

P. W. HARDWICK.

Whiffletree.

No. 34,253.

Patented Jan. 28, 1862.

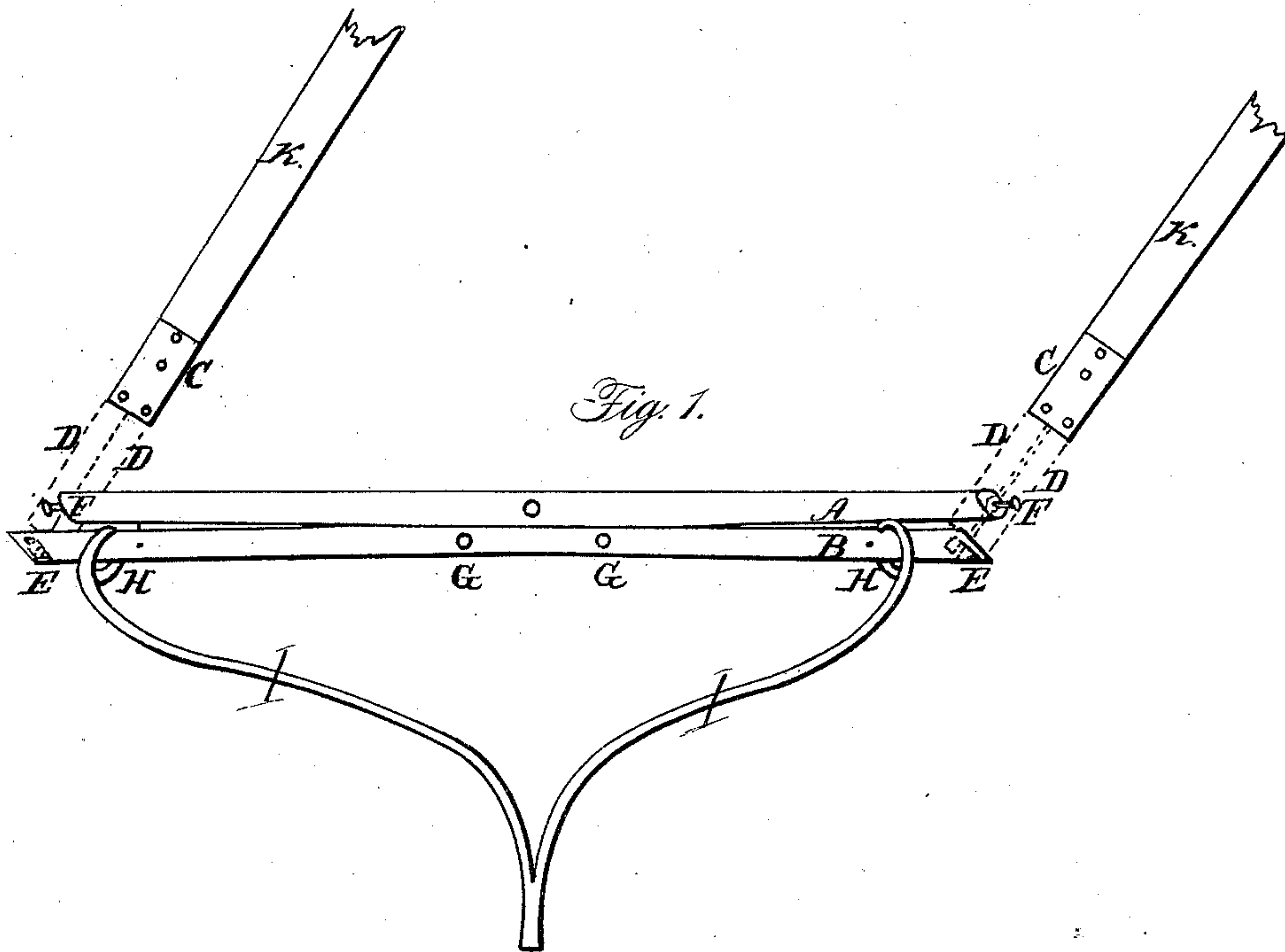


Fig. 2.

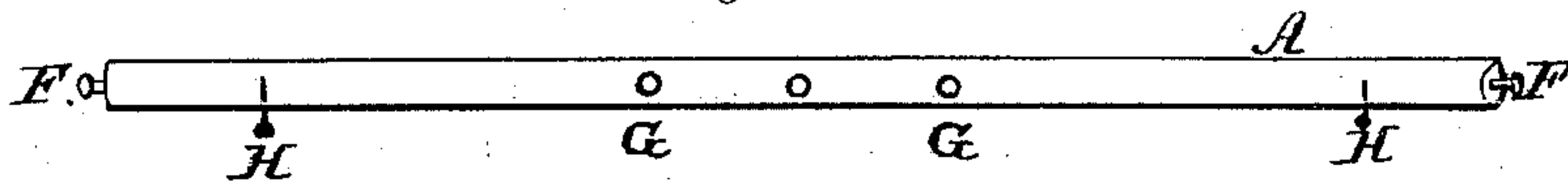


Fig. 3.

