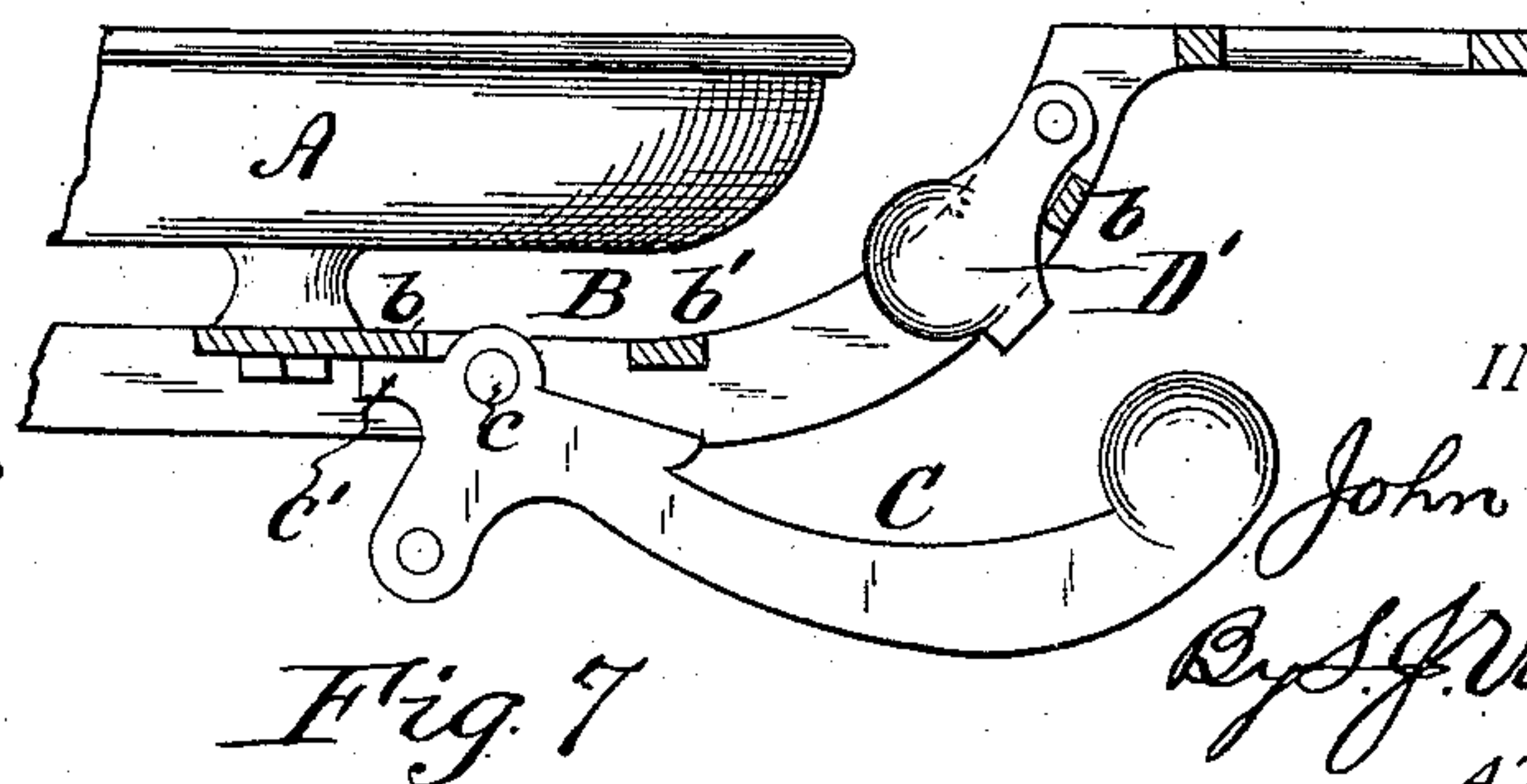
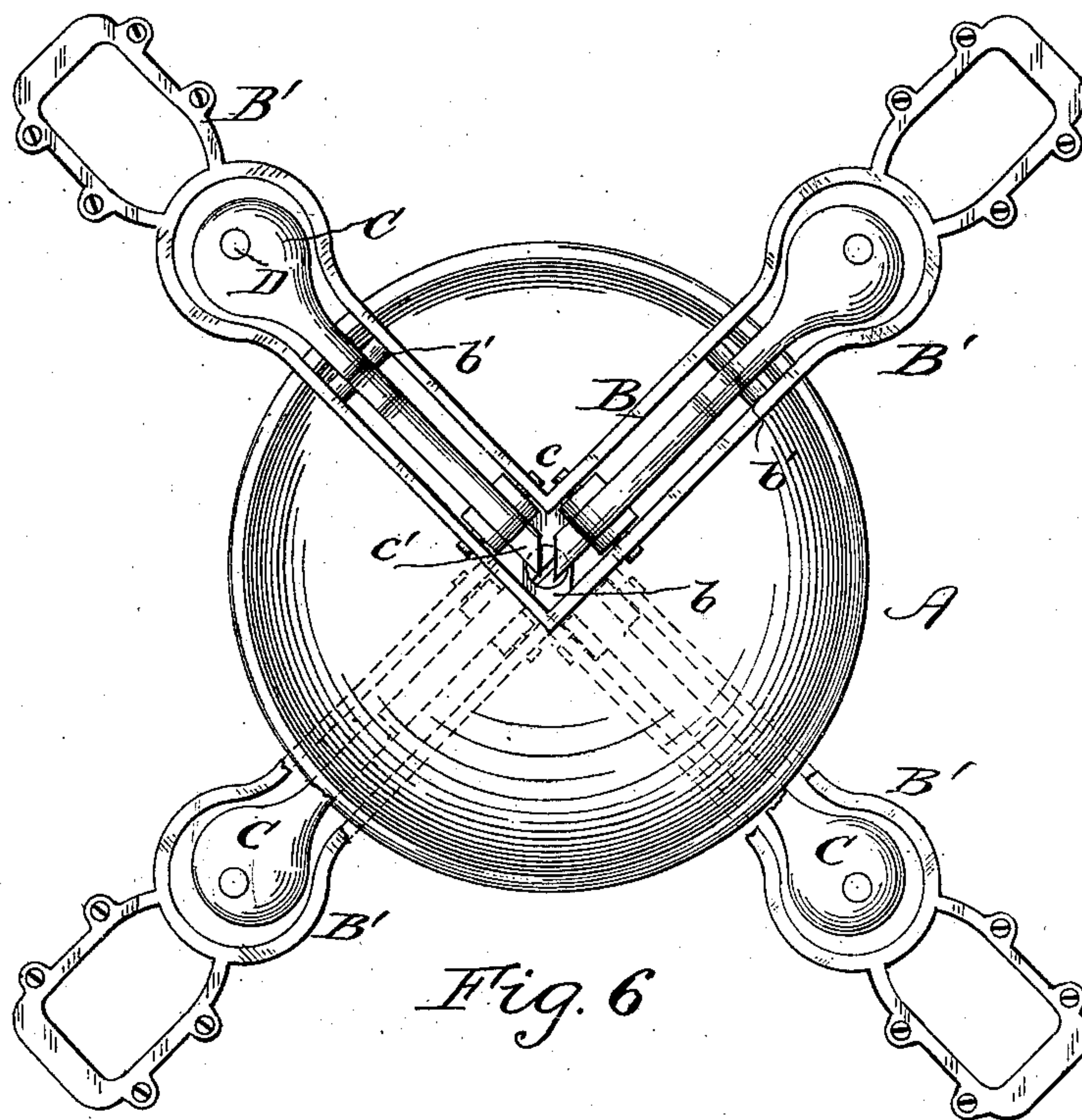
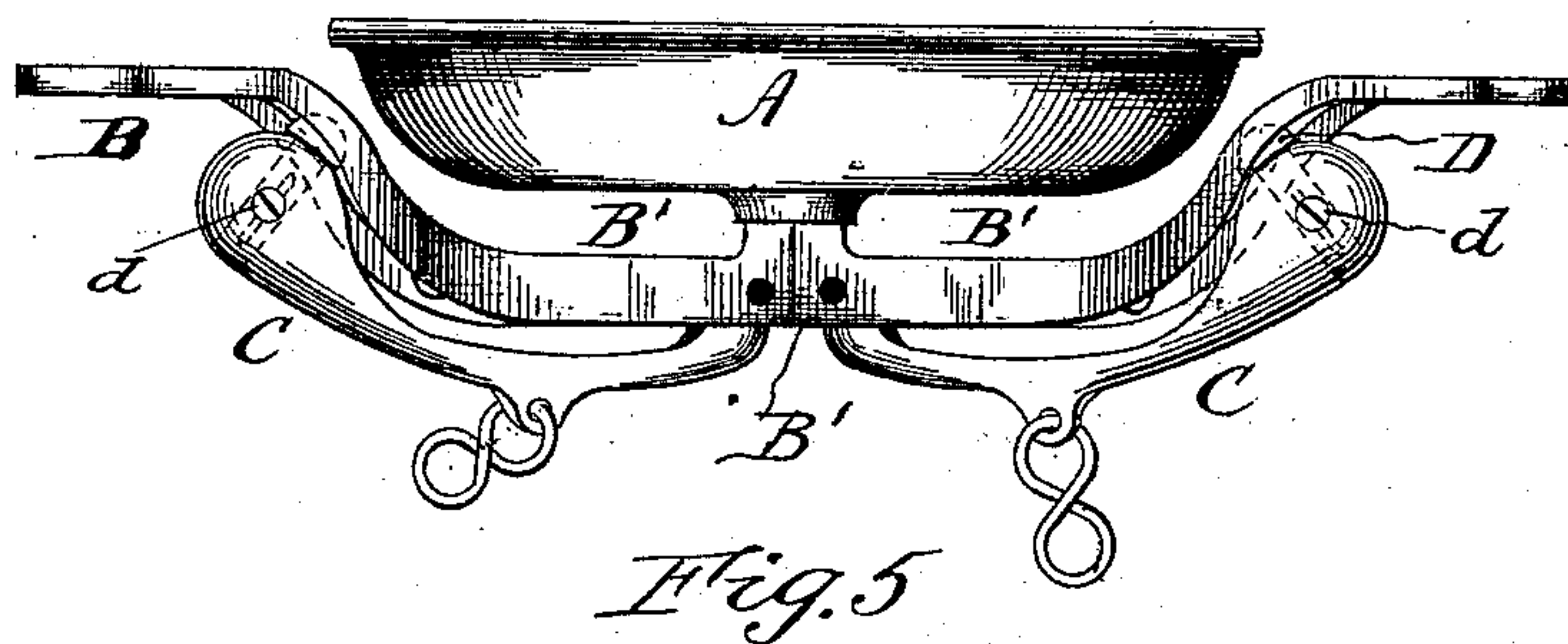
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Patented Sept. 27, 1887.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN A. BRILL, OF PHILADELPHIA, PENNSYLVANIA.

