

(No Model.)

G. & W. H. MERRILL.
CAR COUPLING.

No. 272,299.

Patented Feb 13, 1883.

Fig. 1

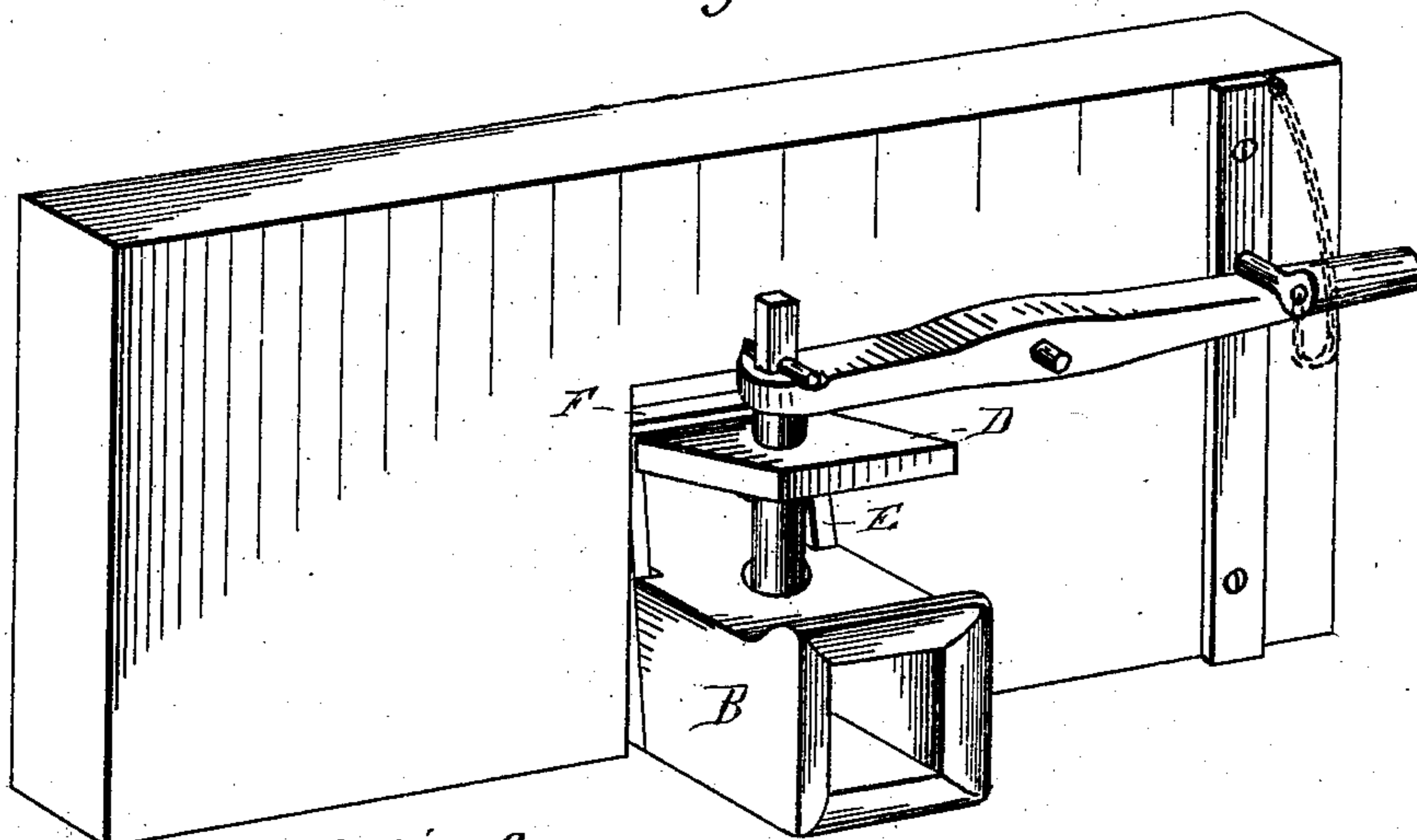


Fig. 2.

Fig. 3.

