

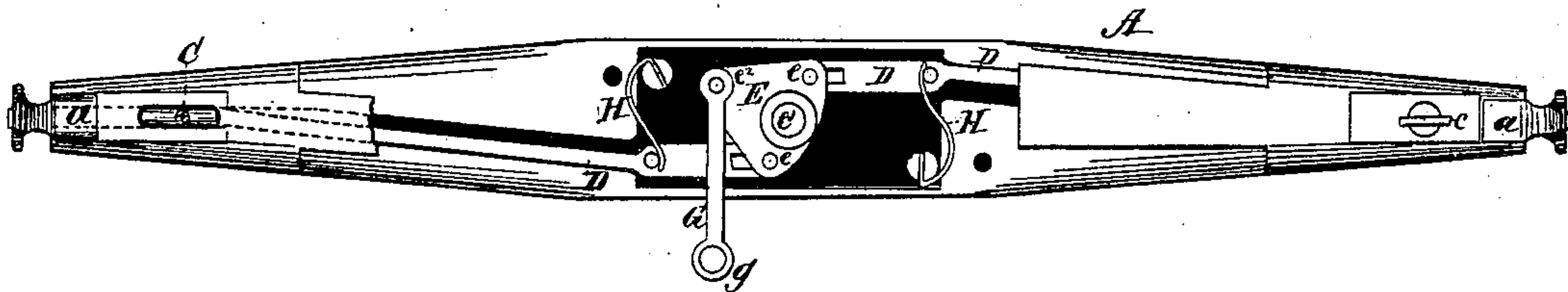
G. R. EDWARDS.

## Whiffetrees.

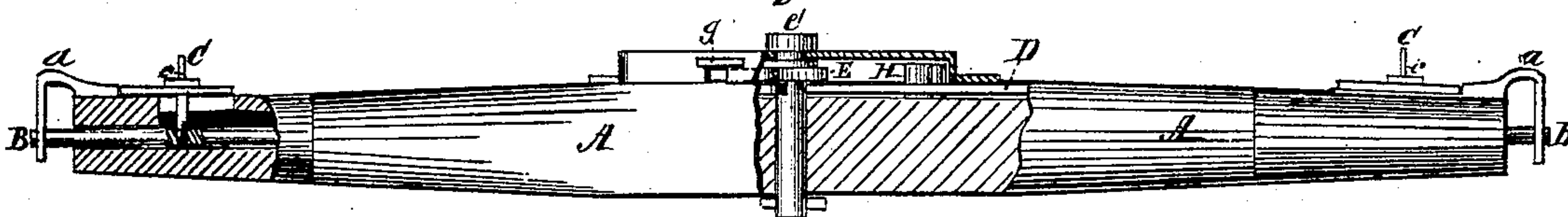
No. 148,433.

Patented March 10, 1874.

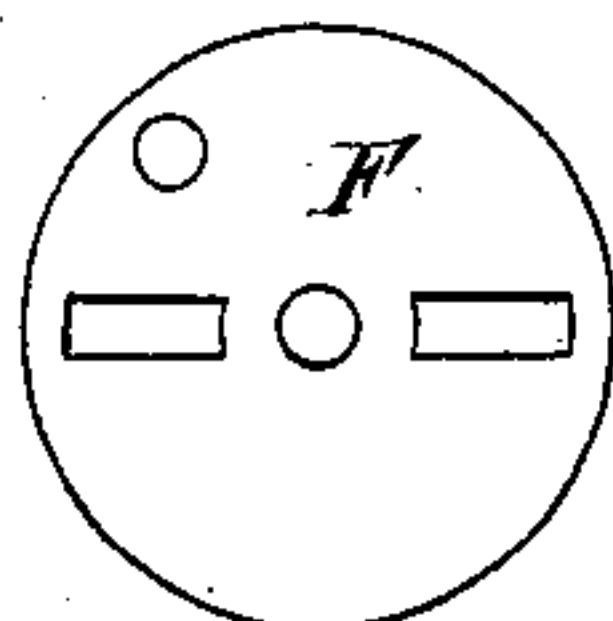
*Fig.1.*



*Fig. 2.*



*Fig. 3.*



**Witnesses:**

G. Marthys.  
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# UNITED STATES PATENT OFFICE.

GEORGE R. EDWARDS, OF GALENA, ILLINOIS.

## IMPROVEMENT IN WHIFFLETREES.

Specification forming part of Letters Patent No. **148,433**, dated March 10, 1874; application filed February 7, 1874.

*To all whom it may concern:*

Be it known that I, GEORGE R. EDWARDS, of Galena, in the county of Jo Daviess and State of Illinois, have invented a new and Improved Whiffletree; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a top, and Fig. 2 a side, view, both partly broken away. Fig. 3 is a plan view of a circle-plate, which is preferably, but not necessarily, employed.

The invention relates to that class of whiffletrees in which means are employed to release therefrom the traces in case of a runaway or other accident, so that the horse will at once leave the vehicle, thus preventing its fracture or the injury of its occupants.

A is a whiffletree, having on each end a socket, with the end-apertured guard *a*, and an internally-sliding spring-bolt, B, that plays in and out of the aperture of guard. C is a bolt, which is perpendicular to and rigidly connected with each bolt B, and movable back and forth in a slot of socket and whiffletree. *c* is a thumb-piece on the outside of socket, and belonging to the bolt C.

In hitching up or removing the horse from vehicle, the thumb-pieces are used to unlock the bolts from the traces; but if the horse runs away, or for other reason it is desirable in a moment to separate the horse from the carriage, it is necessary to employ other means for acting on the spring-bolts. For this pur-

pose, I connect the bolts C, by rods D, with opposite ends of a triangular lever-plate, E, preferably fulcrumed in a circle-plate, F. H H are springs, that tend always to hold the bolts forward and in the end apertures of guards *a*, while G is a rod, having eye *g* that receives one end of a cord, whose other end is placed within reach of driver.

It will be observed that the triangular plate E has the two pivot-studs *e e* of the rods D near the vertexes of two angles, and on the opposite sides of fulcrum *e*<sup>1</sup>, which is aligned therewith, while the stud *e*<sup>2</sup> of rod G is placed near the vertex of the remaining angle. This allows the spring-bolts to be worked easily by the cord in the hand of driver, and to be easily withdrawn from the trace-holes.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of lever-plate E, springs H H, rods D, and bolts C, to hold the bolts B yieldingly in the end apertures of the guards *a*, as and for the purpose set forth.

2. The combination, with spring-held rods D D and draw-rod G, of a triangular plate-lever, E, having the rods D D pivoted at *e e* in the vertexes of two of the angles, one on each side of fulcrum *e*<sup>1</sup> and in line with it, the draw-rod G being pivoted at *e*<sup>2</sup> in the vertex of the other angle, as and for the purpose specified.

GEORGE RICE EDWARDS.

Witnesses:

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