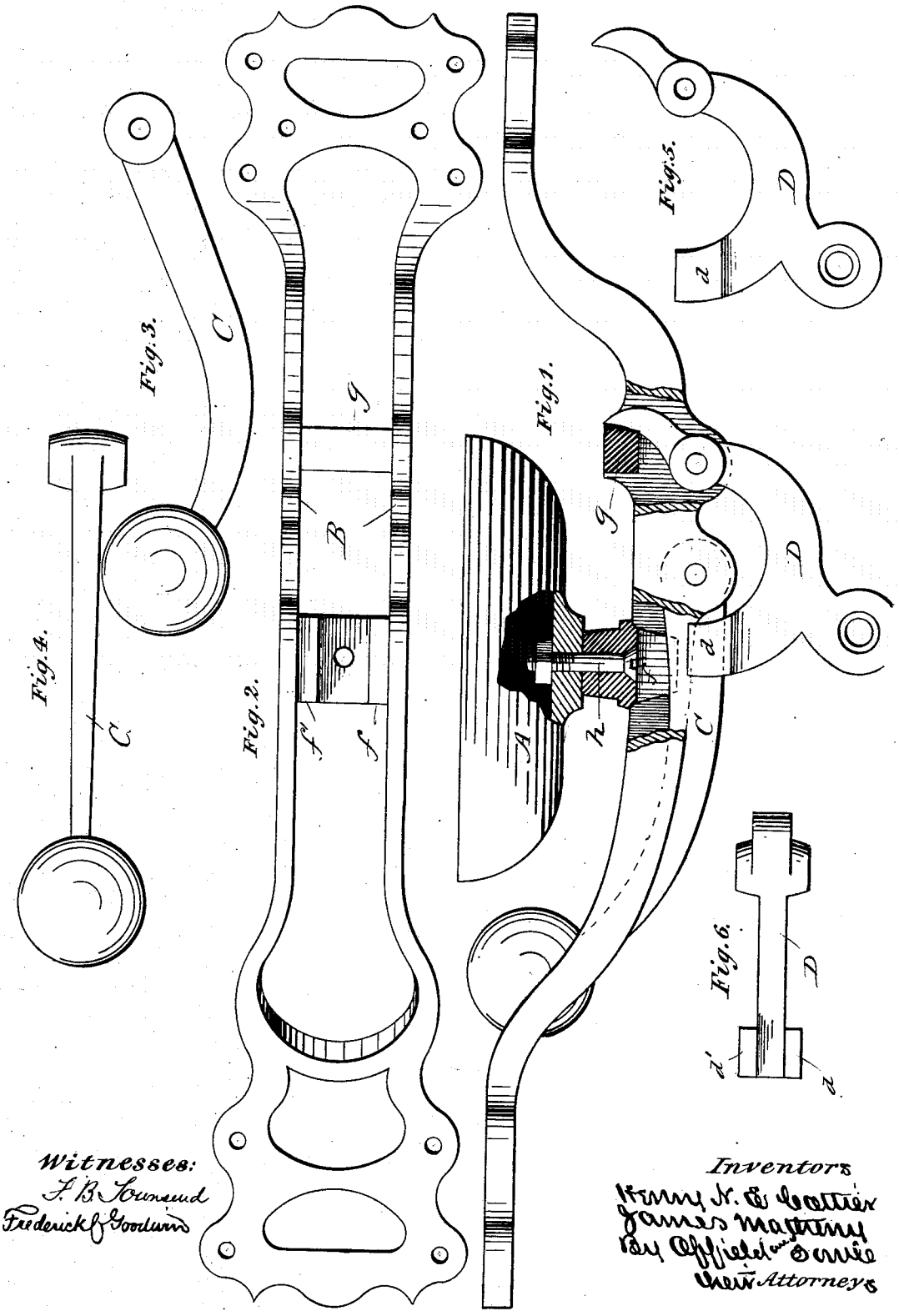
(Model.)

