(No Model.)

D. R. HART & J. B. GEACH.

CAR BELL.

No. 273,358. Patented Mar. 6, 1883.

Fig. 1.

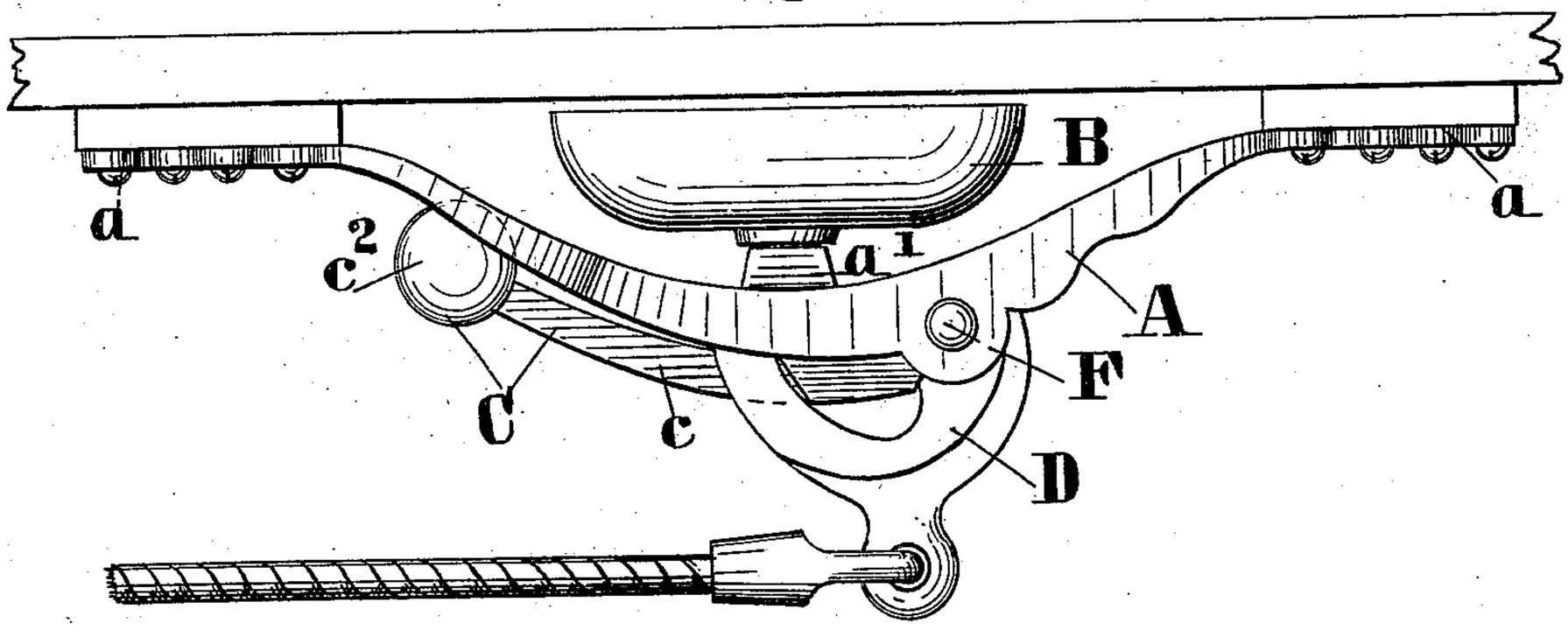


Fig. 2.

