C. C. Dow.

Car Jumper.

No. 87,399. Patented Mar. 2, 1869.

Fig. 1.

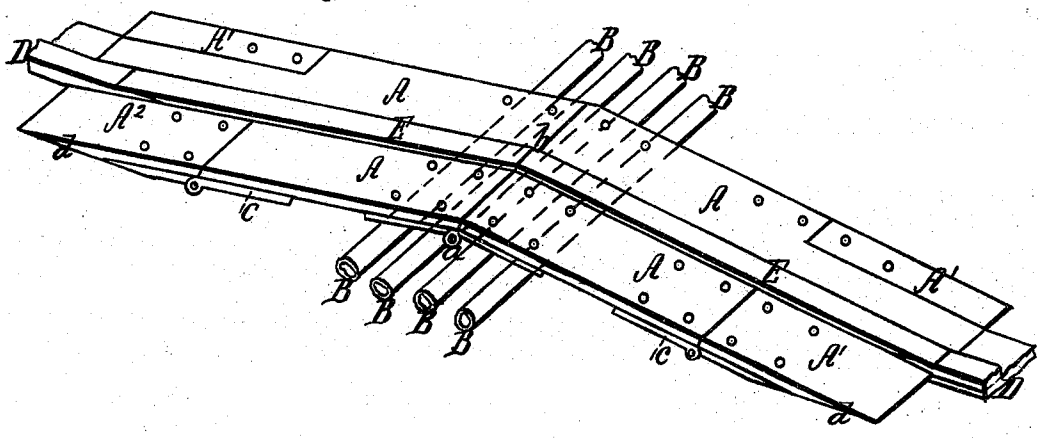


Fig. 2.

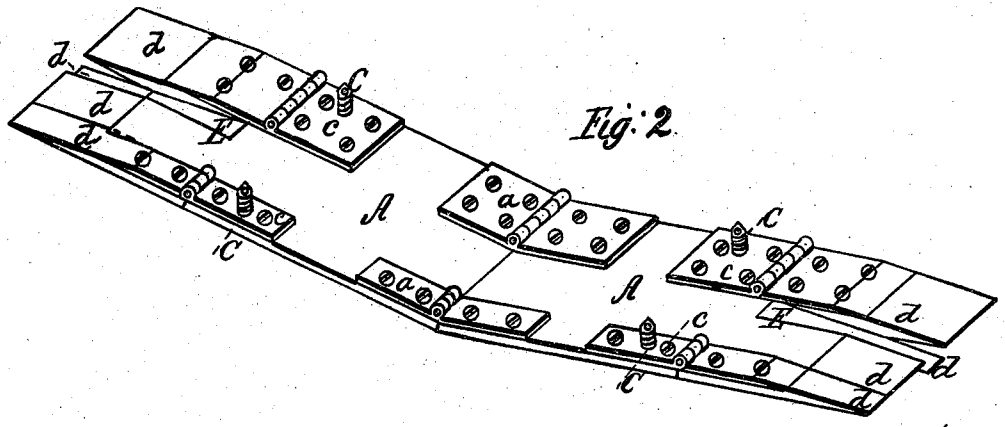
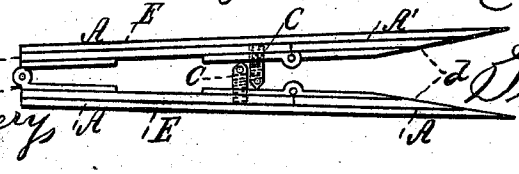


Fig. 3.



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CHRISTOPHER C. DOW, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND LIONEL HYLTON, OF SAME PLACE.

Letters Patent No. 87,399, *dated March* 2, 1869.

IMPROVED CAR-JUMPER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CHRISTOPHER C. DOW, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improved Portable Car-Jumper; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists, in the first place, of two sheet-iron plates, which I usually make of boiler-iron, hinged together, so as to be folded, to be conveniently carried under the seat of a car, when not in use, to be placed on a track, over hose, in time of fire, to protect it from injury in the passage of the cars, there being one pair of plates to be placed over each rail of the track. The plates are elevated at their central or hinged ends when in this position, and have but-joints to give them firmness in their arched or angular position, so as not to bear upon the hose when cars pass over them. The plates are provided with supplemental rails, which are bevelled on their under sides, at their outer ends, to present a continuous surface with the tread of the rails of the track, and thus afford a free running of the wheels of the cars. The outer ends of the hinged plates are bevelled off in like manner, to form a continuous surface with the track.

The invention, in the second place, consists of adjustable feet to the hinged plates, in adaptation to variable heights of the tread of the track-rails, and the inequalities of the road; and,

In the third place, in supplemental hinged plates, which, by their weight, adjust themselves to the track on each side of the track-rails.

The first-mentioned hinged plates are wide enough to have a sufficient margin, on each side of their rails, to compensate for any irregularity of running of the wheels, of vehicles which are not of the same distance apart as the wheels of the cars; and, to this end, the supplemental plates are so combined and arranged with the others, which are cut out in their corners to receive them, as to come, at their outer edges, just outside of the tread of the track-rails, and at their inner edges, inside of the flanges of the same.

In the accompanying drawings—

Figure 1 is an isometrical view of a jumper on one rail of a track.

Figure 2 is a like view of the jumper in its reversed position.

Figure 3 is an edge view of the jumper folded together for convenience in carrying it.

Like letters in all the figures indicate the same parts.

A A are plates, which I usually construct of boiler-iron. They are connected together, at their inner ends, by means of hinges *a a*, and have a but-joint, *b*, which, in conjunction with the hinges, gives a firm support to the plates as the cars pass over them, so as not to bear upon hose which they cover.

There are four pieces of hose, B, represented as crossing the track, in fig. 1, over which the jumper is placed.

In practice, I place a jumper, as represented, on each rail, over any convenient number of hose.

C C C C are adjustable feet, which are connected with the plates A A, in adaptation to different heights of tread-rails of the tracks, and to the inequalities of the latter.

In order to adapt the jumper to vehicles whose wheels are not of the same distance apart as the wheels of the cars, and to irregularity in running, I construct the plates A A considerably wider than the tread-rails D of the track, and I cut away the outer ends of said plates, so as to receive the supplemental plates A^1 A^1 and A^2 A^2, which are connected to the former by means of the hinges *c*, so that by their weight, as they turn freely on their hinges, they adapt themselves to the road, the plates A^1 falling just inside of the flange of the rail D, and the plates A^2 outside of the tread.

These plates have bevels *d* on their under sides, at their outer ends, so as to bring their upper surfaces continuous with the track at each side of the rail. The remaining portion of the ends of the plates A A, and the outer ends of the continuous rails E E, which are confined to the plates by means of rivets, have like bevels *d*, so that the plates may form a continuous surface with the flange of the rail of the track, and the rails E, a like surface with its tread.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the plates A A, having hinges *a* and a but-joint *b*, so as to form a solid arch over the hose, the said plates being provided with supplemental rails E, substantially in the manner and for the purpose above described.

2. The combination of the adjustable feet C with the plates A A, substantially in the manner and for the purpose specified.

3. The combination and arrangement of the supplemental plates A^1 and A^2 with the plates A, substantially in the manner above described, and for the purpose specified.

In testimony that the above is my invention, I have hereunto set my hand, and affixed my seal, this 28th day of September, A. D. 1868.

CHRISTOPHER C. DOW. [L. S.]

Witnesses:

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WM. LARZELERE.