C. KEPPLER.

STREET-CAR BELLS.

No. 193,876. Patented Aug. 7, 1877.

FIG. 1.

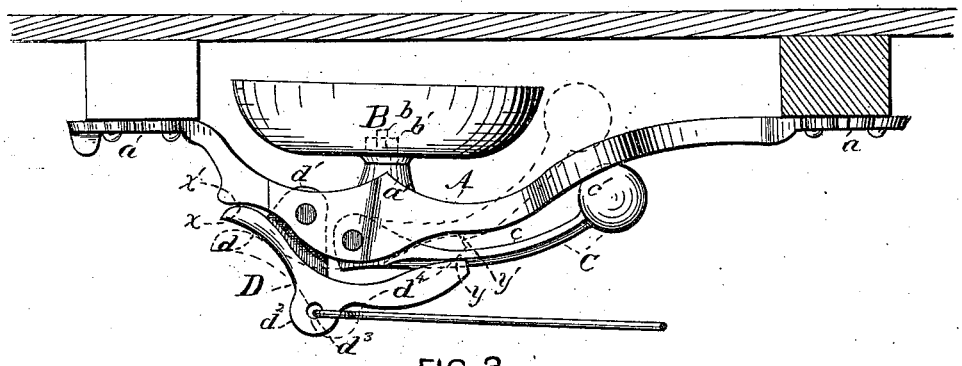


FIG. 2.

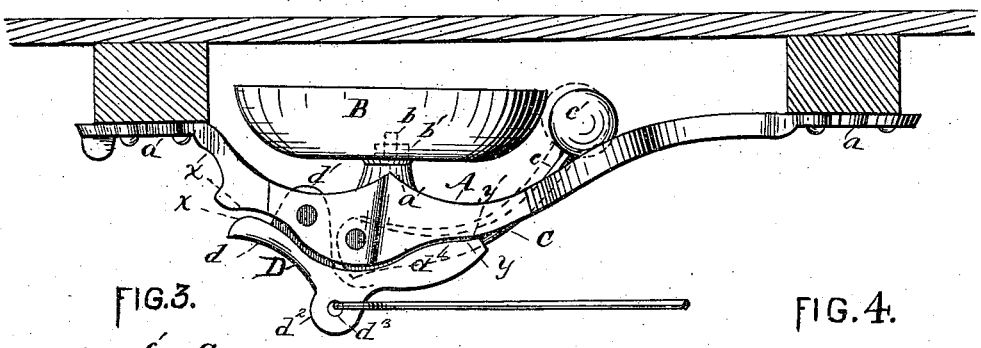


FIG. 3.

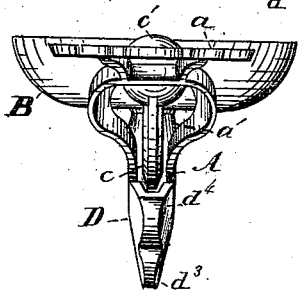


FIG. 4.

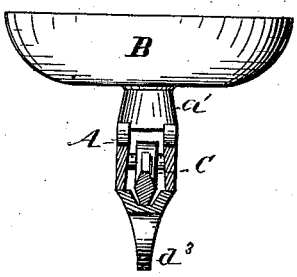


FIG. 5.

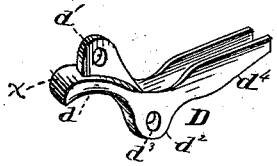
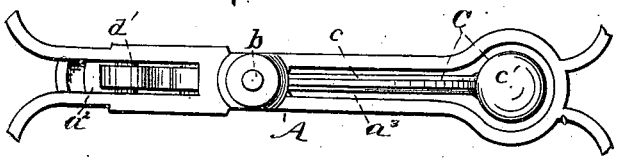


FIG. 6.



WITNESSES

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IMPROVEMENT IN STREET-CAR BELLS.

Specification forming part of Letters Patent No. **193,876**, dated August 7, 1877; application filed June 5, 1877.

To all whom it may concern:

Be it known that I, CHARLES KEPPLER, of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Car-Bells; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention is designed for use upon street-cars; and consists, mainly, in certain details of construction, which will be fully described hereinafter.

In the drawings, Figures 1 and 2 represent side elevations of my invention; and Figs. 3, 4, 5, and 6, various views of detached parts.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A represents a supporting-bracket, constructed of any proper material and suitable size, which is provided at its ends with proper bearing-faces *a a*, adapted for attachment to the beams of the car-roof, and near its center with a depressed portion, having a stud, a^1, adapted to support the gong or bell B, as shown. a^2 a^3, Fig. 6, represent longitudinally-central openings or spaces, which are formed in the bracket for purposes hereinafter explained. B represents the gong or bell, of any proper construction, which is supported by the stud a^1 of the bracket A, and secured in place by the threaded bolt *b*, rising from the stud, and the nut *b'*, as shown.

C represents the bell-hammer, consisting of a curved shank, *c*, pivoted at one end between the side pieces of the bracket, as shown, and provided at the other with the knob or hammer proper, *c'*, as shown. D represents a lifting-lever, consisting of a curved metal piece, *d*, having an ear, d^1, by means of which it is pivoted between the side pieces of the bracket, an arm or projection, d^2, having a hole, d^3, or other proper means for attaching the bell-strap, and a bearing-portion, d^4, adapted, when the lever is properly actuated, to lift the hammer to strike the bell. The construction of this lever is such, also, that its movement in each direction is properly limited, the downward movement of the long arm being checked by the contact of the faces *x* with the adjacent faces *x'* of the bracket, and the upward movement of the same by the contact of the faces *y* with the adjacent faces *y'*, as shown.

The operation is as follows: When the moving parts (*i. e.*, the bell-hammer and lifting-lever) are in their normal position, they are acted upon by the attraction of gravitation, and hang in the position shown in Fig. 1 at the limit of their downward movement.

When the strap is pulled to actuate the bell the long arm of the lifting-lever is raised, as shown in Fig. 2, and consequently, also, the bell-hammer, which rests upon it, the knob of the latter, by the impulse of the movement, being consequently thrown against the bell to sound the same. The bell-hammer, however, it will be observed, is not carried entirely up to the bell by the lifting-lever, as indicated in Fig. 2, as the motion of the latter is arrested by contact with the bracket before the movement of the former is complete. Sufficient impulse, however, is given to the hammer to cause it to complete its movement by its own momentum, as indicated in dotted lines; but after completing its stroke, being unsupported, it cannot, of course, remain against the bell to check the sound.

Some of the advantages of the described construction are as follows: The parts are few in number, simple in construction, and not liable to get out of order. No springs are employed, the return of the hammer being effected by gravity alone.

In using the bell it is not possible to hold the hammer against the bell, so as to check the sound.

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

In combination with a suppporting-bracket, A, centrally divided, as described, a bell-hammer, C, pivoted to the bracket and adapted to move between the divisions of the same, and lever D, the hammer and lever both being pivoted to the bracket, substantially as described.

This specification signed and witnessed this 27th day of February, 1877.

CHARLES KEPPLER.

Witnesses:
SAMUEL BROWN, Jr.,
W. M. POWELL.