

(No Model.)

S. B. ZIMMERMAN.

CAR COUPLING.

No. 298,264.

Patented May 6, 1884.

Fig. 1.

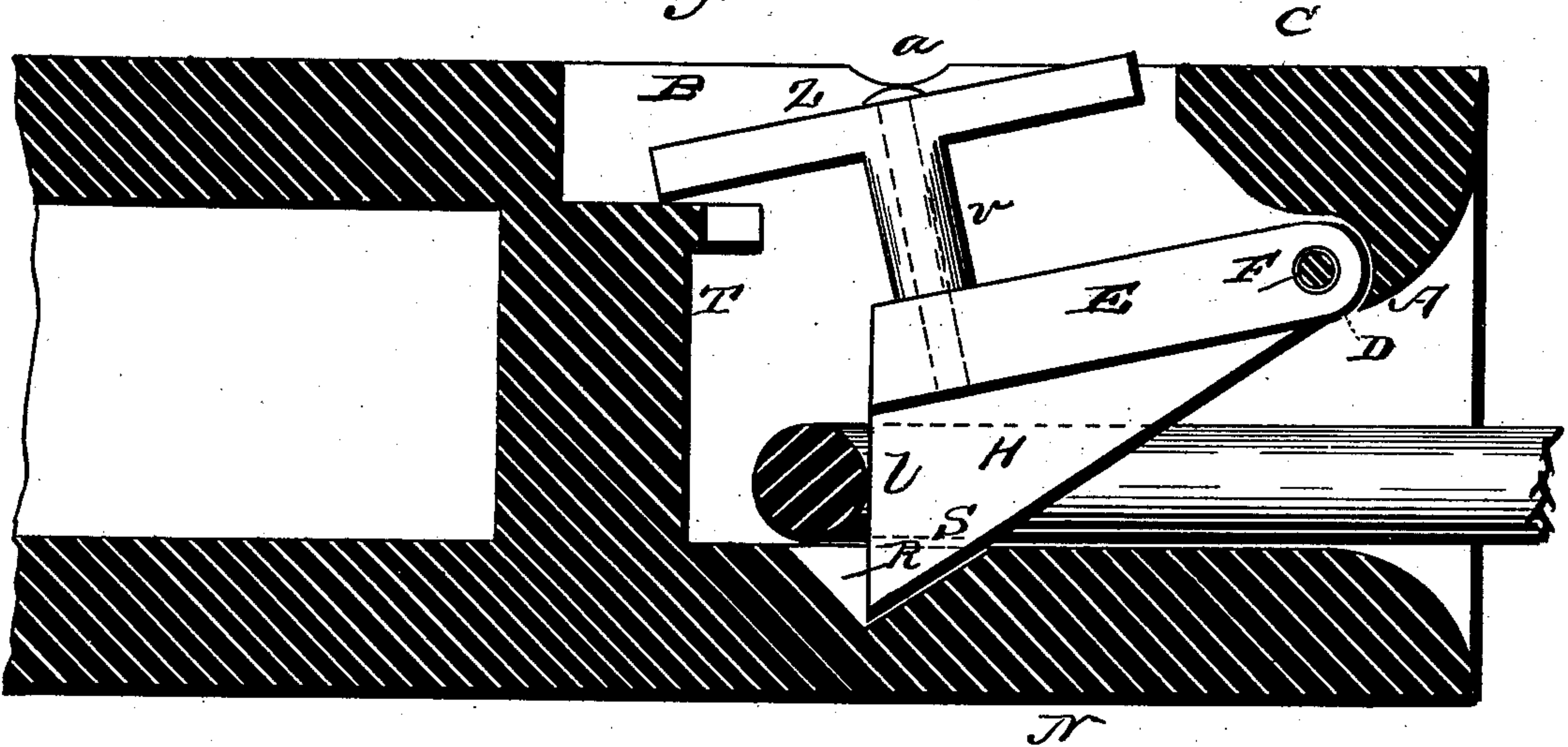
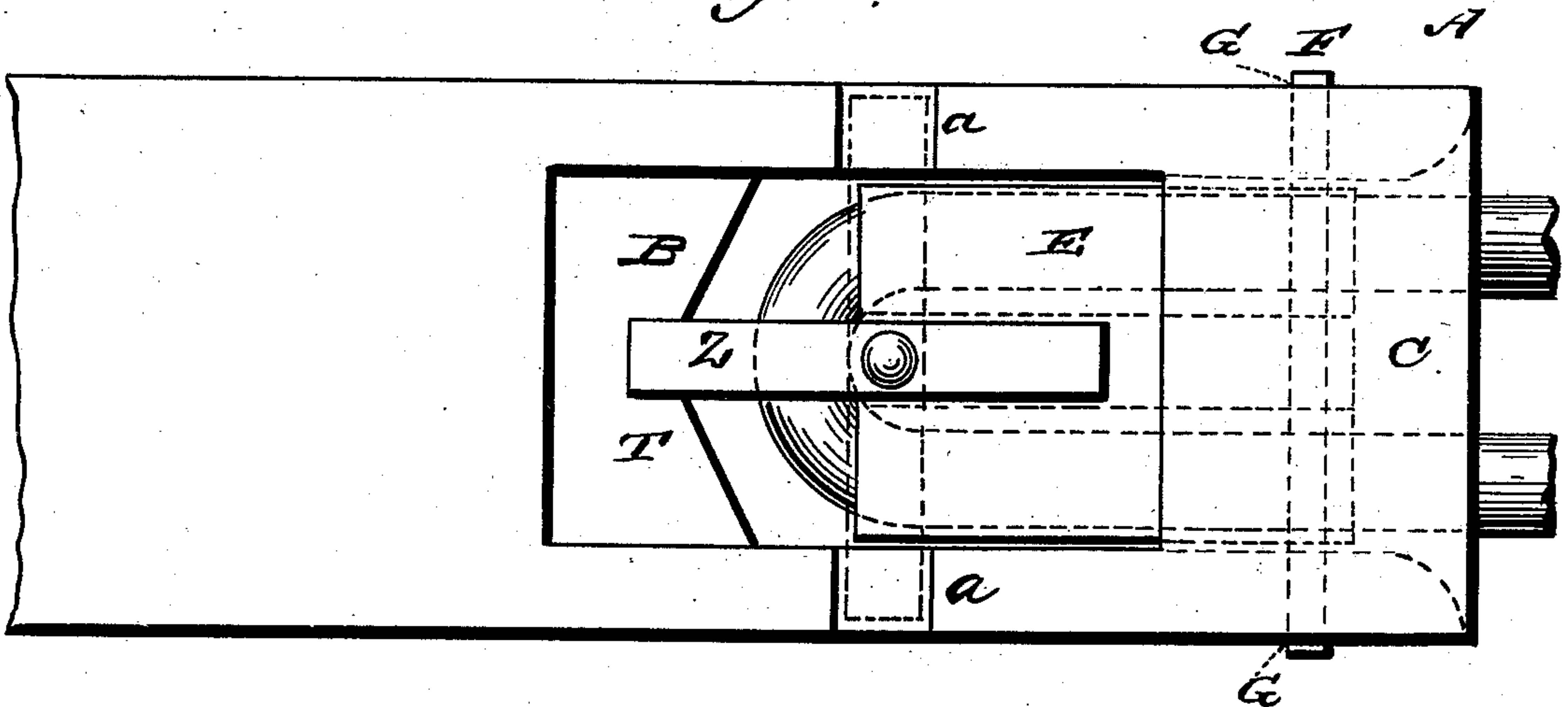


