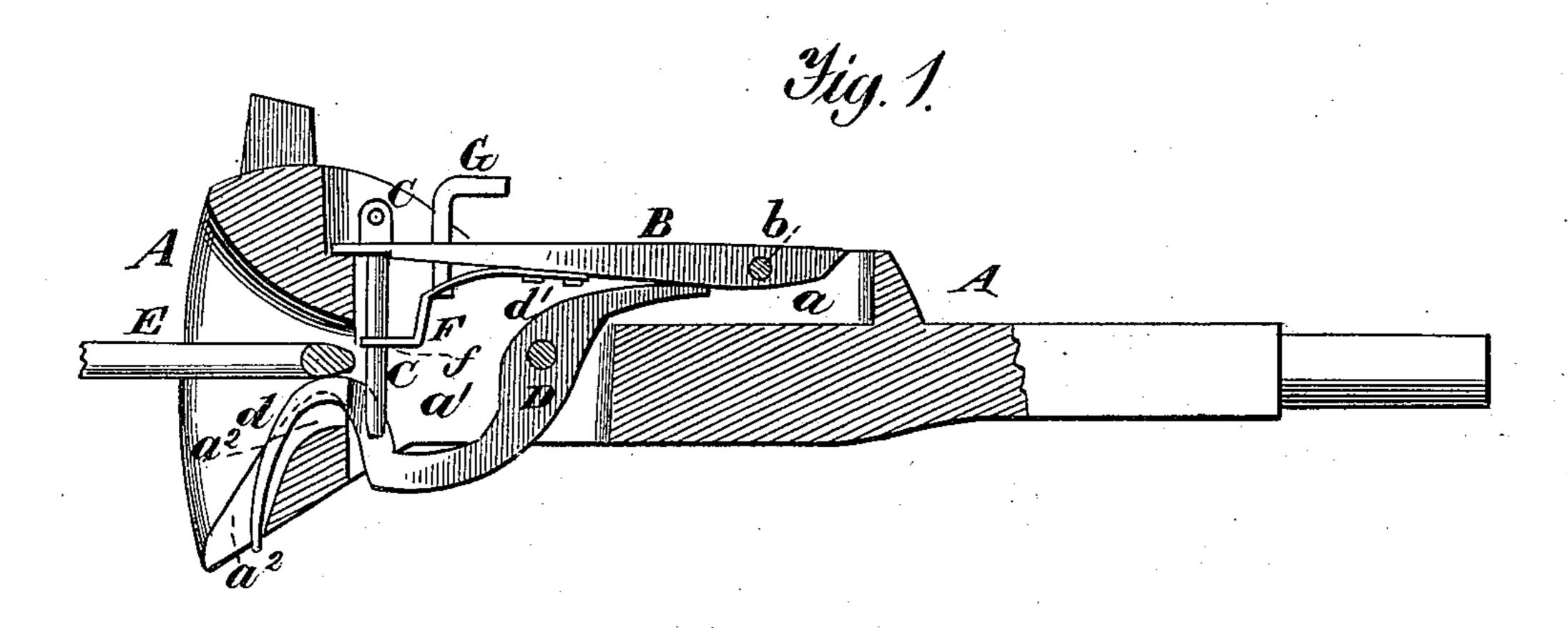
(No Model.)

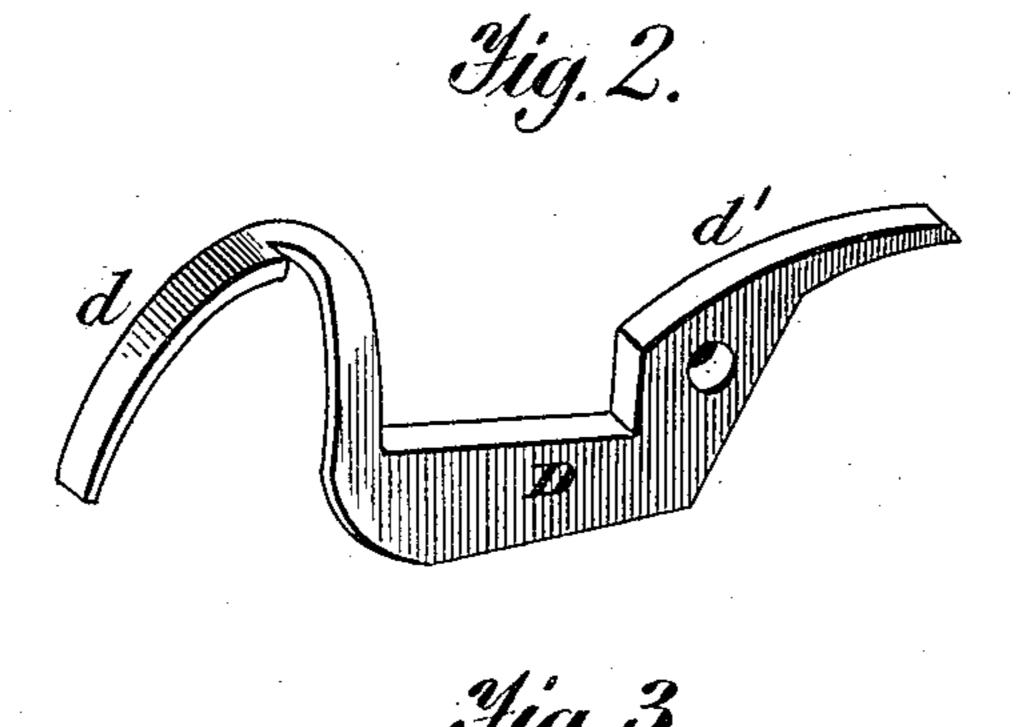
## J. M STALEY.

