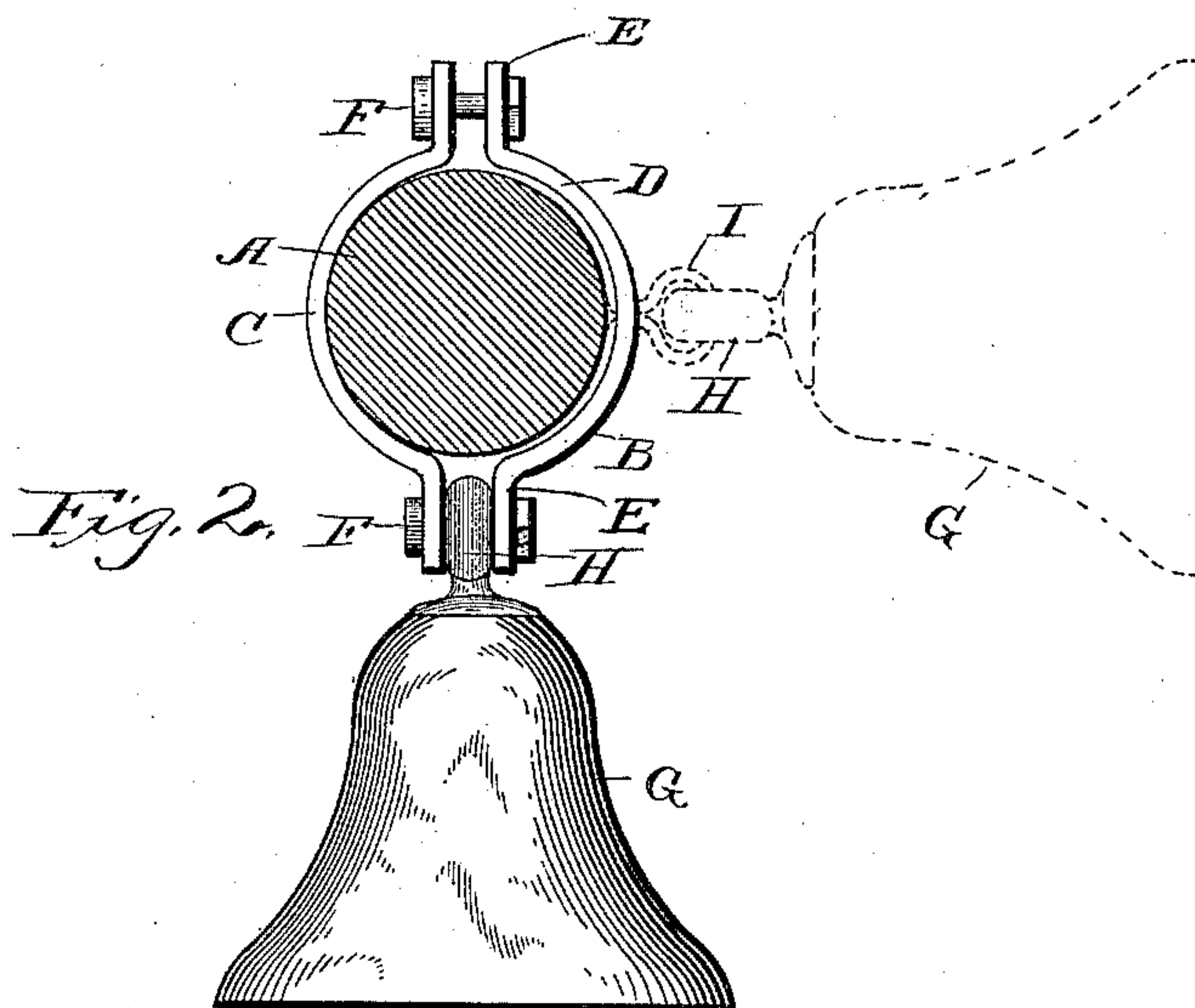
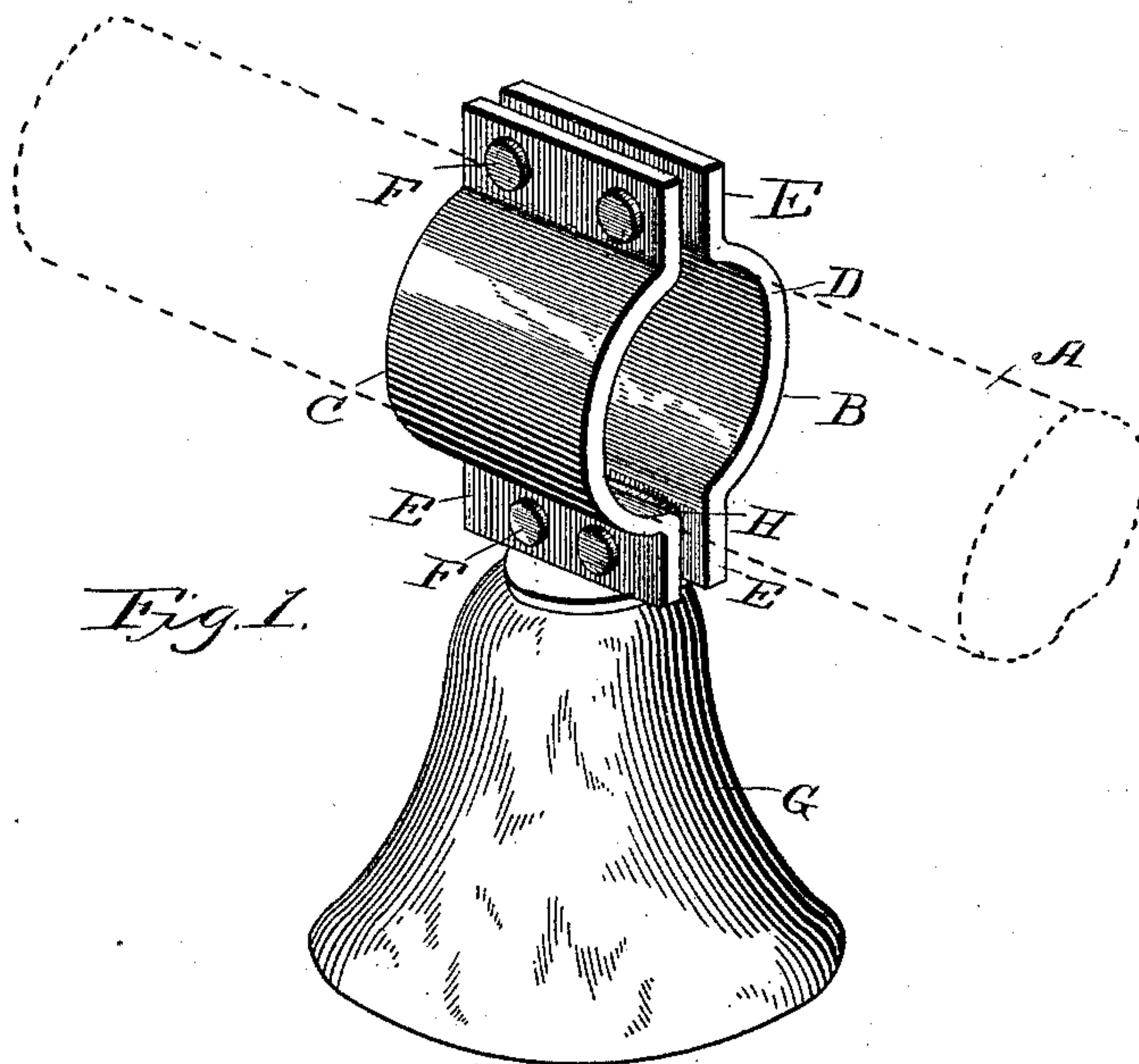