H. N. E. COTTIER & J. MATHENY.

STREET CAR GONG.

No. 245,060. Patented Aug. 2, 1881.



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UNITED STATES PATENT OFFICE.

HENRY N. E. COTTIER AND JAMES MATHENY, OF CHICAGO, ILLINOIS; SAID MATHENY ASSIGNOR TO SAID COTTIER.

STREET-CAR GONG.

SPECIFICATION forming part of Letters Patent No. 245,060, dated August 2, 1881.

Application filed February 9, 1881. (Model.)

To all whom it may concern:

Be it known that we, HENRY N. E. COTTIER and JAMES MATHENY, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Street-Car Gongs, of which the following is a specification.

Several different forms of gongs for street-cars have been in use; but as far as they have come under our observation, and so far as we have been able to ascertain from others, they have all been deficient in strength as well as defective in construction.

All men connected with street-cars know that the breaking of gongs has been a matter of frequent occurrence, as in the devices heretofore used there has been nothing to effectively prevent the hammer from striking the gong with whatever degree of force that might be applied to the cord or strap therewith connected. The gong-frames now used are easily broken, and are also deficient in not having any sufficient means for preventing the hammer from being drawn backward. This unrestricted action of the hammer causes rapid wear of the parts by which the same is connected with the frame; and a still further defect is the fact that, as now constructed, the gongs are so secured to their supporting-frames that the breaking of a gong necessitates the use of an entire new frame, as well as of a new gong.

The nature of our invention consists of a peculiar mechanism for operating a bell-hammer of a street-car gong, arranged as hereinafter shown and described, for the purpose of obviating the lateral displacement or play of the operating-levers and securing the whole device from liability of breakage by the accumulation of ice or the freezing up of its parts. We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of our gong and gong-frame, with a portion of the frame broken away in order to better show some of the parts. Fig. 2 is a plan or top view of the frame. Fig. 3 is a side view of the strike-lever. Fig. 4 is a top view of the same. Fig. 5 is a side view of the secondary lever. Fig. 6 is a top view of the same.

Similar letters refer to similar parts in the several views.

A represents the gong; B, the arms or frame, which is fastened to the roof of the car and supports the gong, and between which is secured the secondary lever to which the strap is fastened and the lever or hammer which strikes the gong.

C represents the lever or hammer which strikes on the gong, and which is secured between the arms of the frame by means of a bolt or screw.

D is the secondary lever, which is suspended in a like manner, and operates on the hammer of the gong. The strap or cord by which the gong is operated is connected to this secondary lever by means of an eye or opening.

f f' are the stops or checks between the arms of the frame, which check the forward movement of the secondary lever, and which are connected by a brace extending between the arms of the frame.

d d' represent the stop-flanges on the secondary lever D, which strike on the stops *f f'*, and are so made as to straddle the strike-lever C.

g is the check or stop which prevents the backward movement of the secondary lever.

h is the screw, with a nut which secures the gong to the frame.

The checks or stops *f f'* and *g* operate also as braces to strengthen the arms of the gong-frame.

While our improved gong is more particularly designed for street-cars, it can also be used in omnibuses, workshops, and factories. Our improved device can be secured in any position that will admit of the free action of the gong and the levers by means of the connecting cord or strap.

As to the material suitable for our improved gong, we prefer to use malleable iron nickel-plated for the frame, the gong, which is also nickel-plated, as a matter of course, being

made of bell-metal; but brass or other suitable metal or material may be used for the frame, levers, and connecting-bolts or screws.

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

In an improved street-car gong, the combination of the gong A, the supporting-frame B, the lever or hammer C, the secondary lever or carrying-arm D, the stop-flanges *d d'*, oscillating within the arms B, whereby lateral play of the secondary lever D and hammer C is prevented, and the checks or stops *f f'* and *g*, substantially as and for the purpose described.

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