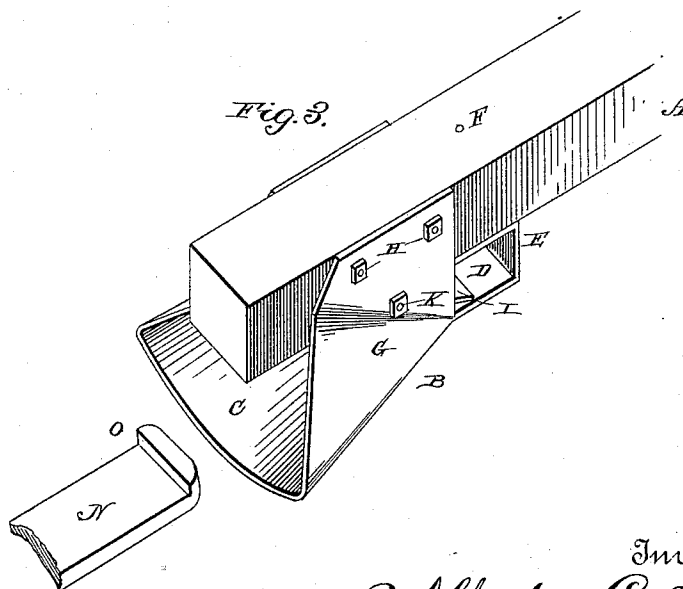
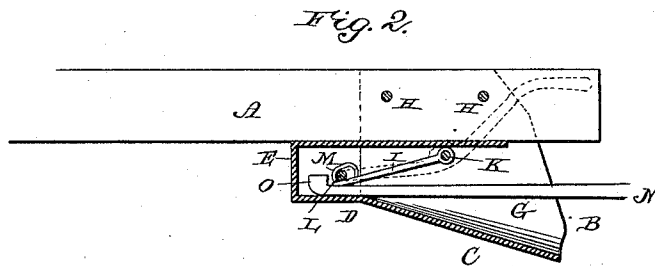
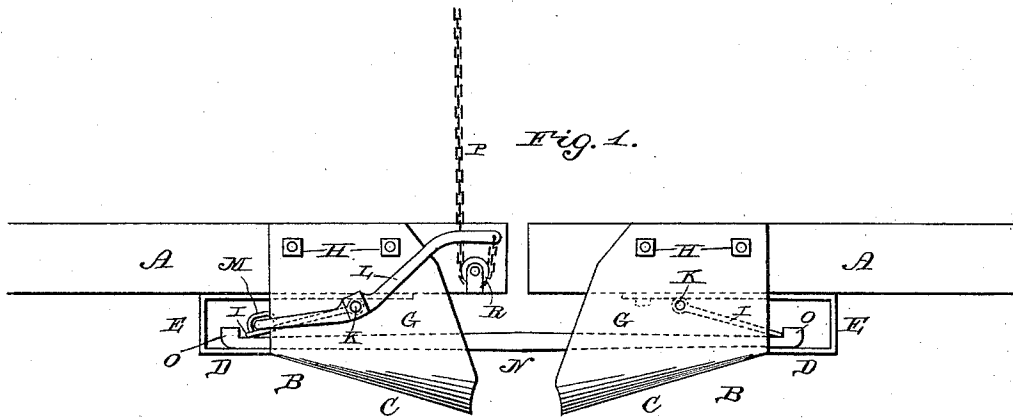


(No Model.)

A. COLVIN.
CAR COUPLING.

No. 430,729.

Patented June 24, 1890.



Witnesses

J. W. Garner
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Inventor

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per Freeman & Money,
Attorneys

UNITED STATES PATENT OFFICE.

ALFRED COLVIN, OF CARROLLTON, MISSISSIPPI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 430,729, dated June 24, 1890.

Application filed April 18, 1890. Serial No. 348,576. (No model.)

To all whom it may concern:

Be it known that I, ALFRED COLVIN, of Carrollton, in the county of Carroll, State of Mississippi, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an improvement in car-couplings; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a pair of draw-heads provided with my improved coupling devices. Fig. 2 is a longitudinal sectional view of one of my improved draw-heads. Fig. 3 is a perspective view of the same.