(No Model.)

J. O. BELKNAP & O. F. CAWTHON.  
CAR SIGNAL.

No. 421,227.

Patented Feb. 11, 1890.



Witnesses

*E. Murdeman*  
*A. W. Bishop*

Inventors

*Pytherr Attorneys,*

*Jackson O. Belknap.*  
*Orville F. Cawthon*

*C. Snow & Co.*

# UNITED STATES PATENT OFFICE.

JACKSON O. BELKNAP AND ORVILLE F. CAWTHON, OF MOBILE, ALABAMA.

## CAR-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 421,227, dated February 11, 1890.

Application filed June 5, 1889. Serial No. 313,109. (No model.)

*To all whom it may concern:*

Be it known that we, JACKSON O. BELKNAP and ORVILLE F. CAWTHON, citizens of the United States, residing at Mobile, in the county of Mobile and State of Alabama, have invented a new and useful Car-Signal, of which the following is a specification.

Our invention relates to improvements in car-signals; and it consists in certain novel features hereinafter described and claimed.

Figure 1 is a perspective view of our improved device. Fig. 2 is a side view with the car-axle in section.

The car-axle A is of the usual or any preferred construction, and upon the same we rigidly secure the divided collar B, which consists of two members C D, provided with the radial lugs E, through which securing-bolts F are passed to clamp the collar on the axle. The bell G is shown as of the ordinary hand-bell variety; but it will involve no departure from our invention to employ any other desired form of bell. The bell is provided at one end or side with a lug or extension H, which fits between the lugs E at one side of the collar, and is secured between the same by the bolt F passing therethrough. Instead of securing the bell in this manner, we may secure it by engaging the lug H in a loop I on the side of the collar or by bolting it to a projection on the collar, and we have illustrated these different positions of the bell in the drawings.

From the foregoing description it will be seen that we have provided a very simple signal by which, as the car is drawn along, the bell will be sounded, so as to warn pedestrians of the approach of the car. As the car is drawn along the track the axle, of course, will be rotated, and as the bell is secured permanently to the axle by means of the collar it will be carried around thereby and the hammer consequently caused to fall against the side of the body, and thereby sound the bell.

Our device is extremely simple, and its advantages are thought to be obvious.

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

A car-signal comprising a bell rigidly and removably attached to a street-car axle by a divided clamp secured together by bolts, the lower set of bolts serving to secure both the sections of the clamp together and the bell to the sections, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

JACKSON O. BELKNAP.  
ORVILLE F. CAWTHON.

Witnesses:

WM. H. SULLIVAN,  
CHARLES W. DORRANCE.