

E. W. HARVEY.

Improvement in Car-Couplings.

No. 127,601.

Patented June 4, 1872.

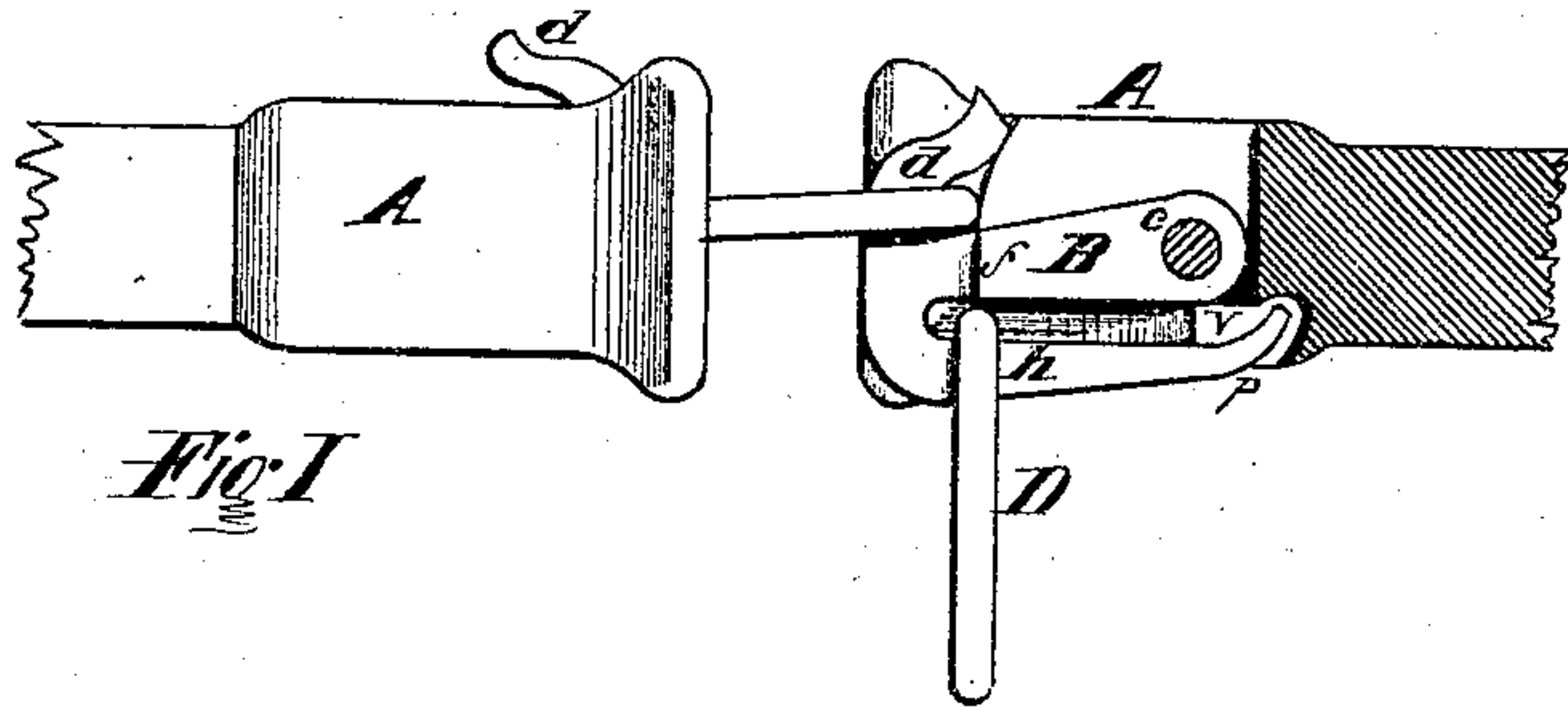


Fig. I

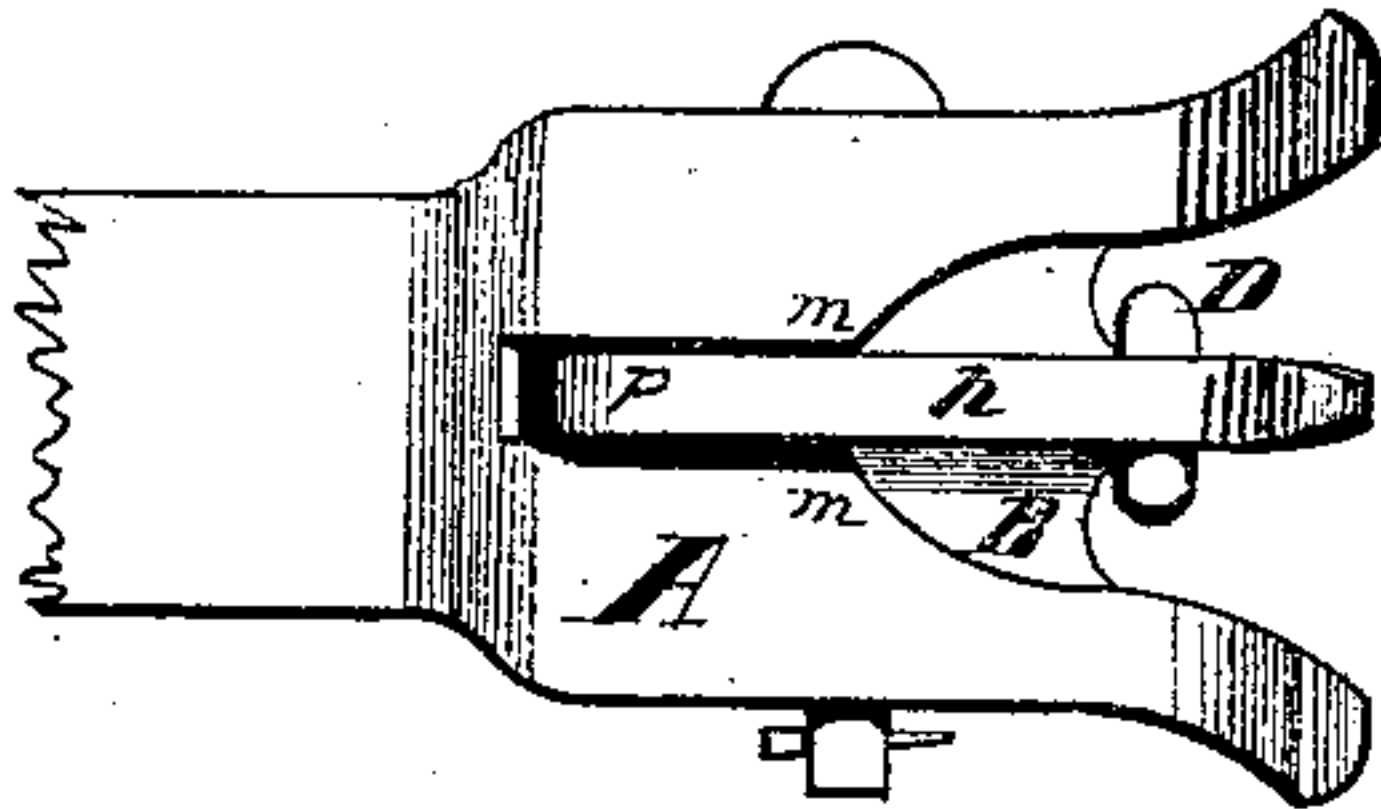


Fig. III

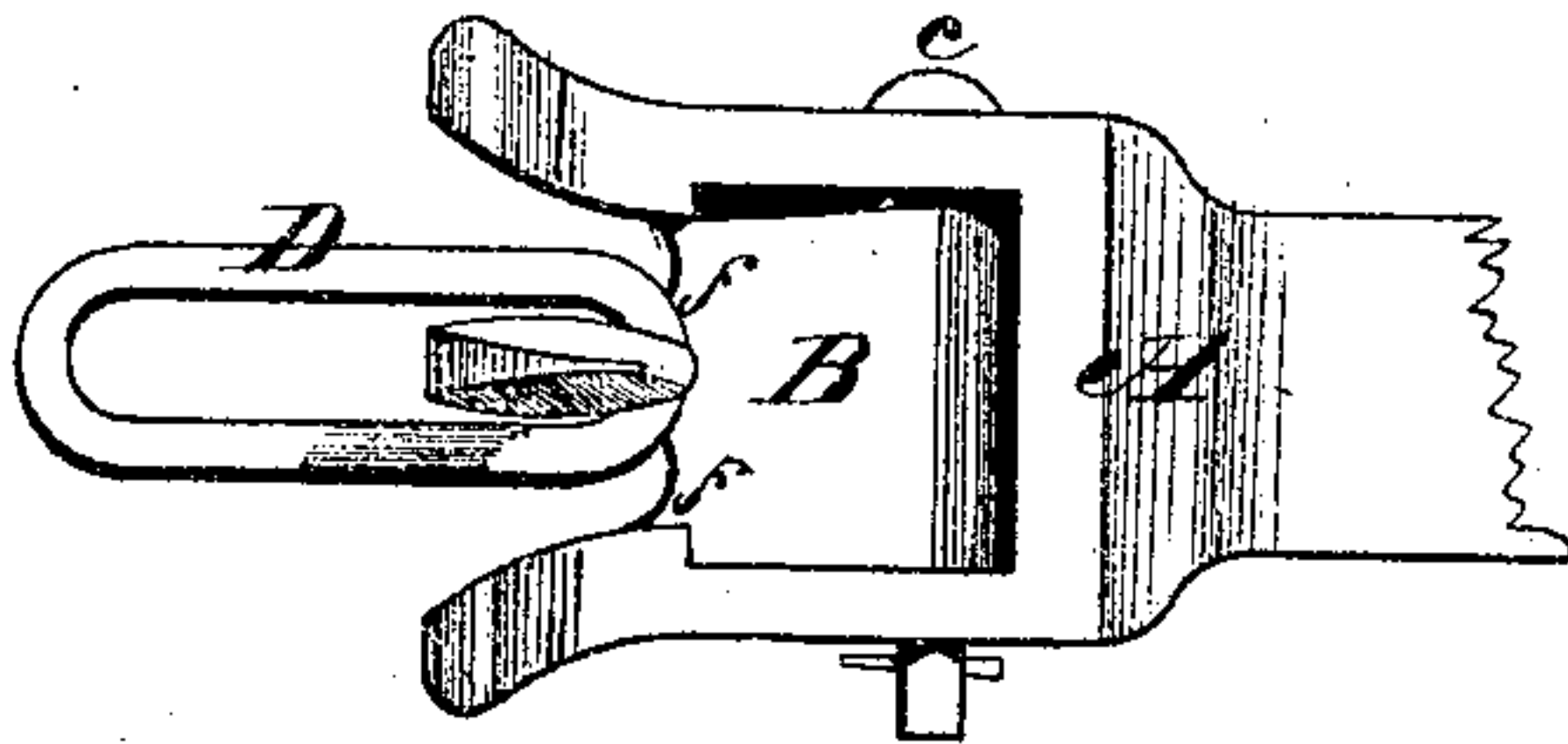


Fig. II

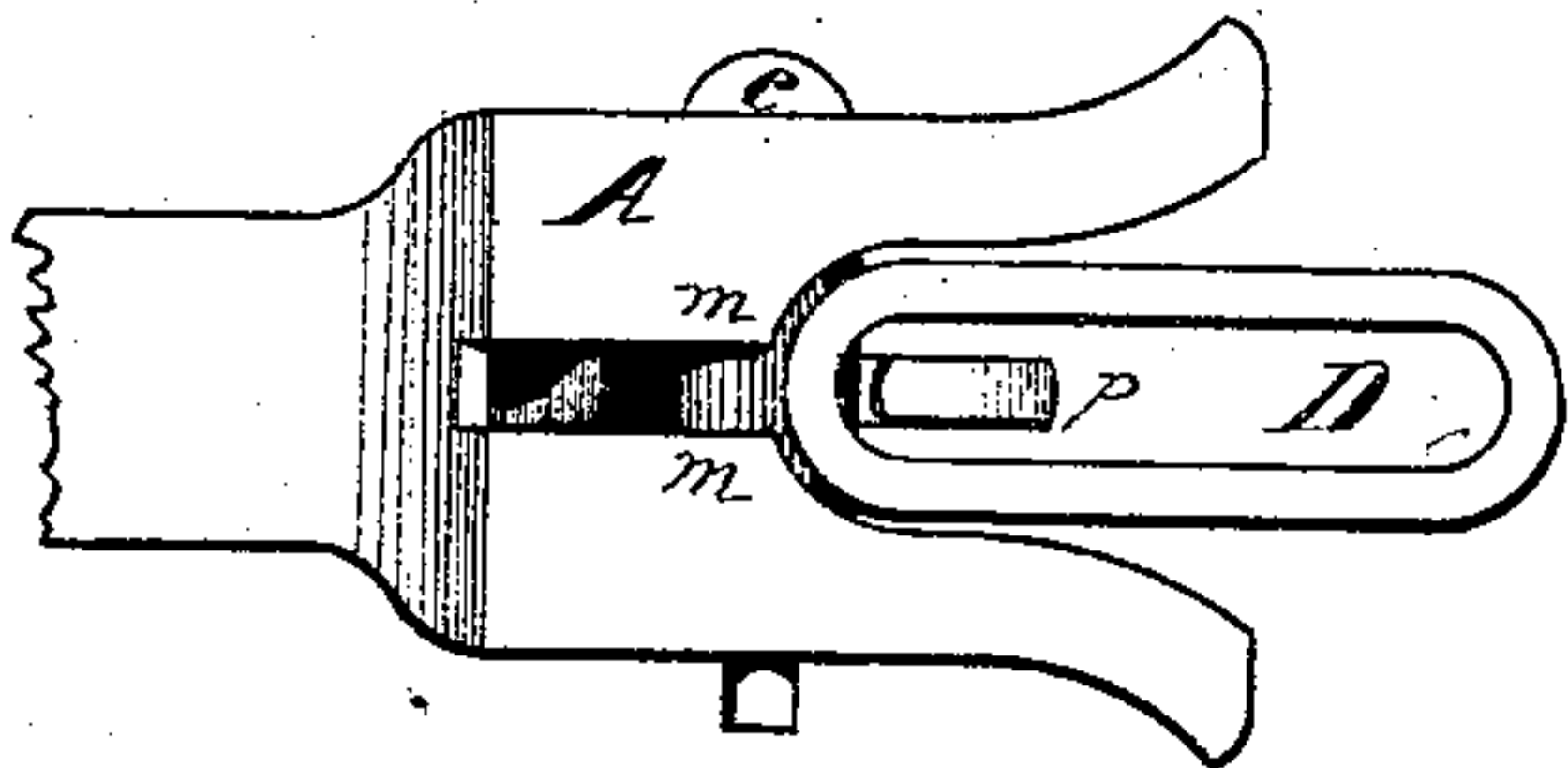


Fig. VI

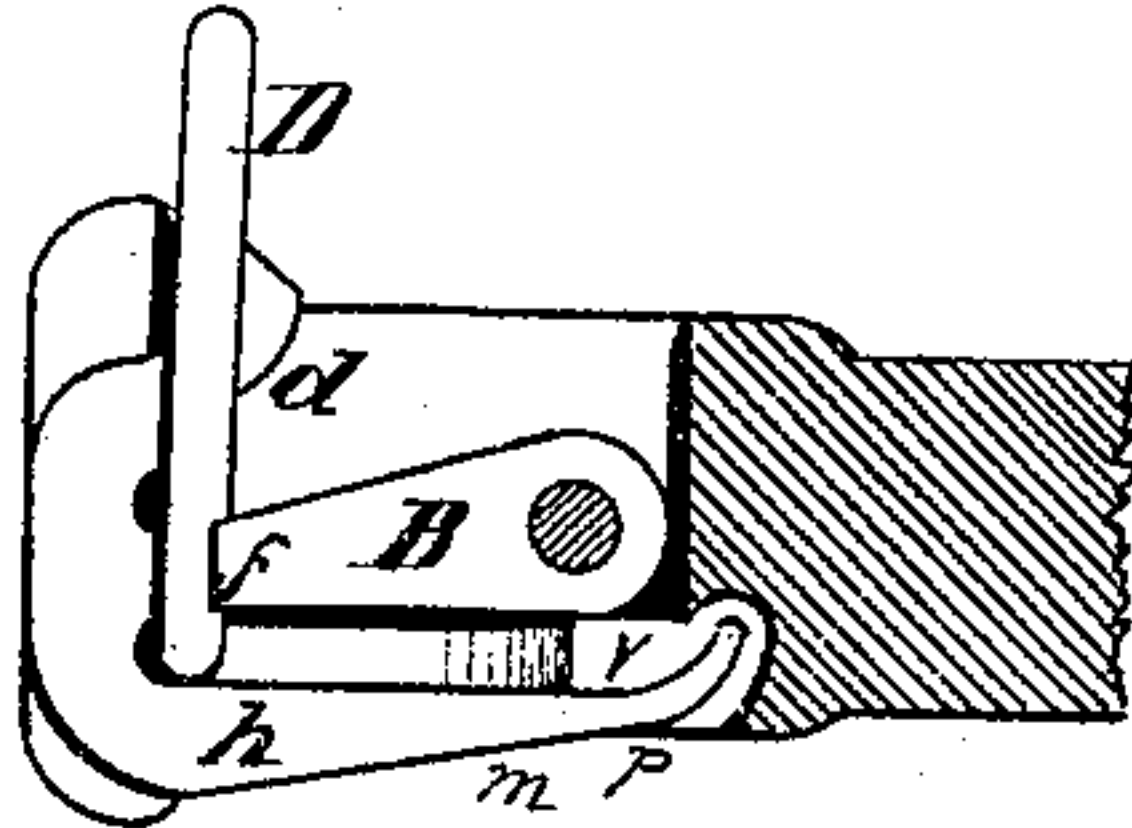


Fig. IV

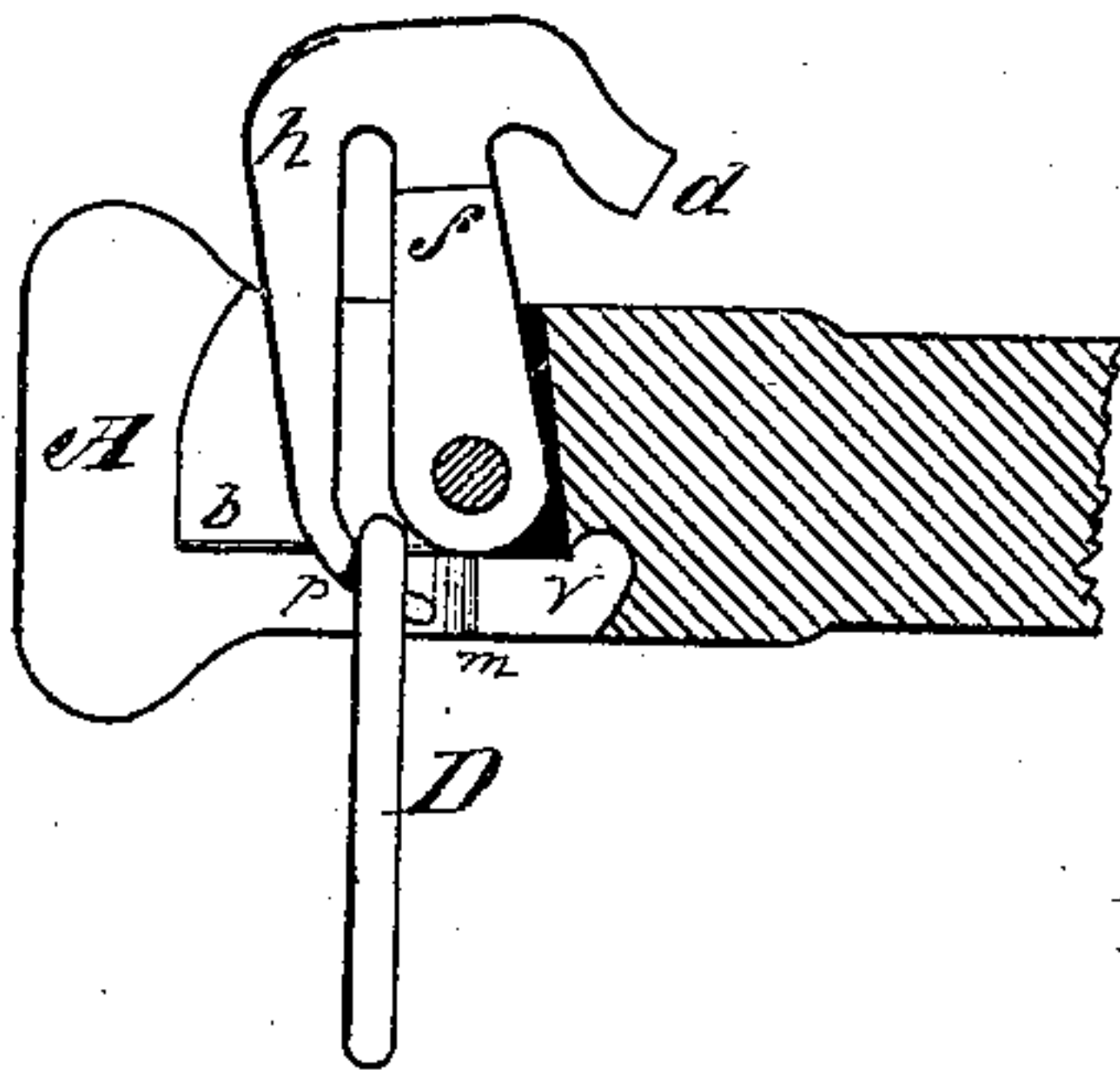


Fig. V

Witnesses  
Roswell Lee  
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Inventor  
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## UNITED STATES PATENT OFFICE.

EDWIN W. HARVEY, OF SPRINGFIELD, MASSACHUSETTS.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 127,601, dated June 4, 1872.

*To whom it may concern:*

