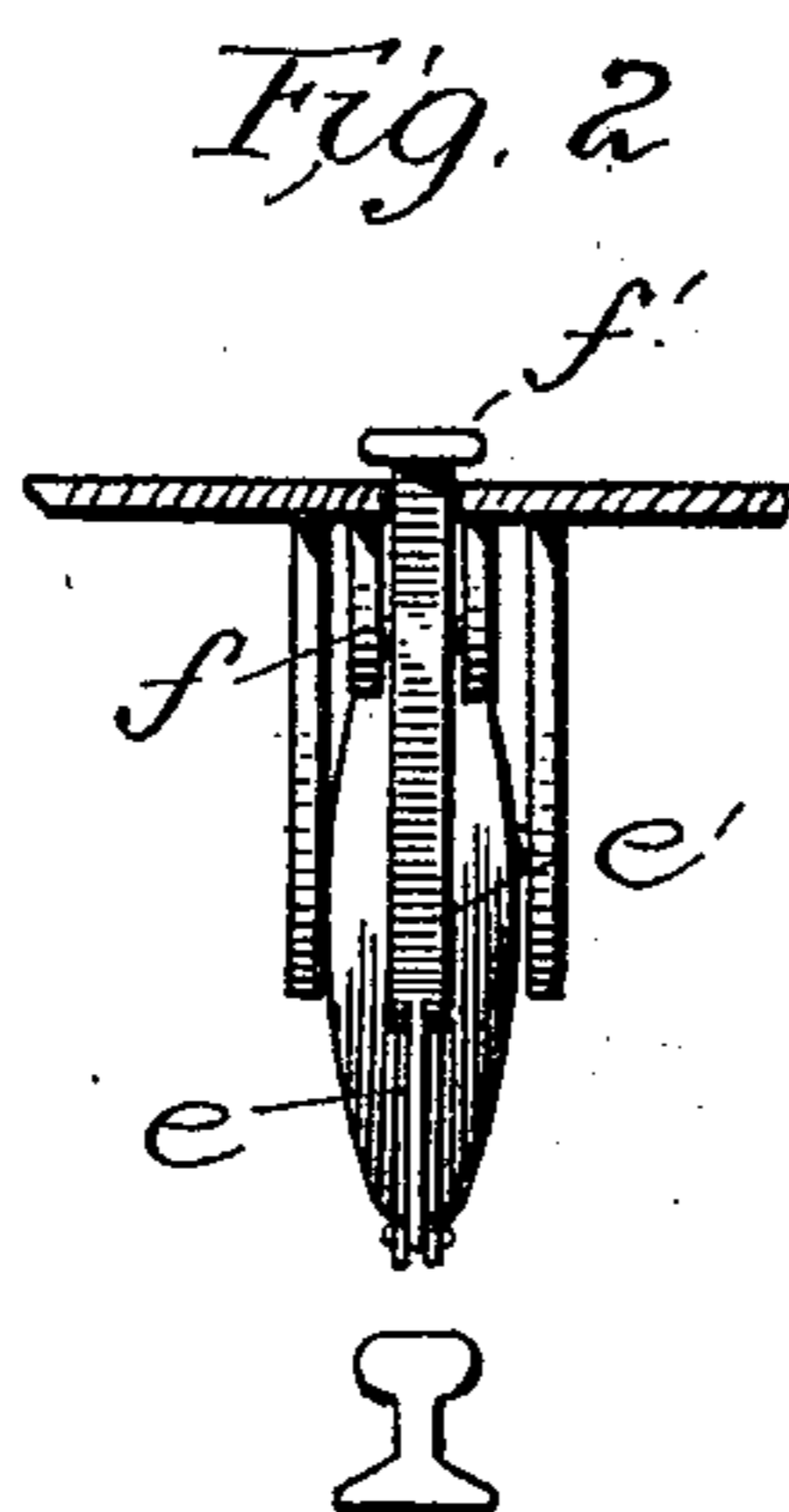
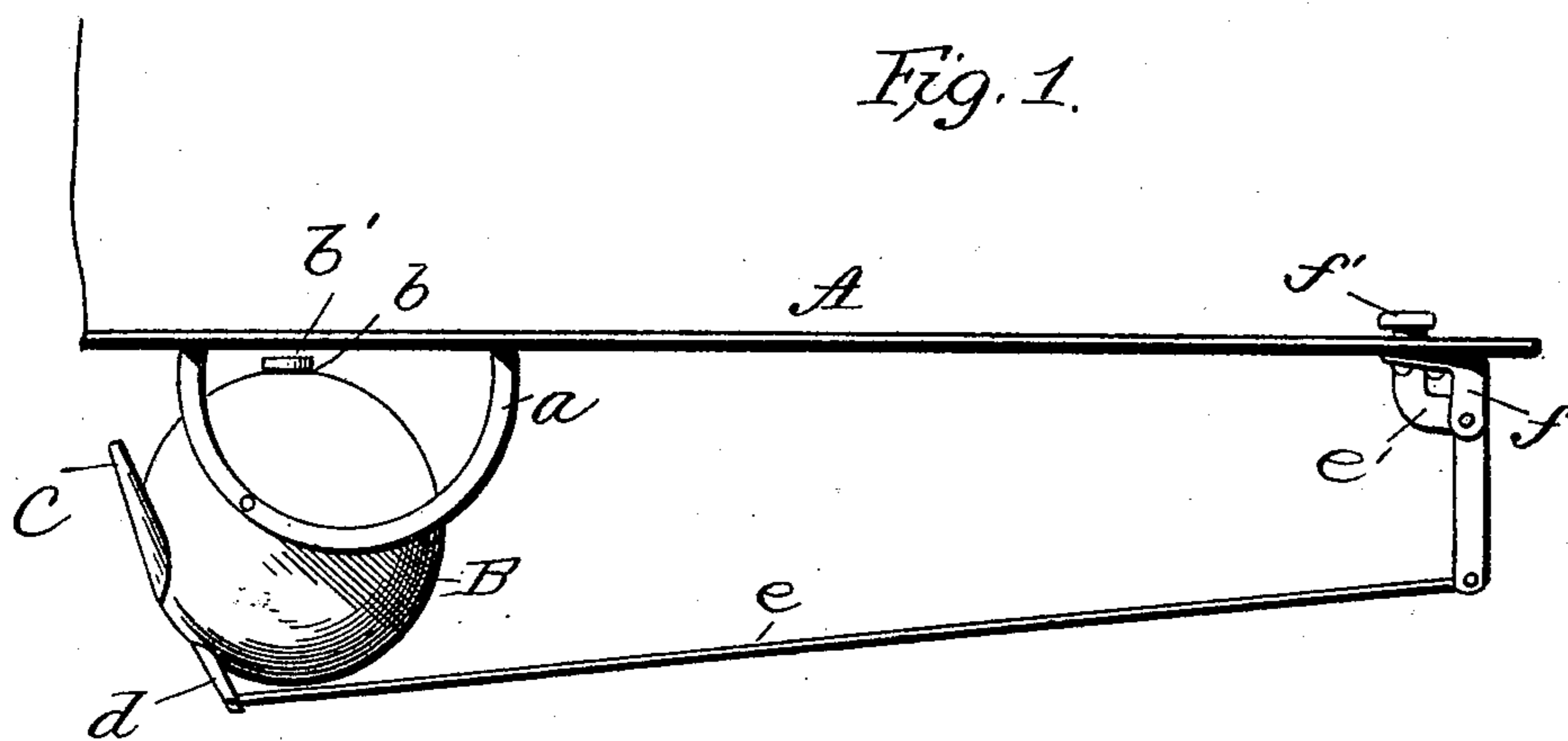