The draw-heads A are adapted to come in contact with each other when the cars come together, and are of suitable size and strength and should preferably be provided with the usual buffer-springs (not shown) to deaden the shock of the concussion and to yield when the train starts. Under the outer ends of the draw-heads are hoods B, each of the said hoods being made of a single piece of plate metal, as follows: At the inner end of the inclined bottom C of the hood is formed a projecting portion D of reduced width, which is first bent up at right angles to reach the bottom of the draw-head and thereby form the inner end E of the hood, and is then bent outward at right angles and extended under the lower side of the draw-head and secured to the latter at suitable points along its length by bolts F, which pass through the draw-head. The inclined bottom C gradually widens to its outer end, and the sides G of the hood are inclined inward toward each other and converge till they reach the sides of the draw-head and are then extended vertically, bear against the sides of the draw-head, and are secured thereto by cross-bolts H, which pass transversely through the draw-head, as shown. Arranged between the sides of each hood near the in-

ner end thereof is a detent-jaw I, which is pivoted on a bolt K, that passes transversely through the sides of the hood at a suitable distance from the bottom thereof. The said detent-jaws extend rearward toward the inner ends of the hoods, and are of sufficient width to play freely at their free ends in a vertical direction between the contracted sides of the hood, as shown. To one or to both of the bolts K (as may be found desirable) is pivoted a lever L, arranged on one side of the hood and extending parallel with the draw-head. The inner end of the said lever is bent at right angles and extends transversely across the contracted portion of the bottom of the hood in rear of the sides, and is connected by eye or loop M to the detent-jaw, near the free end of the latter. Thereby the said jaw may be raised by operating the lever, as will be readily understood and for the purpose to be hereinafter stated.

The link N, used in coupling the cars, is flat and of suitable width and thickness, and has shoulders O, arranged transversely of the upper sides of its ends. The said link is first attached to the draw-head of one car by inserting one end into the hood and causing its shoulder to be engaged by the detent-jaw, as will be readily understood, and when the cars come together the free end of the link will enter the hood of the opposing draw-head and be guided by the inclined bottom and sides thereof under and past the detent-jaw, which will immediately by its own gravity engage the shoulder at the end of the link and thereby automatically couple the cars together. Hence life and limb need not be exposed to accident by going between the cars to couple them, as is now the common practice.

In order to uncouple the cars it is only necessary to operate the lever and cause the detent-jaw attached thereto to release one end of the link, when the cars may be drawn apart. I propose to provide a chain P, extending from the top of the car and attached to the lever, so that the latter may be operated by a person stationed on the top of the car. This chain passes around a guide-sheave R on one side of the draw-head, as shown.

A car-coupling thus constructed is exceed-

ingly cheap and simple, will be found entirely efficient, and is adapted to automatically couple cars as soon as they are run together.

Having thus described my invention, I claim—

1. In a car-coupling, the draw-heads having the hoods with the inclined bottoms, the extensions at the inner ends forming the inner ends of the hoods and bearing under and secured to the bottom of the draw-heads, the inclined sides bolted to the sides of the draw-heads, the detent-jaws pivoted between the sides of the hoods, the levers (one or more) on the pivots of the jaws and connected to the latter to disengage them, and the link having its ends adapted to enter the hoods and provided with the shoulders to be engaged by the detent-jaws, substantially as described.

2. The draw-head having the hood on its

lower side, said hood comprising the inclined bottom C, the extension D of reduced width at the inner end of the hood bent up at right angles to form the inner end E of the hood and then extended outward under the draw-head and secured thereto by bolts F, the inclined sides G, secured to the sides of the draw-head by the bolts H, in combination with the pivoted detent-jaw arranged between the sides of the hood, the lever to operate the said jaw, and the link having the shoulder at its end to engage the jaw, all substantially as described.

In testimony that I claim the foregoing I append my signature.

ALFRED COLVIN.

Witnesses:

J. H. AMBROSE,
AYRES HART.