JOSEPH RUE.

Improvement in Hose Jumper for Street Railways.

No. 122,660. Patented Jan. 9, 1872.

Fig. 1.

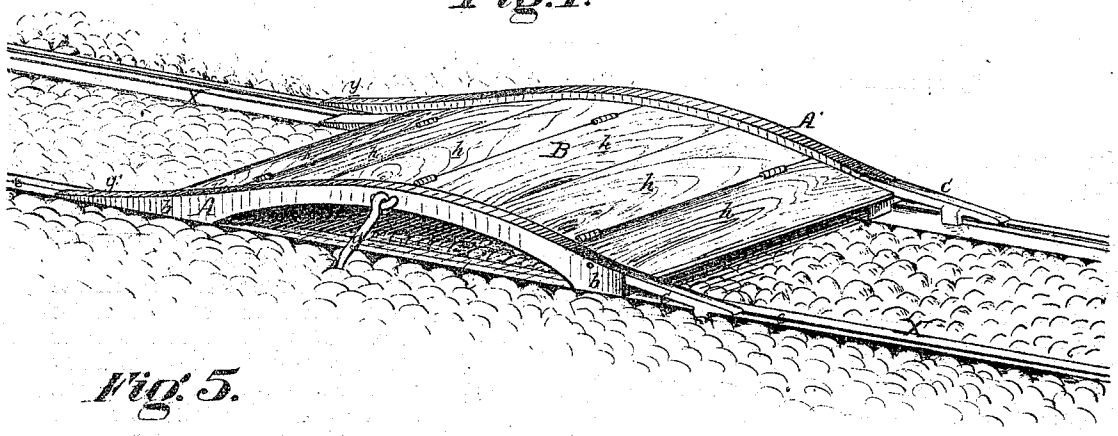



Fig. 5.

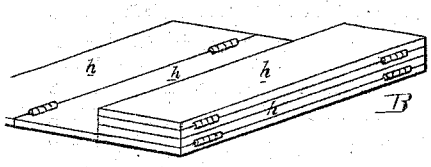



Fig. 2.




Fig. 3.

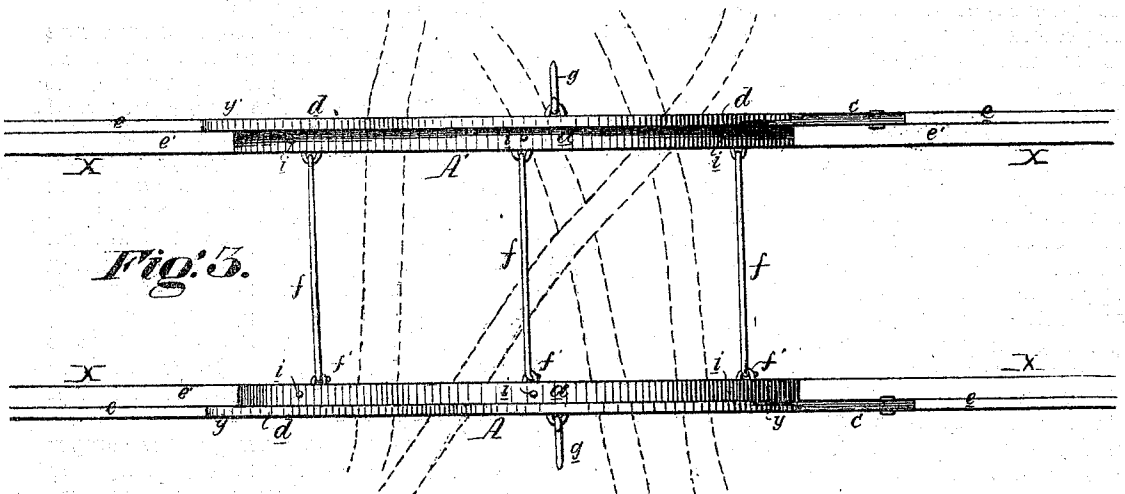
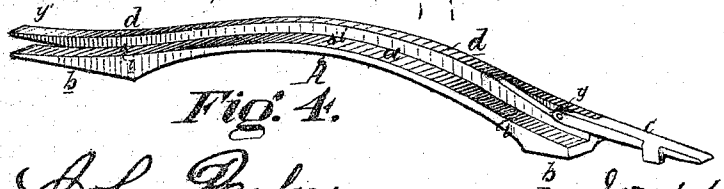



Fig. 4.