Be it known that I, EDWIN W. HARVEY, of Springfield, Hampden county, State of Massachusetts, have invented a new and Improved "Car-Coupling," of which the following is a specification.

My invention relates to the formation of the bumper, and, in connection with it, of a swinging block and its hooks, so that, while self-shackling, when used in duplicate is adapted to be used in combination with the ordinary coupling, or most of the improved ones, upon another car, and while being provided with one link in position for use, and only detachable manually, can be securely coupled by the link of another car.

In the drawing, Figure I is a view of my coupling, showing a partial section of one of the bumpers. Fig. II is a top view of one bumper, Fig. III being a bottom view of the same. Figs. IV and V are sectional side views, with the hooks and links in different positions; and Fig. VI shows the position of the parts as the link is detached.

A is the bumper-head, open entirely through at its front for a purpose hereinafter described, and having stock removed from its sides to receive the swinging block B, and, while permitting it to rise, limiting it by the shoulder *b* from falling below the required point. The block B swings upon the draft-pin *c* extending through it and the sides of the bumper, as shown, and may be moved to a vertical position within the bumper. This block is formed, near its free end, into the hooks *d* and *h* and the shoulders *f f*. The bottom of the bumper is formed, as shown in Fig. VI, to leave a recess, *v*, for the reception of the end of hook *h* and shoulders *m m*, to limit the slide of link D upon said hook.

In operation, when intended to be a self-coupler, the link D—as shown in Fig. IV—is brought to a vertical position or little past it, if desired, and, resting on hook *h* and against shoulders *f f*, is in a position to be caused to fall by the jar of striking bumpers over hook

*d* of a duplicate coupler, and the upper surface of block B is an incline that the link will follow until it engages hook *d*, the mouth of the head A being left open, as before mentioned, to permit such freedom of movement to link D. The link, when connecting two bumpers of my construction, is free to slide up the inclined top of the block in one bumper, or between the bottom of the block and the parallel surface of hook *h* beneath it, without being liable to become disengaged from either by any motion of the cars, and, the link catching in hook *h*, can swing up the block B until the direct line of draft with pin C is obtained. The hook *h* is prolonged into the curved end *p*, which is received within the recess *v* in the bumper-head, and, when the block is raised sufficiently, as shown in Fig. V, the link D, sliding upon hook *h*, bears against said curvature to weigh the block to its proper position. To withdraw the link it is necessary to swing the block vertically upward and slide the link horizontally, as shown in Fig. VI, until it clears the end *p* of hook *h*, so that, unless deliberately removed, the link is confined to block B. By means of a cord attached to the link it can be drawn into position for coupling by the brakeman from the top of the car.

It will be seen that there is always one spare link in position, to be at once used upon the parting of the other, the links used upon my coupling being the ordinary link of the usual strength.

Now, having described my invention, what I claim is—

In combination with the bumper-head A, the swinging block B with its hooks *d h* and shoulders *f f*, the parts being constructed and arranged in the manner and for the purpose hereinbefore specified.

EDWIN W. HARVEY.

Witnesses:

R. F. HYDE,

E. H. BUCKLAND.