Fig. 2.



WITNESSES

E. H. Bates.
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SAMUEL B. ZIMMERMAN, OF HUDSON, MICHIGAN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 298,264, dated May 6, 1884.

Application filed March 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL B. ZIMMERMAN, a citizen of the United States, residing at Hudson, in the county of Lenawee and State of Michigan, have invented certain new and useful Improvements in Car-Couplers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings represents a vertical sectional view of my coupler, and Fig. 2 is a plan view of the same.

This invention has relation to car-couplings; and it consists in the construction and novel arrangement of devices, as hereinafter set forth, and particularly pointed out in the appended claim.

In the accompanying drawings, the letter A designates the draw-head, which is made of ordinary form, except that in its top is made a large aperture, B, the length of which is greater than its breadth. Just under the forward portion of the top C of the draw-head is the pivoted portion D of the drop-catch E, which is bored to receive the transverse pivot-pin F, the ends of which are seated in bearings G in the side walls of the draw-head. The drop-catch E is a broad casting having an under projection, H, the forward edge of which is sloping and the rear edge, I, of which is abrupt, or nearly at right angles to the plate. The drop-catch plate forms a kind of movable top for the aperture in the upper part of the draw-head. In the floor N of the draw-head is made a small slot or recess, R, in which the point S of the projection H of the drop-catch is received when this catch is in its lowest position.

T represents an abutment in the draw-head, back of the slot or recess R, extending transversely, and adapted to form a guard to prevent the link from slipping too far to the rear in the cavity of the draw-head during the coupling operation.

To the top of the drop-catch plate is pivoted the vertical shank v of the handle Z, which, when the plate is raised in level position, extends horizontally. When the drop-catch is raised, the distance between the point

of its under projection and the floor of the draw-head is sufficient to allow a link of ordinary thickness to pass freely in and out without effecting a coupling. In this position the drop-catch may be sustained by turning the handle crosswise, it being made long enough to rest by its ends on the side walls or bearings, a, of the draw-head, at the sides of the aperture B. When, however, the handle is turned in the direction of the length of the draw-bar, the size of the aperture from end to end is sufficient to allow the handle to pass through said aperture and the drop-catch to fall until its projection engages the slot or recess in the floor of the draw-head. In this position the drop-catch is adapted to act automatically in the coupling operation. When a link is introduced into the mouth of the draw-head and passed backward therein, as in the act of coupling cars together, the link will pass under the drop-catch plate and under the sloping forward edge of its under projection, raising the drop-catch until the end of the link has passed beyond the projection, when the drop-catch will fall, its projection engaging the link and holding it securely in position. When the drop-catch is in the depressed or coupled position, the handle thereof is completely within the cavity of the draw-head, and is fully protected from injury by the walls thereof. To uncouple, it is only necessary to raise the drop-catch by means of its handle and turn it transversely, so that the ends of the handle will rest on the side bearings of the aperture B.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

In a car-coupling, the draw-head having the elongated aperture B in its top and slot or recess in its bottom, the broad drop-catch plate pivoted to the draw-bar by a transverse pivot-pin, and having an under catch projection, H, and a pivoted handle, Z, of proper length to engage the aperture B by the ends when turned transversely, and to pass down through said aperture when turned lengthwise, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL B. ZIMMERMAN.

Witnesses:

L. R. PEIRSON,
DAVID BENEDICT.