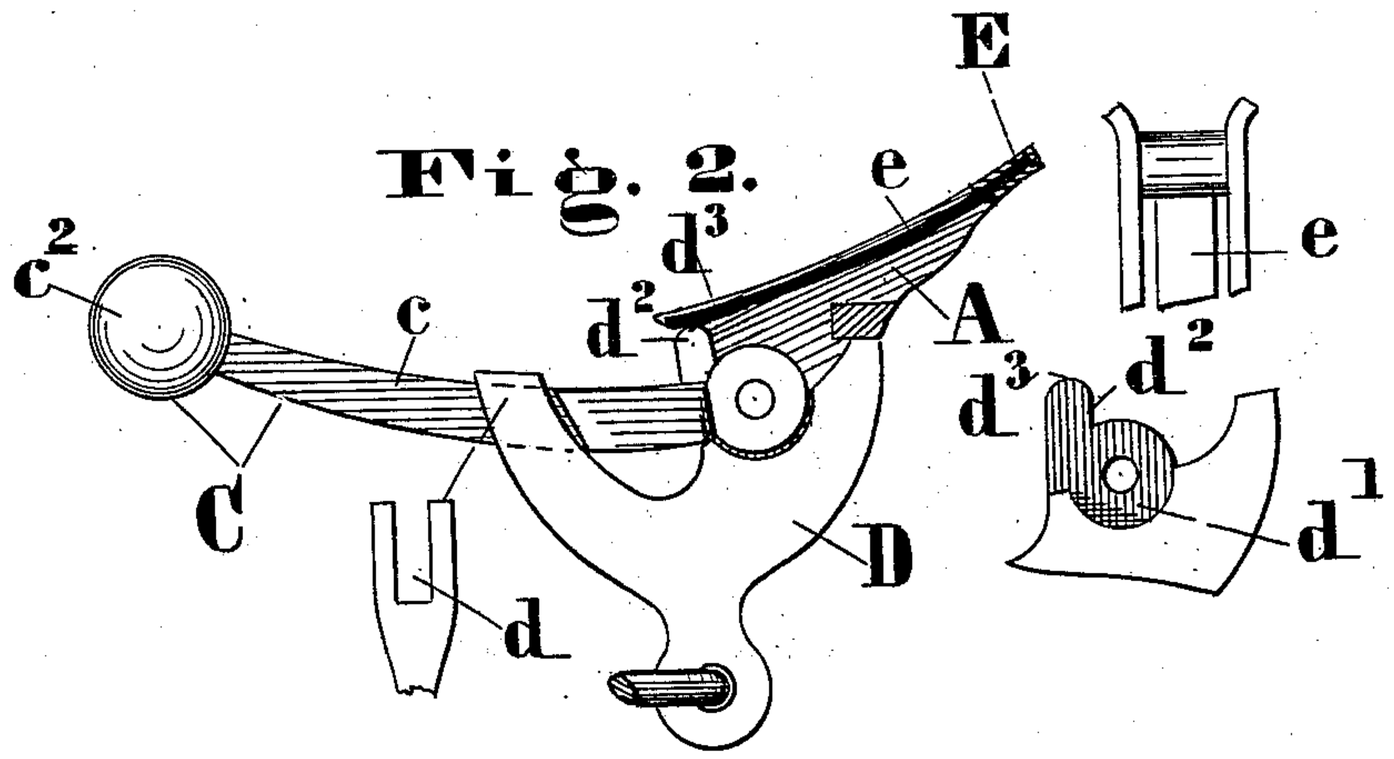


Fig. 3.

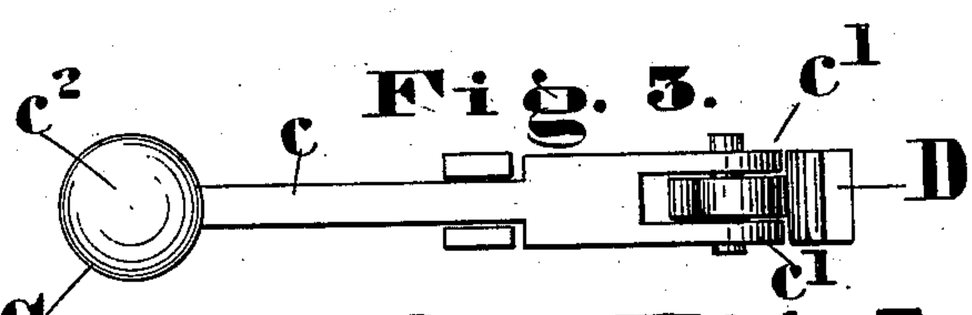


Fig. 4.

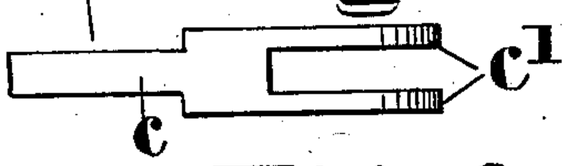
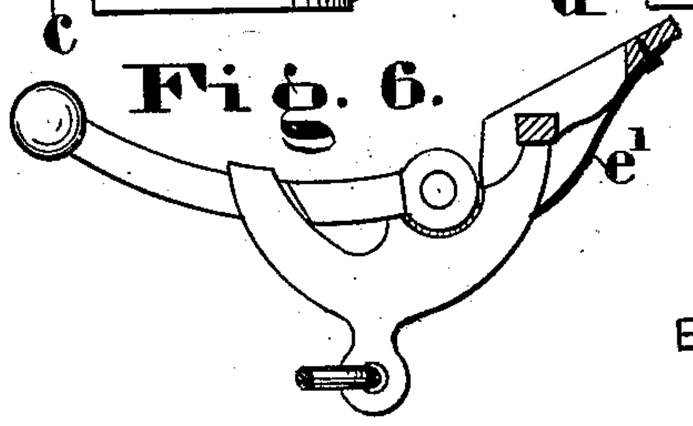


Fig. 5.

