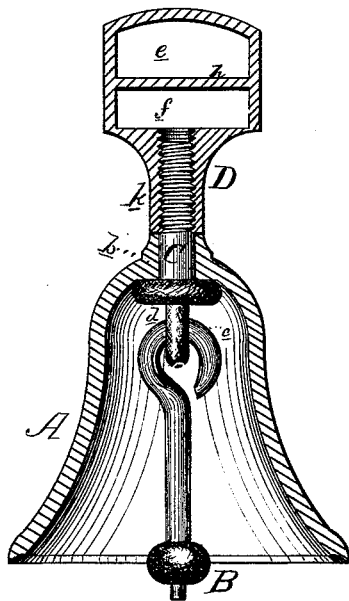


J. M. GAUGHEN.
Horse-Car Bell.

No. 202,645.

Patented April 23, 1878.



WITNESSES

Nat. E. Oliphant
Sam^l H. Wise

INVENTOR

John M. Gaughen
by Ben. C. Pole,
Attorney.

UNITED STATES PATENT OFFICE.

JOHN M. GAUGHEN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN HORSE-CAR BELLS.

Specification forming part of Letters Patent No. **202,645**, dated April 23, 1878; application filed March 9, 1878.

To all whom it may concern:

Be it known that I, JOHN M. GAUGHEN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Horse-Car Bells; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The accompanying drawing is a longitudinal vertical section of my invention.

This invention relates to that class of bells used on the horses of street-cars; and the novelty consists in attaching to the upper end of the bell proper a detachable shank provided with two or more slots for the passage of the straps, which cross and are independent of each other, and which connect the same to the harness; also, in the clapper and eye, which are one casting and very substantial, whereby all liability of the bell becoming detached from the harness is overcome, as will be hereinafter more fully set forth.

In the annexed drawing, A represents the bell-case, constructed in the usual shape. The upper end or stem of the bell-case is provided with a central opening, *b*, for the passage of a screw-threaded stem, substantially as shown in the drawing. The lower end of this stem is provided with an eye, *c*, to receive the clapper B, the eye, washer, and stem being cast in one piece; and the said clapper B is also cast into the eye *c*, making a very substantial and not easily lost clapper.

Immediately above the eye of the stem is arranged a washer, *d*, forming a component part of the stem, which forms a support to the bell-case, the upper surface resting against the under side of the stem, thereby forming a support and acting as a stop for the stem.

D represents a detachable shank, the stem of which is provided with internal female screw-threads, to engage with the male screw-threads of the connecting bolt or stem, as shown in the drawing. This detachable shank is provided with two openings or eyes, *e f*, divided by means of the partition *h*. Through these openings are passed two separate straps of the harness, which cross each other and make the necessary connection of the bell to the harness.

By this construction it will be seen that the parts are made separately and put together by means of the screw-threaded connecting-bolts. Thus I am enabled, in case of any of the parts becoming broken or useless, to remove said parts readily and easily, and substitute in lieu thereof a corresponding part; also, by providing the detachable shank with two openings, am enabled to make a secure fastening of the bell to the harness of the horse, thereby preventing the same from becoming detached and lost.

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

1. As an attachment to a bell of the construction substantially as hereinbefore described, the detachable shank D, provided with the female screw-threaded stem *k* and openings *e f*, for the purposes set forth.

2. The horse street-car bell consisting of the bell-case A, having its upper end perforated, the connecting screw-threaded stem or bolt C, and the double eye or shank D, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN M. GAUGHEN.

Witnesses:

BENJAMIN C. POLE,
T. W. FARLEIGH.