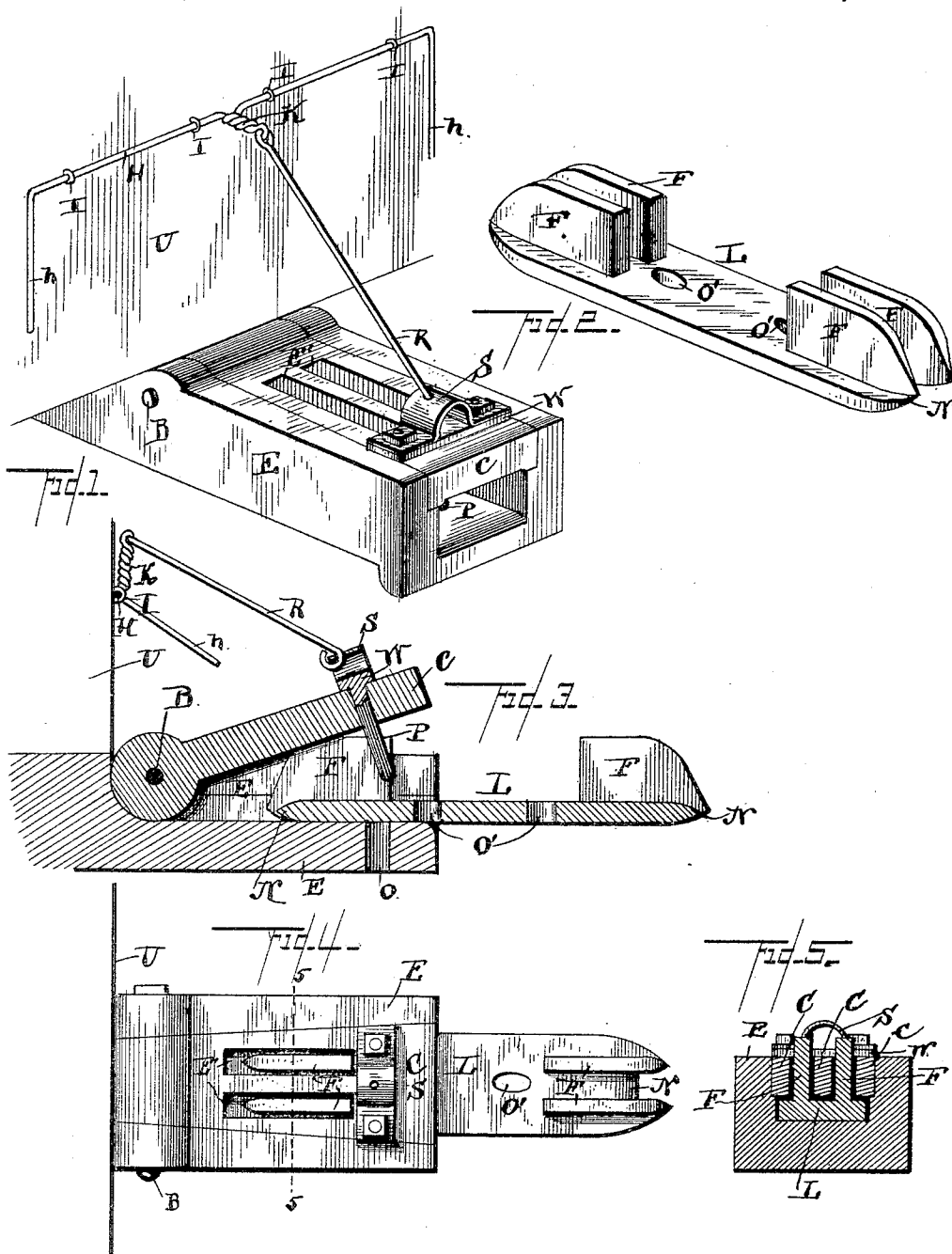


(No Model.)

P. F. HUTCHISON.
CAR COUPLING.

No. 460,970.

Patented Oct. 13, 1891.



Witnesses

A. G. Seitz
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UNITED STATES PATENT OFFICE.

PERSIFOR FRAZER HUTCHISON, OF NEW HAMPSHIRE, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 460,970, dated October 13, 1891.