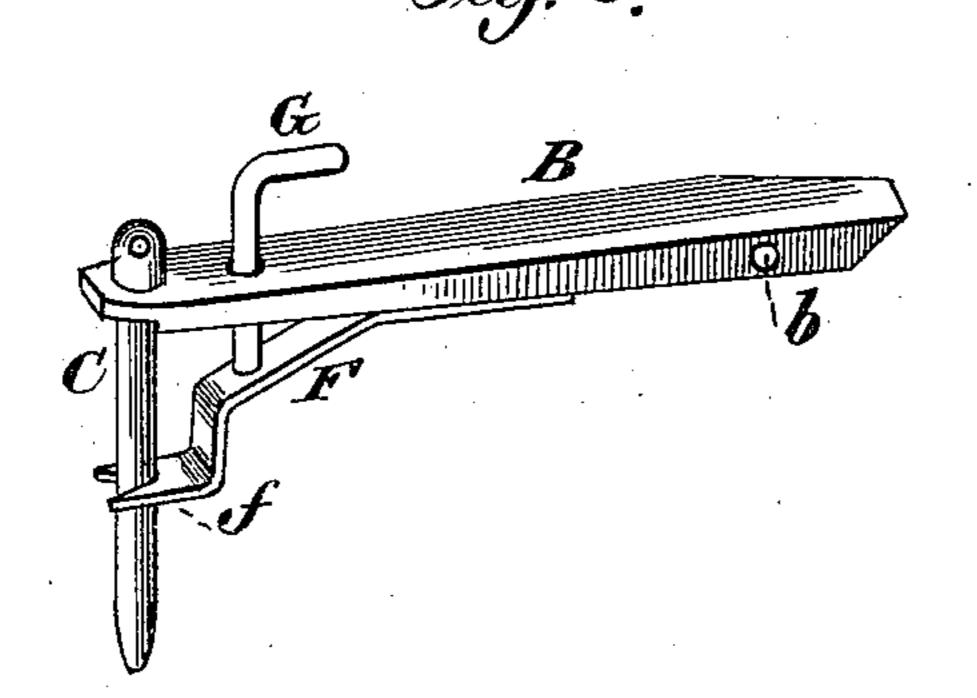
CAR COUPLING.

No. 313,548.

Patented Mar. 10, 1885.







Witnesses. A. Ruppert. A. Ellworth.

Inventor.

Tames M. Staley,

Fer

Thomas F. Simpson,

attorney,

## United States Patent Office.

JAMES MONROE STALEY, OF WOMELSDORF, PENNSYLVANIA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 313,548, dated March 10, 1885.

Application filed October 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, James M. Staley, of Womelsdorf, in the county of Berks and State of Pennsylvania, have invented an Improved Car-Coupling, of which the following is a specification.

The special object of the invention is to couple automatically with a pin by means which are simple and not liable to get out of 10 order.

The invention will first be described in connection with the drawings, and then clearly pointed out in the claims.

Figure 1 of the drawings is a longitudinal vertical sectional elevation showing the local relation of the parts. Fig. 2 is a detail view, in side elevation, of a lever which is to be actuated by the link as it enters the draw-head. Fig. 3 is a similar view of a bar or lever which carries the coupling-pin.

In the drawings, A represents a draw-head having the usual bevels on the inside of its mouth to guide the link into place, and the opposite slots, a a', in the top and bottom. In the top slot, a, is pivoted, at b, the rear end of the pin-bar B, and in the bottom slot, a', a lever, D. The latter has a front bend, d, which is held up by the weight of the lever's rear arm to the upper side of the mouth of the draw-head, so that the link cannot be forced between them without pressing down the bend d, and thus operating the lever.

a² is a groove which receives the bend when it is pressed down. As soon, however, as the link has passed the bend d, the latter is raised by the weight of the rear end of the lever into its normal position. This allows the pin-bar, which has been raised by the lever, to drop and pass the pin down through the link at one side of the bend d, so that the link may have a bearing both on the pin and on the bend d, thus dividing the strain, relieving the pin, and preventing the latter from being bent. This is an important feature of my invention.

45 The rear end of the lever D is shaped so as to

get a good bearing on the under side of the pin-bar B, to which is secured an angular plate, F, which may or may not be a spring. It has upon its front end two horizontal prongs, f f, which straddle the pin, so as to prevent 50 lateral displacement and bear upon the end of link, so as to preserve it in a horizontal position, thus performing two very useful functions.

To the plate or spring F, I attach the lower 55 end of a rod, G, which passes up loosely through a hole in the bar B, the upper end being preferably bent for convenient manipulation. The object of this is to enable the outside end of the link to be raised or lowered without 60 putting the hand between the draw-heads of two cars which are coming together.

Having thus described all that is necessary to a full understanding of my invention, what I desire to protect by Letters Patent is con- 65 tained in the following:

1. In car-couplings, a lever, D, having a front bend, d, adapted to be pressed down by an incoming link, and thus raise the rear end, in combination with a pin-bar, B, pivoted at 70 b and resting with its front arm on the rear of said lever, for the purpose described.

2. In car-couplings, the combination of a lever, D, having the bend d, and a pin, C, arranged to drop beside said bend, the pin 75 thus being relieved of a part of the draft-strain, as described.

3. In car-couplings, the combination, with a rear pivoted pin-bar, B, of an angular spring or plate, F, having a bifurcated end adapted 80 to keep the pin in a perpendicular and the link in a horizontal position, as described.

4. The combination, with the pivoted pinbar B and the plate or spring F, of the rod G, arranged to move up and down in a hole of 85 said pin-bar, as and for the purpose specified.

JAMES MONROE STALEY.

Witnesses:

JNO. M. SMITH, EMMA C. SMITH.