GONG OR BELL FOR STREET-RAILWAY CARS.

SPECIFICATION forming part of Letters Patent No. 370,602, dated September 27, 1887.

Application filed December 29, 1886. Serial No. 222,866. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. BRILL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Gongs or Bells for Street-Railway Cars, of which the following is a specification, reference being had therein to the accompanying drawings, where-
10 in—

Figure 1 is a sectional elevation of a bell, frame, single main hammer, and auxiliary striker embodying my invention. Fig. 2 is an elevation of bell, angular frame, and two main
15 and auxiliary hammers or strikers. Fig. 3 is a like view showing the two hammers arranged parallel to one another. Fig. 4 is a plan of same. Fig. 5 is an elevation showing bell and angular frame, the hammers on which have
20 in their heads sliding or striking plungers. Fig. 6 is a plan of same, and Fig. 7 is a detail elevation showing modified form of auxiliary striker.

My invention has relation generally to gongs or bells for street-railway cars, and particularly to that form of same wherein the hammer is so arranged that it does not strike the bell, but has in its head a loose or sliding plunger, which, when the hammer is moved or pulled, flies to-
30 ward and strikes the bell and then instantly flies back or away from it, so as to keep out of contact after striking, and thus permitting the bell to vibrate at its rim or edge to avoid crystallization and consequent breaking of the
35 bell at its center, as is well known.

My invention has for its primary object to make an economical and effective single bell for open or summer cars, as well as for other styles of cars, to take the place of two or more
40 separate bells heretofore used; and this I accomplish by providing the bell with two or more hammers suitably pivoted to a common frame to which a single bell is secured.

My invention has for its further object to provide the bell or hammer frame with a loose plunger for striking the bell, the plunger being between the bell and hammer-head, so that the one prevents the plunger moving out of its bearing or socket in one direction and the
50 other performing a like result when the plunger moves in an opposite direction. Conse-

quently no special devices are required for limiting the movement of the plunger.