Application filed May 1, 1891. Serial No. 391,181. (No model.)

To all whom it may concern:

Be it known that I, PERSIFOR FRAZER HUTCHISON, a citizen of the United States, residing at New Hampshire, in the county of Auglaize and State of Ohio, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention relates to car-couplings, and more especially to that class thereof known as "swing-pin;" and the object of the same is to effect certain improvements in devices of this character.

To this end the invention consists in the details of construction hereinafter more fully described and claimed, and as illustrated on the accompanying sheet of drawings, wherein—

Figure 1 is a general perspective view of my improved draw-head, and Fig. 2 of the link. Fig. 3 is a central longitudinal section through the draw-head and link, showing the latter as passing into the former. Fig. 4 is a plan view of the link locked in the draw-head. Fig. 5 is a section on the line 5 5 of Fig. 4.

Referring to the said drawings, the letter E designates the draw-head having an open top, and C is a cover pivoted at its rear end on a bolt B and adapted to close the top of the draw-head, leaving, however, the usual mouth. This cover is provided with two elongated slots E' in its body, and forward of the same with a weight W and an upwardly-bent strap S, secured to the cover by bolts, as shown. Depending from the center of the weight is a pin P, which passes through the cover and is adapted to be seated at its lower end in a pin-opening O in the bottom of the draw-head.

The link L comprises a flat bottom plate provided with openings O' for the pins, and outside of these openings its ends are notched and reduced, as at N, to thin edges. Each side of each notch is an upwardly-rising fin F, whose outer edge is inclined, as shown, and these fins extend to the extreme ends of the body of the link.

The letter U designates an upright mounted upon the draw-bar, although this upright may be the end of the car, if desired, and mounted in eyes I, across the face of the upright U, is a horizontal rod H, having depending handles h at its ends, and having its center bent up-

wardly, as at K, to form a crank. A rod R is linked at one end to this crank and at the other end to the strap S upon the free end of the cover C.

In operation, when the link L is driven into the mouth of this draw-head, the beveled front edges of its fins F pass beneath the front end of the cover C and raise the same, the fins moving to either side of the pin P and the lower end of the latter passing over the thin notched end N. In this manner the link passes beneath the cover until the slots E of the latter register with the fins, when the cover falls under the influence of its weight W, the pin P passing through the opening O' and into the opening O, and the fins F projecting through the slots E. When it is desired to uncouple this device, one of the handles h, which of course stand at the sides of the car, is moved in the proper direction to draw upon the rod R, and this raises the weighted end of the cover in a manner which will be clear and allows the link to pass out.

Among the principal advantages possessed by this car-coupling are the facts that no springs whatever are employed, and also that the ordinary link may be coupled therein and uncoupled therefrom.

I do not limit myself to the exact construction of parts, especially of the cover-raising devices, as considerable change may be made in the details without departing from the spirit of my invention.

What is claimed as new is—

1. In a car-coupling, the combination, with the draw-head having an open top, a cover pivoted at its rear end therein and having two elongated slots in its body, means for raising the cover, and a pin depending from the front end of the cover and engaging an opening in the bottom of the draw-head, of a link comprising a flat body having pin-openings near its ends and two upwardly-projecting fins outside each pin-opening, having inclined outer edges extending to the end of the link, substantially as and for the purpose set forth.

2. In a car-coupling, the combination, with the draw-head having an open top, a cover therefor mounted on a horizontal bolt at its rear end and having two elongated slots in its body, a weight on the front end of said cover

having a depending pin passing through the cover and engaging an opening in the bottom of the draw-head, an upwardly-bent strap upon said weight, and bolts securing the strap and weight to the cover, of an oscillating horizontal rod having a crank in its body, a rod connecting said crank with said strap, and a link comprising a flat body having pin-openings near its ends and two upwardly-projecting fins outside each pin-opening, having in-

clined outer edges extending to the end of link, substantially as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

PERSIFOR FRAZER HUTCHISON.

Witnesses:

D. O. SANDERS,

MACK HULL.