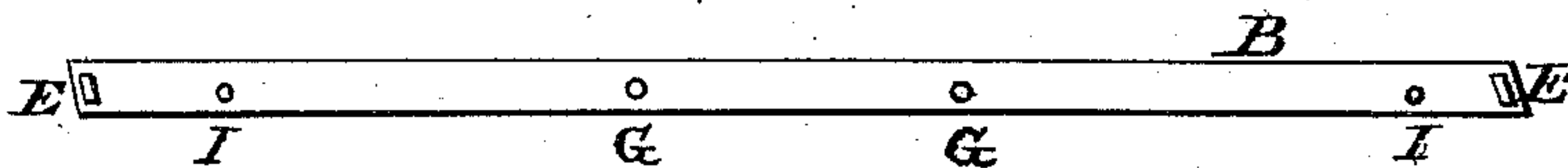


Fig. 4.

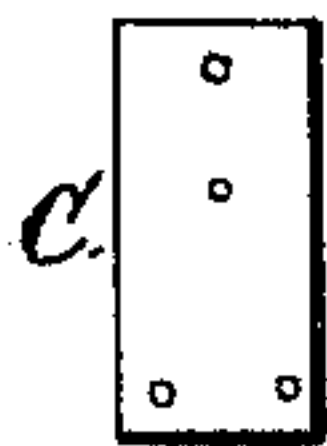
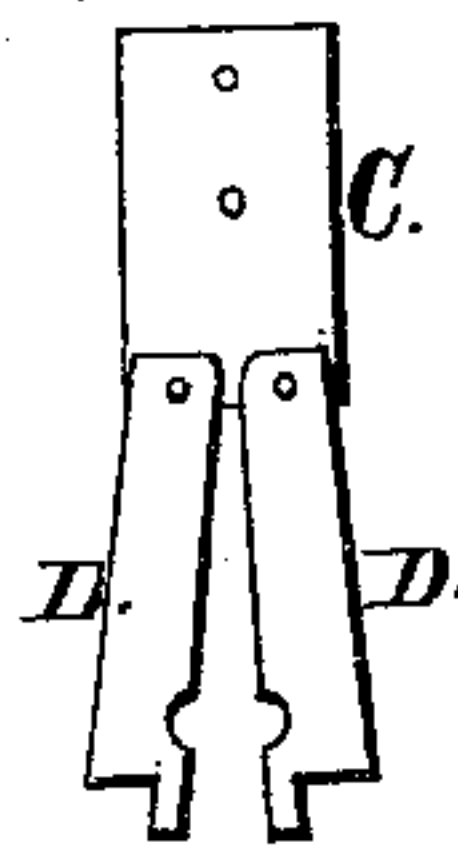


Fig. 5.



Fig. 6.



Witnesses:

Robert Nicholson
Joshua K. Chamney

Inventor:

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UNITED STATES PATENT OFFICE.

PETER W. HARDWICK, OF WILLIAMSBURG, INDIANA.

IMPROVED APPARATUS FOR ATTACHING AND DETACHING HORSES TO AND FROM CARRIAGES, &c.

Specification forming part of Letters Patent No. 34,253, dated January 28, 1862.

To all whom it may concern:

Be it known that I, PETER W. HARDWICK, of Williamsburg, in the county of Wayne and State of Indiana, have invented new and useful Improvements in Apparatus for Attaching and Detaching Horses from Carriages; 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 connecting two pairs of clamps with plates and springs so that a horse may be instantly let loose from a carriage.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 represents my invention complete. Fig. 2 represents the singletree. Fig. 3 represents a spring made of steel. Fig. 4 represents a plate made of iron. Fig. 5 represents a clamp-piece made of iron. Fig. 6 represents two clamp-pieces attached to a plate and forming clamps.

Letter A in Fig. 1 is a singletree; also shown in Fig. 2 at A, with a bolt F F inserted in each end.

Letter B is the spring as attached to the singletree, with an oblong hole crosswise near each end; also seen at B in Fig. 3. This spring is screwed to the singletree by means of two screws.

Letters C C in Fig. 1 represents iron plates which should be riveted on each side of the traces. Said plates are also shown at C in Figs. 4 and 6.

Letters D D D D in Fig. 1 represent the clamps, as shown by dotted lines, and secured to the bolts in the end of the singletree by the slots in the ends of the spring B slipping over the projections at the ends of the clamps D.

Letters E E in Figs. 1 and 3 represent the slots near the ends of the springs.

Letters F F represent the bolts in the ends of the singletree in Figs. 1 and 2.

Letters G G shows where screws may be inserted to screw the spring to the singletree, as seen in Figs. 1 and 2.

H H in Fig. 1 are two pins inserted in the singletree and passing through holes I I in the spring, as seen in Fig. 3, for the purpose of preventing the straps J J from slipping.

I I in Fig. 3 are two holes through which the pins H H pass.

J J is a strap attached to each end of the spring B.

K K are traces broken off.

The clamps D D D D should be made with a hole in one end, and should have a half-circle cut out near the other end, so that when they are closed the two half-circles will fit the bolt in the end of the singletree. Said clamps should also have a piece projecting from the same end in which the half-circles are cut, over which the slot in the spring may pass in order to hold the clamps together while the animal is pulling at the traces. The clamp-pieces should be inserted between the plates C C and a pin passed through and riveted, allowing the clamps to work freely.

Operation: Having adjusted the clamps on the bolts of the singletree and the end of the straps J J extending to the inside of the carriage, the spring may be removed from the clamps and the horse instantly detached by pulling the straps J J.

I do not claim to be the inventor of apparatus for attaching and detaching horses to carriages or from carriages; but

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

The clamps as constructed in connection with the plates or their equivalents, in combination with the spring, the whole being constructed, arranged, and operated substantially as above set forth.

PETER W. HARDWICK.

Witnesses:

ROBERT NICHOLSON,
JOSHUA H. CHANEY.