W. W. BURHANS.

Car-Coupling.

No. 197,598. Patented Nov. 27, 1877.

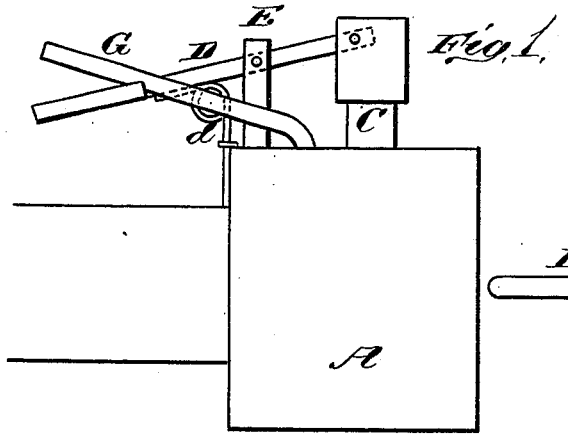

Fig. 1.

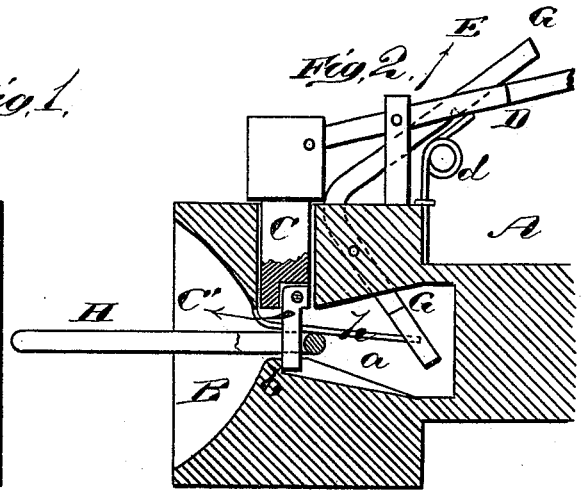

Fig. 2.

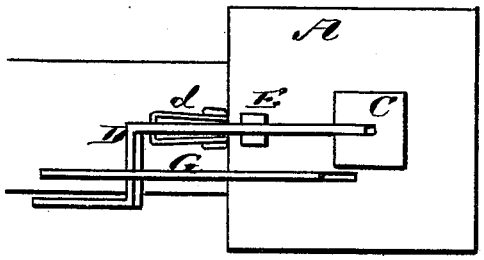

Fig. 3.

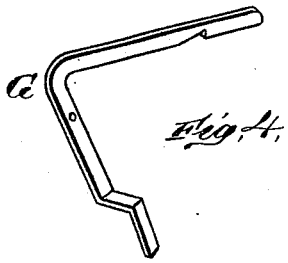

Fig. 4.

WITNESSES

E. H. Bates

George E. Upham.

INVENTOR

Wm. W. Burhans.

Gilmore, Smith & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM W. BURHANS, OF DURHAM, NEW YORK.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **197,598**, dated November 27, 1877; application filed October 27, 1877.

To all whom it may concern:

Be it known that I, WILLIAM W. BURHANS, of Durham, in the county of Greene and State of New York, have invented a new and valuable Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side view of my car-coupling. Fig. 2 is a longitudinal vertical sectional view. Fig. 3 is a plan view, and Fig. 4 is a perspective view, of the latch.

The nature of my invention consists in the construction and arrangement of a car-coupling, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

A represents the draw-head, formed with a concave face, B, surrounding the entrance to the interior chamber *a*.

C represents the coupling-pin, made in square form and shouldered near the upper end, so as to rest on top of the draw-head. The lower end of the coupling-pin C is slotted from the rear, and in the said slot is pivoted a small pin, C′, which hangs down in the center of the chamber *a*, and its lower end rests against a shoulder, *b*, in the bottom of said chamber.

In coupling two cars, the coupling-link is held in one draw-head, and as it enters the other draw-head it strikes the pin C′, which then turns backward until the end of the link can pass the same, when said pin drops down within the link, thus completing the coupling of the cars.

In the head or upper end of the coupling-pin C is connected the end of a lever, D, which is pivoted in the upper end of a post or standard, E, secured on top of the draw-head. This lever is actuated by a spring, *d*, to throw the jointed pin C C′ down through its hole in the draw-head, and by means of said lever the pin C C′ is raised to uncouple the cars.

The free end of the lever D is bent in angular form, as shown, and when this end of the lever is depressed for raising the coupling-pin, a notched lever or latch, G, drops down and catches on said angular portion of the lever D, holding the same in such position and the coupling-pin raised. The latch G is pivoted in a slot in the top of the draw-head, and its lower end passes into the chamber *a*, where it is bent in such a form as to lie in the path of the link H when the same is forced into the draw-head. The lower end of the latch is then pressed back by the coupling-link, so as to release the upper notched end from the lever D, and the spring *d* at once throws down the coupling-pin for coupling the cars.

The concave face B causes the links on different height of cars to be conducted to the opening and coupled without the aid of any of the train-men.

Within the chamber *a* of the draw-head are placed two flat springs, *h h*, diagonally across the link-opening, whereby the link, when pushed in, is held in nearly a horizontal position, and the coupling made more certain.

The upper part C of the jointed coupling-pin is above described as being square; but it may equally as well be made round.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with a coupling-pin, of the lever D, pivoted in a post, E, the spring *d*, and latch G, all constructed and arranged substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM W. BURHANS.

Witnesses:

JOHN H. BURHANS,

CALVIN B. METTLER.