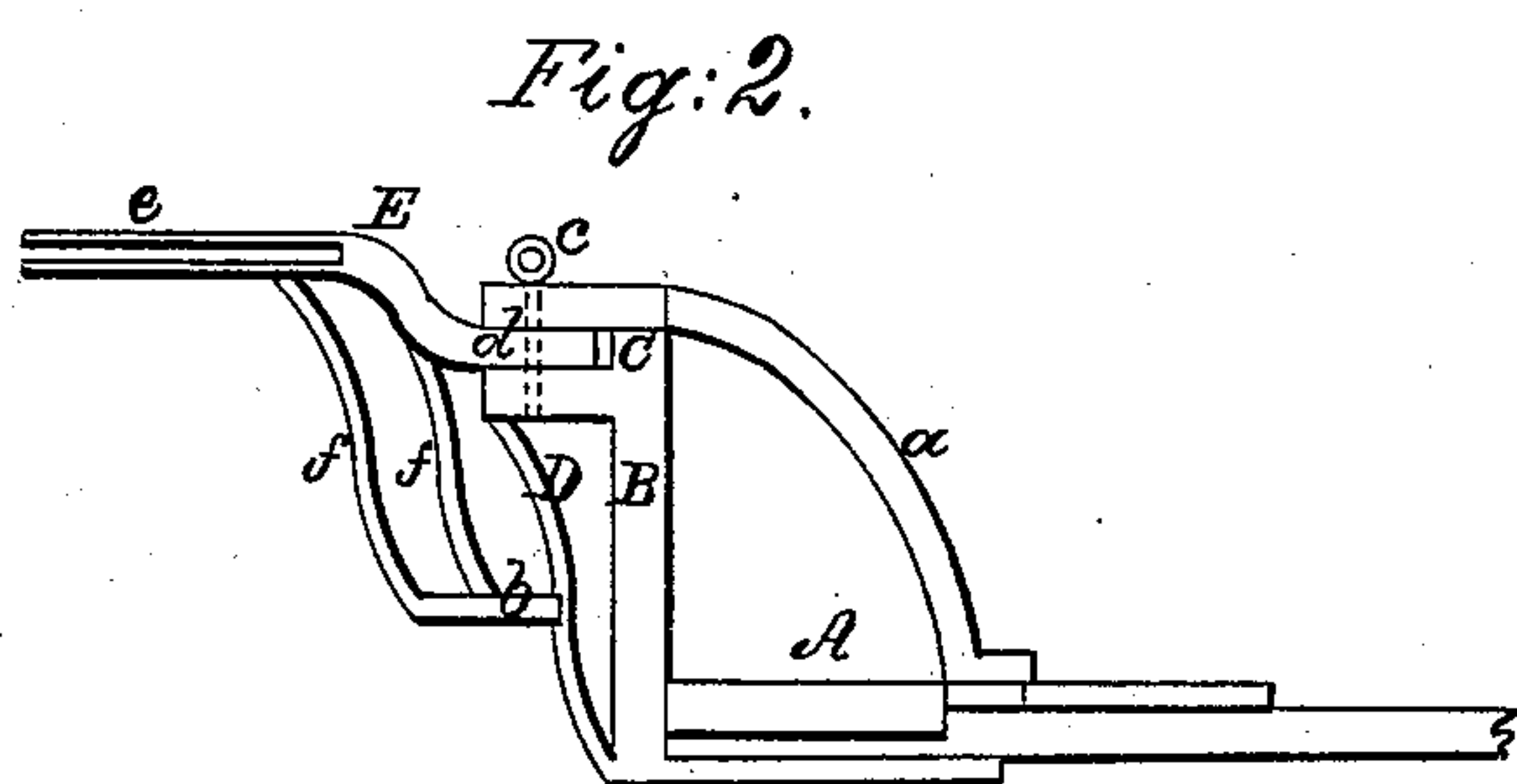
