N. F. WYNKOOP.
Car-Coupling.

No. 213,023. Patented Mar. 4, 1879.

Fig. 1.

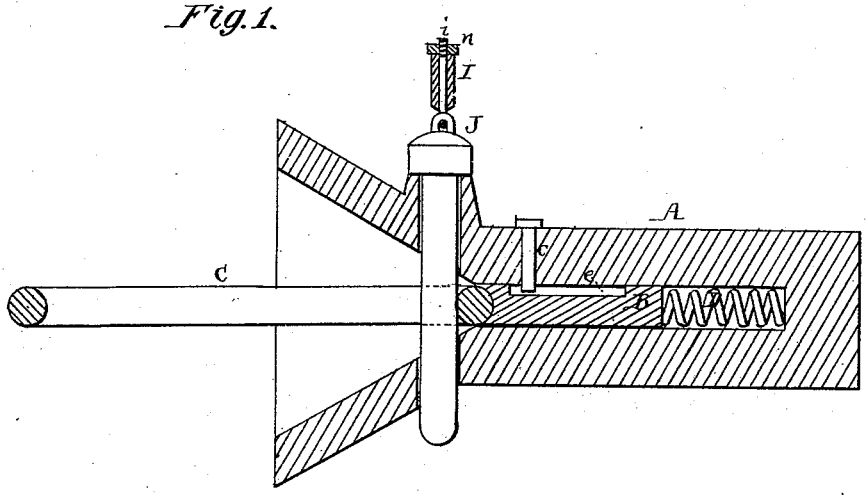


Fig. 2.

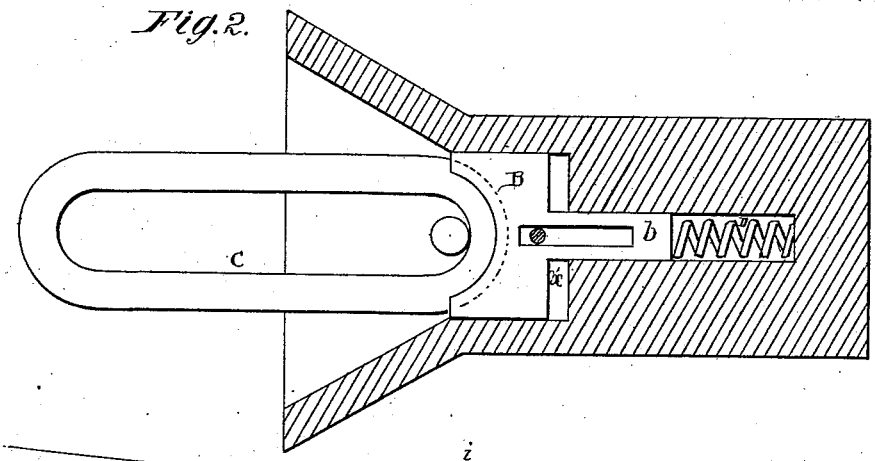
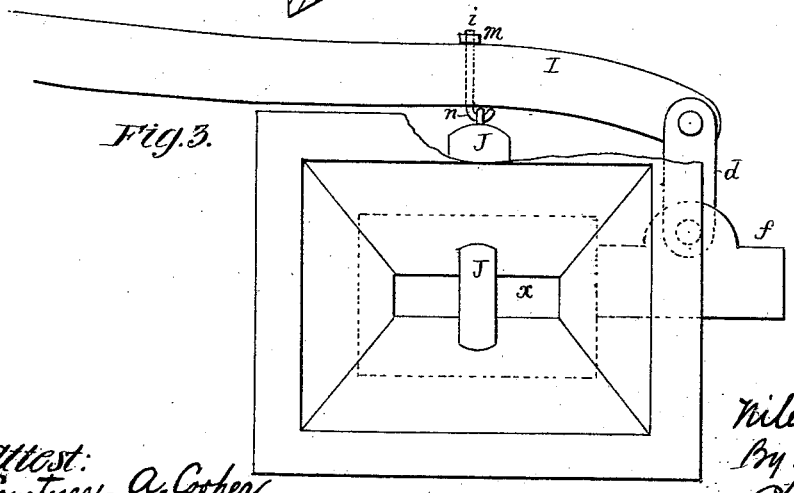


Fig. 3.