Fig. 6.



WITNESSES:
George H. Bowles
A. S. Newman

INVENTORS:
Daniel R. Hart.
John Benney Geach

BY

ATTYS.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

DANIEL R. HART AND JOHN B. GEACH, OF NEW YORK, N. Y.

CAR-BELL.

SPECIFICATION forming part of Letters Patent No. 273,358, dated March 6, 1883.

Application filed October 27, 1882. (No model.)

To all whom it may concern:

Be it known that we, DANIEL R. HART and JOHN BENNEY GEACH, of New York, county of New York, and State of New York, have invented new and useful Improvements in Street-Car Bells; and we 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 an improvement upon the patent of Charles Keppler, of August 7, 1877, No. 193,876; and it consists in certain specific details of construction, fully described hereinafter, by means of which greater simplicity is combined with greater certainty of operation.

In the drawings, Figure 1 represents a side elevation of our improved bell complete; Fig. 2, a side elevation of the spring, lifting-lever, and hammer detached; Fig. 3, a plan view of the hammer detached; Fig. 4, a plan view of the forked end of the hammer; Fig. 5, a plan view of the lifting-lever, and Fig. 6 a view illustrating a different arrangement of the spring for returning the lifting-lever to its normal position.

To enable others skilled in the art to make our improved street-car bell, we will proceed to describe fully the construction of the same.

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'*, adapted to support the gong or bell B, as shown.

C represents the bell-hammer, consisting of the curved shank *c*, provided at one end with the fork *c' c'*, having openings for the pivot-pin, as shown, and at the other end with knob or hammer c^2.

D represents the lifting-lever, consisting of a semicircular piece having at one end a recess, *d*, for permitting the proper movement of the hammer-shank, and near the other end a vertical plate projecting from the body of the lever, which has an annular portion, *d'*, with pivot-opening, and a finger, d^2, with curved end d^3, as shown.

E represents a proper socket formed upon a cross-bar extending between the side plates of the bracket, and *e* a spring, one end of which is held by the socket, as shown. If desired, instead of the spring *e*, a spring, *e'*, may be employed, as shown in Fig. 6, the one being the equivalent of the other.

F represents a pivot-pin extending through the side plate of the bracket, by means of which the hammer-shank and the lifting-lever are securely united thereto, as shown.

When the parts are in place, the curved end d^3 of the finger d^2 bears upon the free end of the spring *e*, the construction and arrangement being such that the latter acts to return the lifting-lever to its normal position after the same has been moved therefrom by the pull of the bell-cord. The arms *c' c'* also of the hammer-shank inclose the annular portion *d'* of the lifting-plate, this construction serving to prevent the lateral vibration of the hammer-shank.

The operation is substantially as follows: When the bell-cord is pulled the lifting-lever is oscillated on its pivot against the action of spring *e* and caused to throw up the hammer to strike the bell. When the cord is released the lifting-lever is positively returned by the action of the spring to its normal position, so that the hammer is permitted to fall its full distance into proper position for action when the cord is pulled again.

Some of the advantages of the described construction are as follows: By the special construction and arrangement of the spring and the lifting-lever, the latter is positively returned to its normal position after each movement, and hence the ringing of the bell when the cord is pulled is made absolutely certain. By the special construction of the hammer-shank, lifting-lever, bracket, and pivot-pin, greater simplicity is obtained and a more perfect action.

Having thus fully described our invention, what we claim as new, and wish to secure by Letters Patent, is—

1. In combination with the bracket having

the socket E, the spring *e* and lifting-lever D, having the finger d^2, as described.

2. In combination with the bracket, the lifting-lever, with vertical plate, the forked hammer-shank, and the single pivot, as described.

3. The street-car bell described, having the bracket A, gong B, hammer C, with fork c' c', lifting-lever D, with vertical plate, spring *e*, and pivot F, all combined and arranged as and for the purpose described.

This specification signed and witnessed this 11th day of October, 1882.

DANIEL R. HART.
JOHN BENNEY GEACH.

Witnesses:
GEORGE H. BOWLER,
A. S. NEWMAN.