My invention accordingly consists of a bell or gong and two or more separate hammers, all attached to a single or common frame; of an angular frame each leg or branch of which is provided with a hammer for sounding a single bell; of a bell or gong frame having loose plungers or auxiliary striking devices located
60 between the bell and hammer, and of the combination, construction, and arrangement of parts, as hereinafter described and claimed.

In the drawings, A represents a gong or bell, and B its frame, which may be of any suitable
65 configuration, and is so made that it not only supports the bell, but also its hammer or hammers C, irrespective of the number of the same—that is to say, that the bell and its hammers are attached to a common frame or support and not to different supports, as heretofore has usually been the case.
70

The bell may have a single hammer, as shown in Fig. 1, or two hammers, as indicated in Figs. 2 and 3, or more than two, as illustrated
75 in Fig. 6, and in either of the two last-described forms the bell and operating devices are preferably located in the center of the car; but any other convenient location may be selected. The hammers C are pivoted to the frame B, as
80 shown at c, and have tail-pieces c', which abut against stops b on frame B, to limit their downward or return movement, and other stops, b', are secured to the frame B, to limit the upward motion of the hammers when they do not
85 strike the bell, but operate plungers or other devices for so doing. If the hammer is arranged to strike the bell, the stops b' are dispensed with.

In using a bell having two hammers upon the usual style of street-car, or that in which the bell-rope runs through the center of the car, the hammers are preferably arranged parallel to the length of the car, and the bell-frame is correspondingly made and located as shown
90 in Figs. 3 and 4; but when used upon open or summer or other styles of cars, where heretofore separate bells were employed, one at each corner of the car, I preferably employ an angular frame, as shown in Figs. 2, 5, and 6, the
95 angles or branches B' of which are preferably at right angles to one another to afford con-
100

venient attachment of the bell-ropes to the hammers, so that they may be operated from any part of the car, the bell in this form being secured to the frame at the angle or junction
5 of its branches B'.

If desired, the usual sliding plunger, D, in the head of the hammers may be used for striking the bell, as shown in Figs. 5 and 6; but as this form of plunger requires the employment
10 of pins or screws *d* for limiting its motion or to prevent it falling out of the hammer-head, I prefer to insert the plungers in suitable openings, *b*², in frame B, as indicated, in which case they are located between the bell and hammer-
15 heads, so that they prevent the plungers moving or falling out of their bearings in either direction of their movement. The plungers, therefore, are loosely inserted in openings *b*², and require no screws or other separate de-
20 vices for retaining them in position and limiting the extent of their movement.

If desired, pivoted levers or auxiliary hammers D' may be substituted for the plungers D, as indicated in Fig. 7.

25 In using an angular frame having two branches it may, if desired, at its junction be provided with an arm or bracket, F, for more rigidly securing the frame B to the car-support.

A gong or bell frame made as described is
30 economical and durable, as all the operating parts, as well as the bell, being attached to the frame, they always retain their relative positions, and the angular formation of the bell-frame for two or more hammers admits of the
35 use of a single bell for cars heretofore requiring two or more separate bells.

It is obvious that the details of construction may be varied without departing from the

spirit of my invention, and I therefore do not limit myself to the form of same herein shown. 40

What I claim is—

1. The combination of a bell-frame, B, having angular brackets B' B', separate hammers C, pivoted to said branches, and auxiliary hammers D between hammers C and bell A
45 on frame B, substantially as set forth.

2. The combination of a bell-frame, B, having angular branches B' B', having stops *b* *b*', separate hammers C, pivoted to said branches and having lugs adapted to stops *b* *b*', and
50 auxiliary hammers D, supported upon branches B' B' and located between hammers C and the bell A on frame B, substantially as set forth.

3. The combination of a bell-frame, B, having mounted thereon an auxiliary hammer, D, in combination with hammer C, pivoted to
55 said bell-frame, substantially as set forth.

4. The combination of bell-frame B, an auxiliary hammer, D, mounted on said frame, and a hammer, C, pivoted to frame B, for striking
60 the auxiliary hammer to sound the bell, substantially as set forth.

5. The combination of a bell-frame, B, having branches B' B', a bell, A, secured to said frame at the junction of its branches, a separate hammer, C, for each branch, and a separate auxiliary hammer, D, between each hammer C and the bell A, substantially as and
65 for the purpose set forth.

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

JNO. A. BRILL.

Witnesses:

S. J. VAN STAVOREN,
TH. RANDALL.