(No Model.)

J. BALLARD.  
SANDING DEVICE FOR CARS.

No. 516,515.

Patented Mar. 13, 1894.



Attest  
J. L. Middleton

Inventor  
John Ballard  
by Eric Spear  
Att'y.

# UNITED STATES PATENT OFFICE.

JOHN BALLARD, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO  
THOMAS W. BERRY, OF SAME PLACE.

## SANDING DEVICE FOR CARS.

SPECIFICATION forming part of Letters Patent No. 516,515, dated March 13, 1894.

Application filed June 26, 1893. Serial No. 478,821. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN BALLARD, a citizen of the United States of America, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Sanding Devices for Cars, of which the following is a specification.

My invention relates to devices for sprinkling sand upon the rails of street railways and the object of the invention is to provide an effective device of extreme simplicity and hence one which is not liable to get out of order or become ineffective from any cause.

The invention is illustrated in the accompanying drawings, in which—

Figure 1, is a side elevation of a portion of a car showing my improved sanding device attached thereto. Fig. 2, is a view at right angles to Fig. 1.

In the drawings A represents the bottom sill of a car to the under side of which are secured the depending braces or frames *a*, *a*, which are located over the rails on each side of the car.

B represents a receptacle for containing the sand which is pivotally supported between the braces. This receptacle I prefer to form of the shape shown and it is provided with a filling opening as at *b* by means of which the sand may be introduced into the receptacle, this opening being closed by a cover *b'*. A spout is provided as at C which is joined to the receptacle near the bottom thereof and tapers toward its mouth which is located directly over the rail so that when the receptacle is rocked upon its pivots sand will be delivered from the mouth of the spout directly

upon the rail. For rocking the vessel connections are provided to the car platform. A projection *d* is formed at the base of the spout to which is connected one end of a rod *e* extending toward the platform of the car. The other end of this rod is connected to the lower end of one arm of a bell crank lever *e'* which is pivoted in a supporting bracket *f* beneath the platform of the car. The other end *f'* of the bell is provided with an extension crank lever which projects up through a slot in the platform and is provided with an enlarged head upon which the operator may place his foot and by depressing the same draw upon the rod to rock the sand receptacle and cause the sand to be delivered through the spout upon the track. The shape of the receptacle serves to keep the sand from clogging and carries a free delivery at all times.

I claim as my invention—

In combination with a street car having the curved brackets depending beneath the same, a receptacle oval in cross section eccentrically pivoted between said brackets and parallel therewith and having a filling opening and delivery spout, a projection on the bottom of the receptacle, and a rod connected to said projection and adapted to be operated from the platform of the car, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN BALLARD.

Witnesses:

FRANK M. DAVIS,  
C. H. WELCH.