

W. LEAF.
Pole-Couplings for Street-Cars

No. 154,259.

Patented Aug. 18, 1874.

FIG. 1.

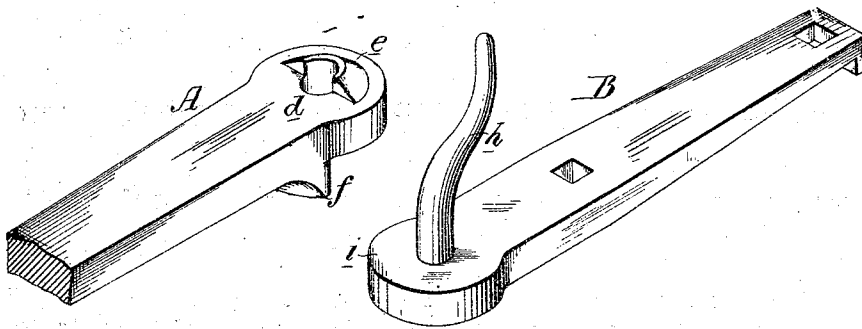


FIG. 2.

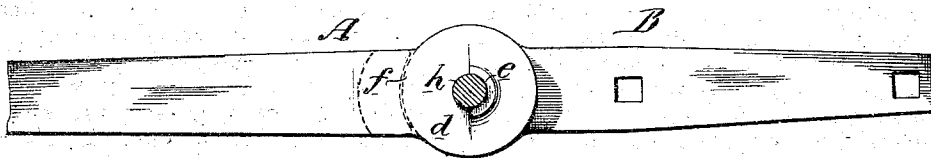
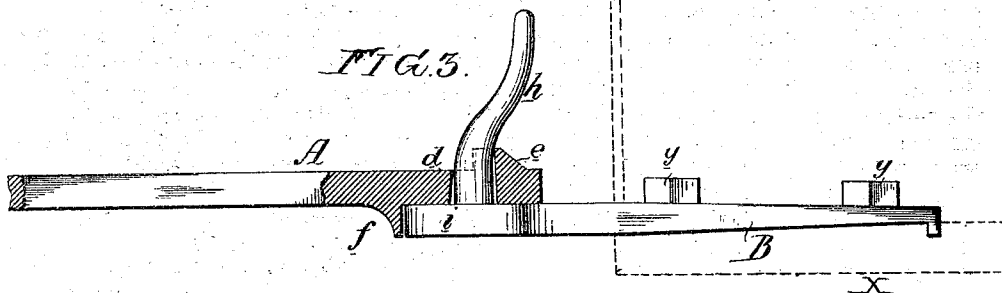


FIG. 3.



Witnesses, Hubert Howson
 Thomas M. Ilvain

William Leaf
 by his Attys.
 Howson and Son.

UNITED STATES PATENT OFFICE.

WILLIAM LEAF, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN POLE-COUPPLINGS FOR STREET-CARS.

Specification forming part of Letters Patent No. **154,259**, dated August 18, 1874; application filed July 15, 1874.

To all whom it may concern:

Be it known that I, WILLIAM LEAF, of the city of Philadelphia, Pennsylvania, have invented an Improved Pole-Coupling for Street-Cars, of which the following is a specification:

The object of my invention is to facilitate the coupling and uncoupling of the poles of street-cars, and I attain this object by adapting a pole-iron, A, having an eye, *d*, and lugs *e* and *f* on its upper and under sides, to a coupling-bar, B, secured to the platform of the car, and having a bent and tapering pin, *h*, all as fully described hereafter, and as illustrated by the perspective view, Figure 1, and sectional plan and edge views, Figs. 2 and 3, of the accompanying drawings.

The poles of street-cars are usually secured to a forked coupling-bar by a detachable pin, the coupling being heavy and expensive and difficult to manipulate in connecting and disconnecting the pole, as the driver of the car has generally to hold the pole in one hand and the lines by which he controls the horses in the other, so that he must drop either the pole or lines in order to withdraw and reinsert the pin. This is not only inconvenient, but the serious risk is incurred of the horses taking fright and running away, when momentarily out of the control of the driver.

My improved coupling, which I will now proceed to describe, is entirely free from this objection, and is cheaper, lighter, and fully as strong as the ordinary coupling.

The coupling-bar B is secured to the upper side of the platform X of the car by bolts *y*, as indicated by dotted lines in Fig. 3, and has a circular enlargement, *i*, at its outer end, from the center of which projects the curved and tapering coupling-pin *h*. The pole-iron A is secured to the pole in any suitable manner, and has an eye, *d*, adapted to the coupling-pin, a curved lug, *e*, on the upper side of the iron bearing against the rear of the said pin, while a corresponding curved lug, *f*, on its under side, bears against the curved front edge of the coupling-bar. The enlargement *i*, at the end of the coupling-bar, affords an extended bearing for the pole-iron, and the latter is prevented from tilting by the above-mentioned lugs, which also reduce the strain upon the pin.

To connect the pole it is simply necessary to drop the iron A over the fixed pin, and to lift it from the latter when the pole is to be disconnected.

I claim as my invention—

The combination of the pole-iron A with eye and lugs, and the coupling-bar B with curved and tapering pin *h*, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

WM. LEAF.

Witnesses:

WM. A. STEEL,
HUBERT HOWSON.