

R. MANSFIELD.

Attachments for Whiffletrees.

No. 157,849.

Patented Dec. 15, 1874.

Fig. 1.

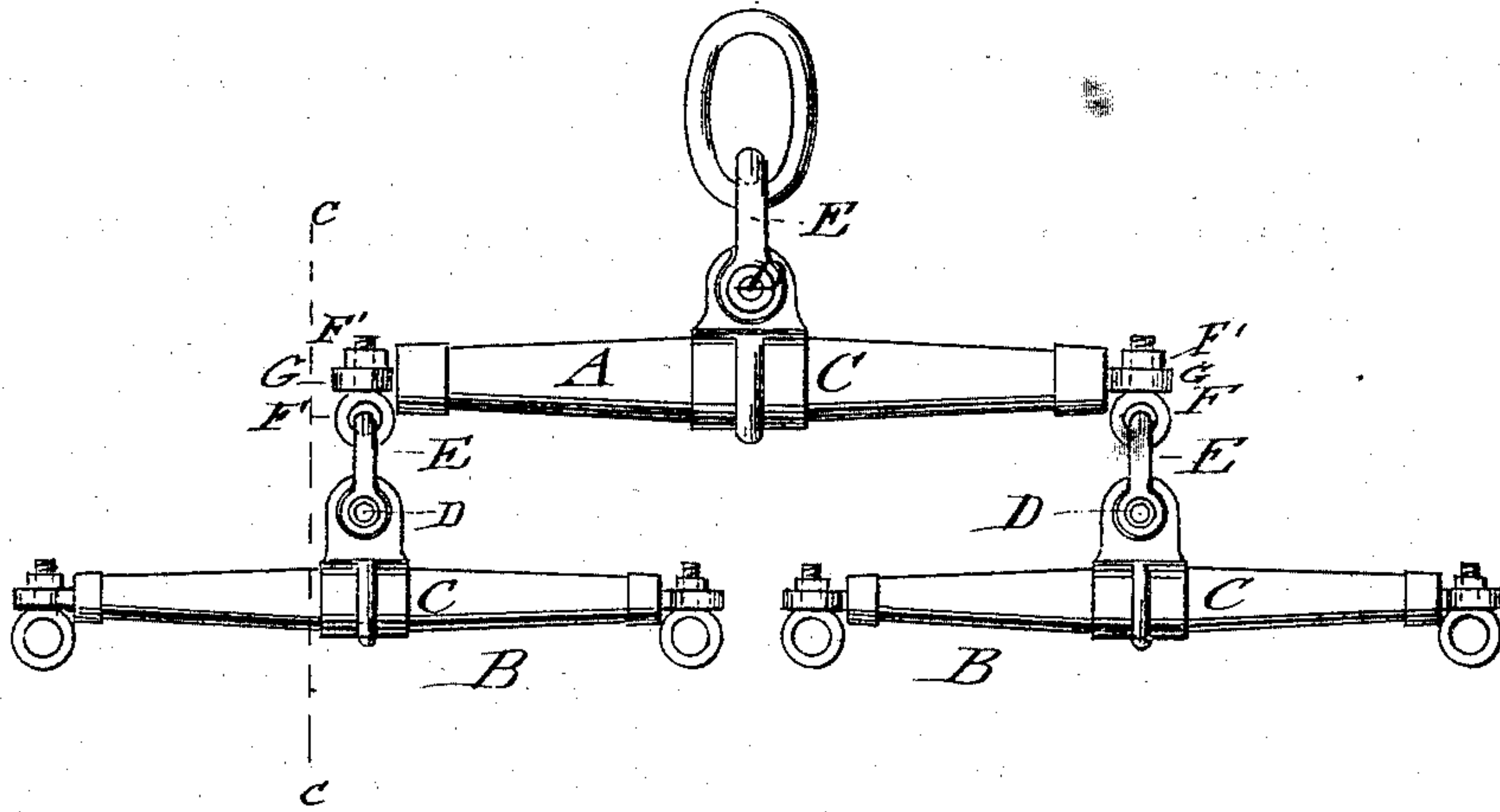
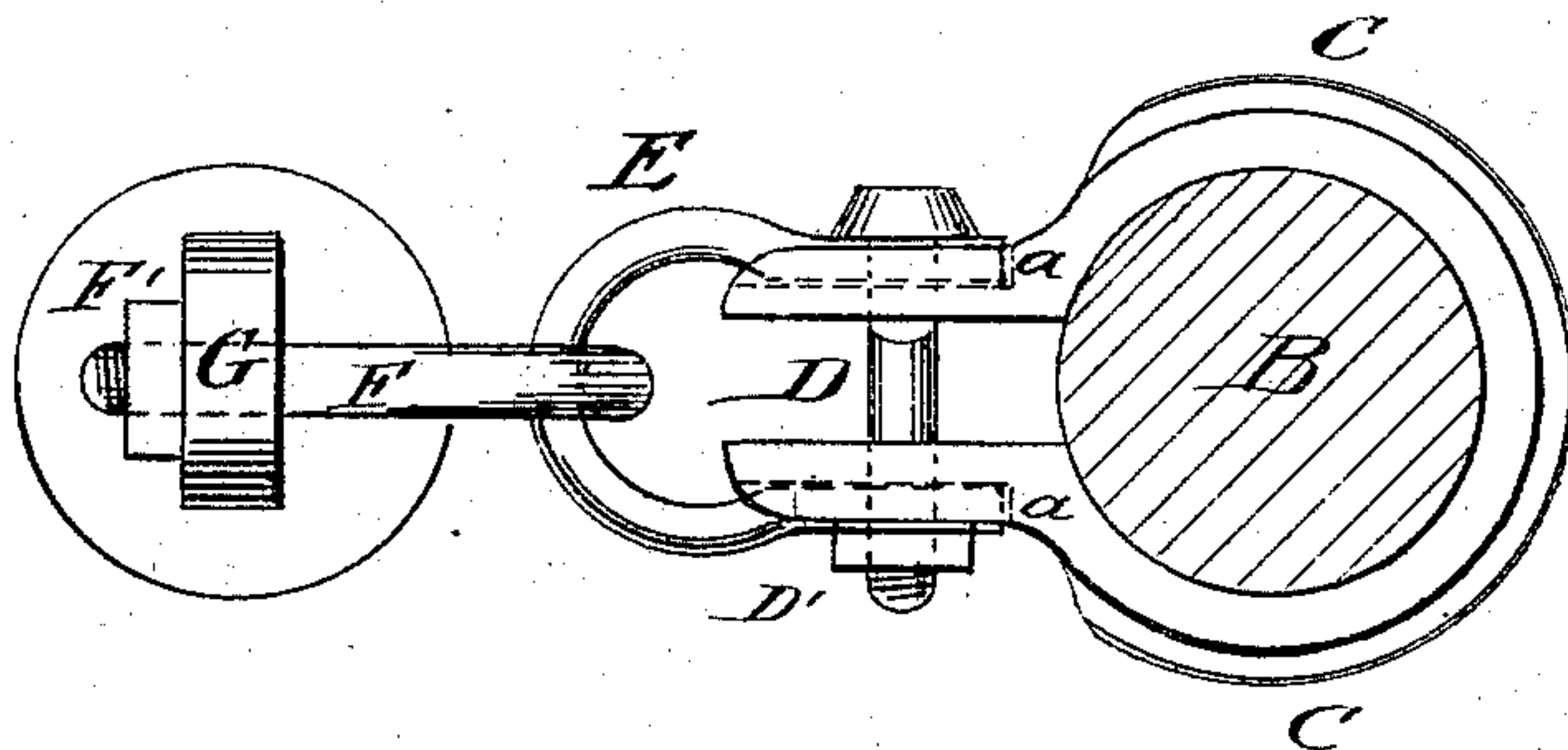