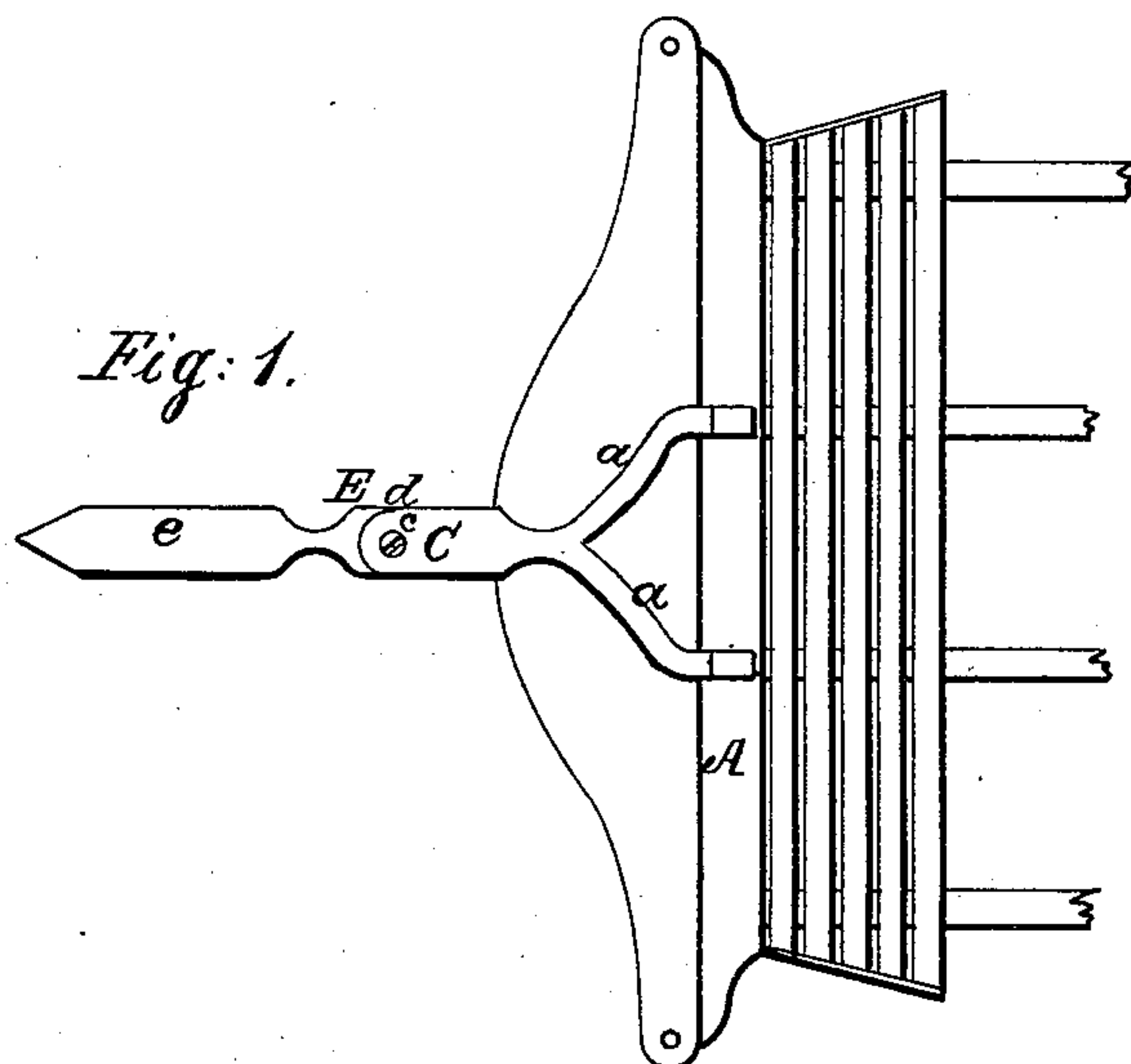