Witnesses { John Parker
Thos. McEwan

Joseph Rue
by his attys
Howson and Son

# UNITED STATES PATENT OFFICE.

JOSEPH RUE, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN HOSE-JUMPERS FOR STREET-RAILWAYS.

Specification forming part of Letters Patent No. 122,660, dated January 9, 1872.

Specification describing an Improved Hose-Jumper, invented by JOSEPH RUE, of Philadelphia, Pennsylvania.

My invention consists of a hose-jumper for city passenger-railway cars, too fully explained hereafter to need preliminary description, and possessing the advantages of lightness, strength, and portability, it being made in three main sections which can be readily taken apart and put together.

Figure 1 is a perspective view of my improved hose-jumper fitted to a railway track; Fig. 2, a longitudinal section of the same; Fig. 3, a plan view with the foot-way removed; and Figs. 4 and 5 detached perspective views of one of the arched side pieces, and of the foot-way partially folded.

The jumper consists of three main parts or sections, namely, of two arched side pieces, A and A′, adapted to the rails X X of a city passenger or other railway track, and of a curved foot-way, B, connecting the two side pieces and resting upon ledges or shoulders *a a* formed on the inner edges of the same. The side pieces are preferably made of wrought-iron, and are curved and otherwise shaped in the manner best observed in Fig. 4, so as to form feet *b b* adapted to the tops of the rails; a recess, *c*, between these feet and above the rail through which the section or sections of hose can be passed, a rib, *d*, forming a continuation of the tread *e* of the rail, and the before-mentioned ledge or shoulder *a*, forming a continuation of the flat portion *e′* of the rail, and serving as a support for the foot-way B. The side pieces when fitted to the rails are connected together by hooks *f*, Fig. 3, hung to one of the said side pieces and adapted to staples *f′* on the inner edge of the opposite side piece, and they may be still further braced by rods *g* projecting outward from the center or highest point of each of the said side pieces and into crevices between the stones of the pavement at either side of the rails, as shown in Figs. 1 and 3. The foot-way B consists of a number of boards or slabs, *h*, hinged together so that they may, when not in use, be rolled or folded up, as shown in Fig. 5, the ends of the said slats resting upon the ledges or shoulders *a* of the arches and having holes adapted to pins *i* on the latter, so as to keep them from slipping from their places. The foot-way when thus fitted to the arched side pieces strengthens the whole structure, which is perfectly firm and rigid, and capable of sustaining the weight of the heaviest car and its horses without yielding.

The wheels of the car are directed up onto the arches by steel strips or tongues C C hung to the said arches at some little distance from their ends the said strips preventing any tendency which the arches might otherwise have to tilt up at their opposite ends if the wheels of the car were conducted directly onto them. This will be readily understood on referring to Fig. 2, where it will be seen that the pressure of the wheels of the car, first exerted upon the strips C, will be transmitted to the pivoting-points *y* on the arches, and will consequently have a tendency to force the latter downward instead of tilting them upward at the outer ends *y′*. The strips C C can be folded over against the side pieces when the jumper is not in use, so as to reduce the length of the said side pieces in packing them beneath the seats of the car or into any contracted receptacle.

The jumper, having a recess, *c*, at each side beneath the arches and above the rails of the track, and being entirely open underneath, one or more sections of hose can be readily passed beneath the same and across the track, as indicated by dotted lines in Fig. 3, and the jumper is of sufficient length to enable the hose to be slightly moved if necessary, or to be extended diagonally beneath the same, as well as at right angles to the track. The jumper also being gradually curved upward from each end toward the center, and being perfectly rigid, will offer very little obstruction to the passage of the cars, and will effectually protect the hose both from the wheels of the car and hoofs of the horses.

Besides lightness and strength, the jumper possesses the advantages of simplicity and cheapness, and also of portability, as when no longer required for use, it can be readily lifted from the track, the foot-way disengaged from the arched side pieces and rolled or folded up, and the whole, (which, when thus taken apart, requires but little room,) can then be placed beneath the seats of the car, or into any convenient receptacle on the line of the railroad.

I claim as my invention—

1. The foot-way B, consisting of slats *h h*, hinged together, as described, and adapted to the arched side pieces A A′, as herein set forth.

2. The combination, with the side pieces A and A′, of the tongues or strips C C, pivoted to the said side pieces and adapted to the rails of the track, substantially as and for the purpose specified.

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

JOSEPH RUE.

Witnesses:
WM. A. STEEL,
HARRY SMITH. (120)