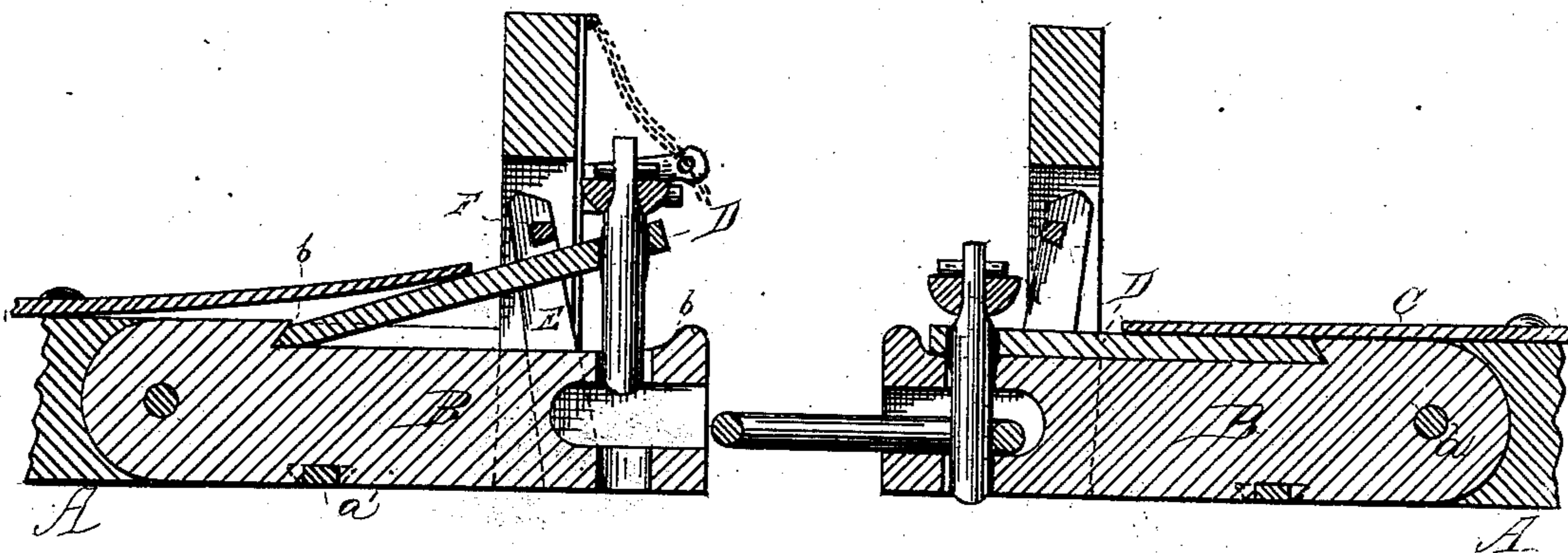
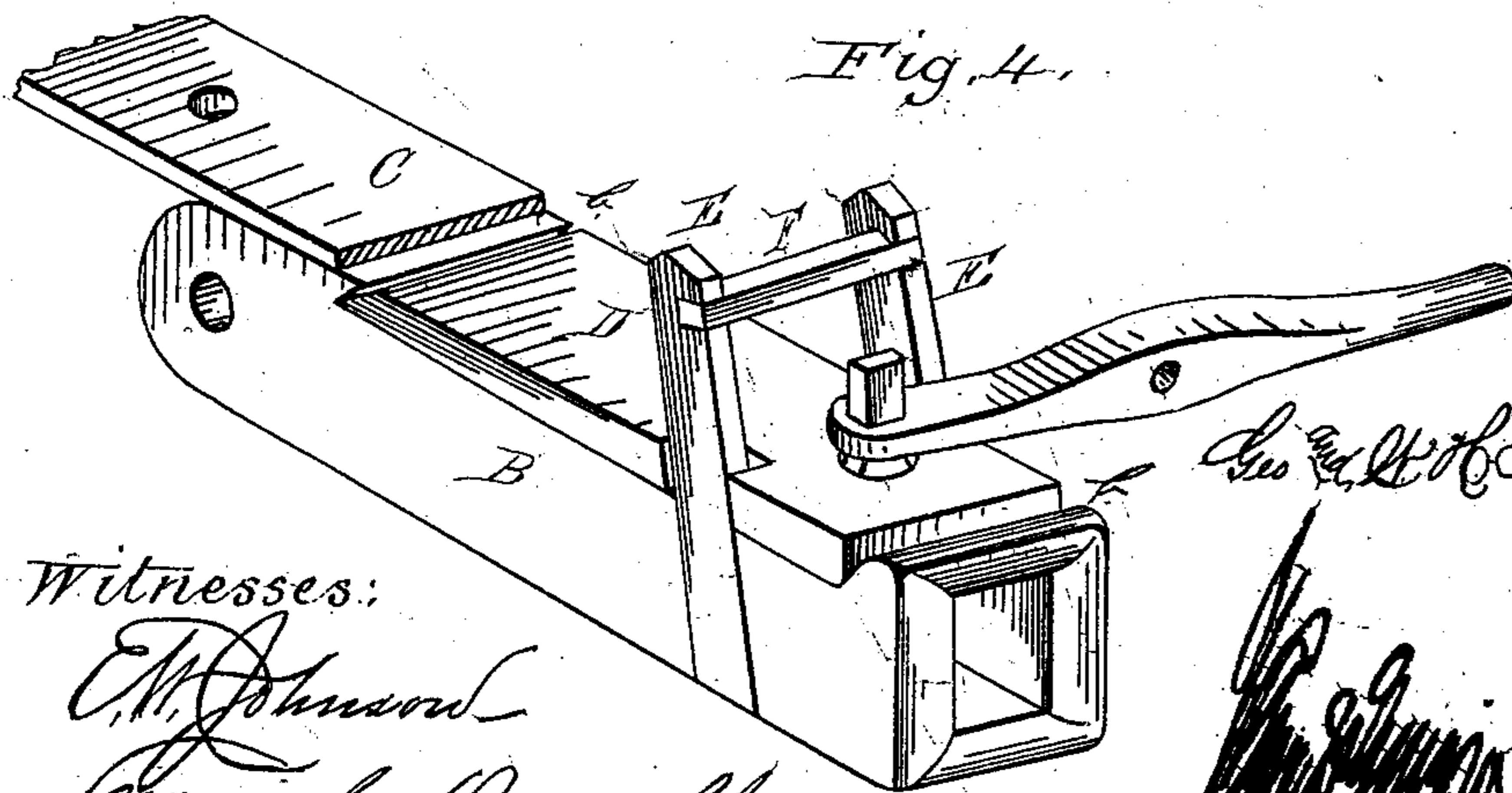