A. S. JIMMERSON.

Horse-Car Pole.

No. 85,670.

Patented Jan. 5, 1869.



Witnesses:

A. J. Llerie
Ed. P. Tracy

Inventor:

A. S. Jimmerson

United States Patent Office.

ALLEN S. JIMMERSON, OF NEW YORK, N. Y.

Letters Patent No. 85,670, dated January 5, 1869.

IMPROVED PULL-IRON FOR HORSE-CARS.

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, ALLEN S. JIMMERSON, of the city, county, and State of New York, have invented a new and useful Improvement in Pull-Irons for Horse-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a plan of the platform-end of a horse-car with pull-iron attached, and

Figure 2, a side view of the same.

Similar letters of reference indicate corresponding parts.

In the ordinary hook or other attachment of the draught-pole to the platform of horse-railroad cars, there are many disadvantages which do not attach to other vehicles, by reason, in part, of the upward character of the draught tending to throw the weight of the car on the rear axle, and often loaded condition of the overhanging rear platform, which combine in lifting the front of the car, causing the latter to be thrown off the track. This, and other disadvantages, consequent upon such attachment of the pole, the herein-described improvement obviates.

My invention consists in an elevated arrangement of the pull-iron, as regards line of draught, relatively to the platform of the car; also, in a certain braced construction of the pull-iron, and of the bracket carrying the same.

Referring to the accompanying drawing, A represents the end-platform of a horse-railroad car, in part, and which may here be referred to as the front platform, the usual facilities for reversing the position of the pull-iron to the opposite end of the car, being, if desired, provided, by a similar construction of parts, for attachment of the pull-iron to such end, said pull-iron being made removable for the purpose.

B is a vertical bracket or upright, firmly secured to the front end of the platform A, and braced by stays *a* in the rear.

This bracket B is made with a top jaw, C, standing at a considerable elevation above the platform, and braced below by a rod, D, which also serves as a support for the foot-rest or lower portion *b* of the pull-iron E, that clips said rod in a free or loose manner, so as to admit of the pull-iron swinging on or around the same, and of its removal, when taking out the pin *c*, which establishes the joint of the upper portion, *d*, of the pull-iron with the jaw C, said pull-iron extending in front, as at *e*, for attachment of the pole in any proper

manner, but at an elevation, relatively to the platform, which will do away with the usual angular position of the pole, and serve to support the latter without weight on the necks or collars of the horses.

The upper portion of the pull-iron and lower sustaining and swinging part *b* of the same, are connected by any desired number of braces *f*.

By this or other equivalent construction of the pull-iron, and mode of supporting or sustaining it, the following advantages are attained:

First, in elevating the pull-iron so that the draught of or on the car is considerably raised, and from the centre, as it were, in contradistinction to the usual upward draught, the weight of the car is not thrown upon the rear axle, or front of the car raised, which a crowded condition of the rear platform tends to aggravate, and, by the overhanging position of said platform relatively to the rear axle, inclines to throwing the car off the track.

Secondly, the elevated position of the pull-iron, and its crane-like construction, supports the pole from pressure or weight on the horses' collars or necks, the lower free rest of the portion *b* relieving, too, the jaw C of strain.

Thirdly, the whiffle-trees may be placed further back than is practicable under the ordinary attachment of the pole, without endangering tripping of the horses on the pole, by reason of the raised position of the whiffle-trees by this my improvement, thus enabling the horses to work closer and more effectively, and rendering it almost impossible for the driver to throw his team.

Fourthly, increased facility for stopping and starting the car, whether running on a level or otherwise, and by stopping in shorter time or distances, reducing the liability to accidents.

Fifthly, increased firmness, by means of the braces, both as regards the pull-iron, and the means for carrying the same, as connected with the platform and support of the pole.

What is here claimed, and desired to be secured by Letters Patent, is—

The bracket B, attached and suitably braced to the platform of the car, when arranged to extend upwardly the desired height therefrom, so as to give about a horizontal draught, and adapted to the car, substantially as shown and described.

A. S. JIMMERSON.

Witnesses:

A. LE CLERC,
E. P. TRACY.