Attest:
Courtney A. Cooper.
William Paxton.

Inventor
Nile F Wynkoop
By his attorney
Chas. E. Foster

UNITED STATES PATENT OFFICE.

NILE F. WYNKOOP, OF CHEMUNG, NEW YORK.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **213,023**, dated March 4, 1879; application filed February 5, 1879.

To all whom it may concern:

Be it known that I, NILE F. WYNKOOP, of Chemung, Chemung county, New York, have invented Improvements in Car-Couplings, of which the following is a specification:

My invention relates to that class of car-couplings in which a sliding block supports the pin or clamps the link against the pin, and a lever is used to elevate the latter; and my invention consists in certain details of construction which reduce the complexity of the apparatus and permit the ready attachment and release of the pin and lever.

In the drawings, forming part of this specification, Figure 1 is a longitudinal section of the coupling; Fig. 2, a sectional plan, and Fig. 3 an end view.

A is the draw-head, having a mouth flaring at all sides from an oblong recess, *x*, in which slides a block, B, having a curved front edge adapted to the end of the link C.

A tongue, *b*, extends into a contracted portion of the recess *x*, and bears on a spring, D, which tends to throw the block outward, a pin, *c*, extending into a groove, *e*, of the block, and limiting the movement of the latter.

When the pin J is elevated the block B, moving beneath, holds it in place until the link strikes and pushes it back, when the pin will fall and secure the link, as shown.

The sides of the mouth all converging toward the recess *x* insure the end of the link being brought against the end of the block, from whatever point the link enters, and the pin being in front of the mouth of the recess, the link can be turned to any angle vertically.

In order to permit the lateral adjustment of the link, the front end of the block is curved, to permit the link to turn therein, and the inclined sides are carried to or back of said end, as shown in Fig. 2. This necessitates a wide block; but by providing the wide head with a tongue, *b*, a single small spring may be used, and the cutting away of the draw-head, reducing its strength, is avoided.

In order to draw the pin in a direct vertical line, the lever I is pivoted to a link, *d*, connected to a lug, *f*, at one side of the draw-head; and in order to secure the pin detachably to the lever, the latter is provided with a hooked bolt, *i*, catching a staple, *n*, on the end of the pin, and adjustable by means of a nut, *m*, to secure or detach the hook from the pin.

I do not claim the sliding block and lever; but it will be seen that by the construction described a wide bearing is given the block without cutting away the draw-head. A light spring may be used, as the weight of the block is reduced, while the pin is drawn vertically by simple mechanism.

The main feature, however, is the ability to adjust the link vertically or laterally to any desired angle with the use of a sliding block coinciding very nearly in width and thickness with the width and thickness of the link—a result secured by carrying the flaring sides of the funnel-like mouth to the rear of the center of the pin, so that the link, while bearing on the sliding block, can be turned up, down, or laterally until parallel with either flaring face. It will be apparent that this result is secured without interfering with the automatic self-coupling action of the device.

I claim—

1. A draw-head having a block sliding against a spring in an opening nearly coinciding in width and depth with the width and thickness of the link, and with a flaring funnel-like mouth, all the sides of which meet those of said opening at the rear of the center of the pin, as set forth.

2. The combination of the draw-head, link, pivoted at one side of the head, lever I, pivoted to the link, and adjustable hook-bolt *i*, carried by the lever and adapted to a staple, *n*, at the end of the pin, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NILE F. WYNKOOP.

Witnesses:
CHARLES E. FOSTER,
FRANK M. GREEN.