Fig. 2.



WITNESSES:

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IMPROVEMENT IN ATTACHMENTS FOR WHIFFLETREES.

Specification forming part of Letters Patent No. **157,849**, dated December 15, 1874; application filed October 3, 1874.

To all whom it may concern:

Be it known that I, RICHARD MANSFIELD, of New York city, in the county and State of New York, have invented a new and useful Improvement in Attaching Whiffletrees, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view of a double-tree, showing my improved whiffletree attachment, and Fig. 2 is a detail side view of the attachment, partly in section in line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of my invention is to so improve the whiffletree and sway-bar attachment, that not only the tree itself is strengthened, but also that the connecting part may be readily replaced, when worn out by use, without detaching the clip or ferrule.

My improved mode of attaching whiffletrees is designed for street-cars, in which the strain is mainly thrown on the staples or clevis connecting the whiffletrees to the draft-eyes of the sway-bar or car, so as to cause their rapid wearing out. Hitherto they had to be sent to the repair-shop for detaching the clips, ferrules, and draft-eyes, and welding the worn out parts, or replacing them with new clevis and eyes. This required considerable time and labor, and also weakened the whiffletree at the point of greatest strain, as the bolt of the clevis passed centrally through the whiffletree. My invention is intended to provide a more economical mode of attaching the whiffletrees, by which they may be almost instantly repaired; and it consists of a clevis attached by a cross-bolt and nut to a recessed clip or band encircling the whiffletree or sway-bar, to be connected by a detachable draft-eye, attached by a screw-nut through a square perforation of the socket-bolt, to the ends of the whiffletree, or by a link to the car.

In the drawing, A represents the sway-bar, and B the whiffletrees, of a double-tree for street-cars. Both sway-bar and whiffletrees are provided with a central band or clip, C, of suitable strength, which is firmly clasped

around the center part of the same, by one or more strong end connecting-bolts D, passing through the extension ends of the clip. The bolt D serves also to attach the staple or clevis E to the clip C, the latter being provided with side recesses *a*, corresponding to the ends of the clevis, for securing it in steady position thereon. The rigid position of bolt D is obtained by making it of square shape near the head, and the perforations of the clip and clevis to correspond therewith, while the other end of the bolt is round and threaded, for applying the fastening-nut D' thereto, binding thereby clip and clevis rigidly together and to the tree. The clevis is passed through a link previously to applying the screw-nut D', for connecting the sway-bar to the hook of the car, or through the draft-eye F at the end of the sway-bar. The draft-eye F is attached by a nut, F', to a bolt, G, which is socketed and firmly attached to the end of the whiffletree by a ferrule, in the usual manner, and provided with a square perforation for retaining the draft-eye in rigid position therein. Whenever the draft-eye or clevis is worn out or broken, the fastening-nut is taken off and the same is detached for being welded or replaced by a new eye or clevis, which is instantly attached, so that the double-tree is not required to be thrown out of use for repairs, and may be kept in service for longer time than with the present mode of attaching the whiffletrees.

I am aware that it is not new to attach whiffletrees to their sway-bar by a hinged sleeve, together with a fastening and connecting bolt; but

What I claim is:—

The combination, with clip C and draft-eye F, of the clevis E, bolt D, and nut D', as shown and described, for the purpose specified.

RICHARD MANSFIELD.

Witnesses:

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