Fig. 4.



Witnesses:

E. M. Johnson
Samuel Newell

By

Geo. W. H. Merrill
Inventors

Wm. S. Merrill

Attorney

UNITED STATES PATENT OFFICE.

GEORGE MERRILL AND WILLIAM H. MERRILL, OF RIVERSIDE, MICHIGAN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 272,299, dated February 13, 1883.

Application filed December 12, 1882. (No model.)

To all whom it may concern:

Be it known that we, GEORGE MERRILL and WILLIAM H. MERRILL, citizens of the United States of America, residing at Riverside, in the county of Berrien and State of Michigan, have invented certain new and useful Improvements in Car-Couplings; and we do hereby 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.

This invention relates to certain new and useful improvements in car-couplers; and it consists more especially in providing the draw-head with a spring, whereby the coupling-pin is held and forced into place, which spring also serves to depress the draw-head.

It also consists in the construction and combination of the parts, whereby the pin can be raised and the draw-head adjusted so as to accommodate cars having draw-heads located at different heights, as will be hereinafter more fully set forth, and pointed out in the claims.

In the annexed drawings, which illustrate our invention, Figure 1 is a perspective view, showing the draw-head attached to a car and the coupling-pin raised and held in place by the operating-lever. Figs. 2 and 3 are sectional views, showing the coupling-pins in different positions; and Fig. 4 is a detailed perspective view.

A represents the beam or bumper, to which the draw-head is attached by a pivot or bolt, *a*, and this bumper A overlaps the sides of the draw-head B. The under side of the bumper A is pivoted with a cross-bar, *a'*, which prevents the draw-bar being depressed below the plane of the same. This bumper A is provided with the usual springs and means for attaching the same to the car, and its front end is curved for the reception of the rear curved end of the draw-head. The front end of the draw-bar B is provided with the usual bell-shaped recess and vertical openings for the reception of the link and coupling-pins, and it is cut

away on its upper portion for the reception of the plate D, which serves as a guide for the coupling-pin and prevents the same being displaced. Longitudinal displacement of this plate is prevented by the raised ends *b b* of the draw-head, and lateral by the side bars, E E, which fit into grooves or recesses in the sides of said plate. Attached to the bumper A is a spring, C, which extends over the draw-head B and the plate D, by means of which the pin is forced and held in place. The side arms, E E, which project above the draw-head B, extend upwardly and rearwardly, and they are connected to each other by the transverse bar F. The coupling-pin is operated by a suitable lever, as shown; or there may be provided other means to elevate said pin, either from the top or sides of the cars.

The operation of our improved coupling and draw-head is as follows: When it is desirable to couple cars having draw-heads of the same height, the end of the lever is depressed so as to raise the pin to a sufficient height to allow the link to enter the draw-head, and when in position, the lever being released, the spring will force the pin in position by pressing upon the plate D, and in coupling cars of different heights the pin is raised until the plate D strikes against the transverse bar F on the arms E E, and the lever being further depressed elevates the draw-bar to the desired height.

By the arrangement and construction of this coupling device, we make a single spring operate both the coupling-pin and draw-head.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupling, the combination of the bumper A, having pivoted thereto the draw-head B, with side arms, E E, transverse bar F, and plate D, carrying the coupling-pin and operating means, substantially as shown.

2. The draw-head B, having rearwardly-inclined side arms and connecting-bar, in combination with the plate D, with recessed sides, substantially as shown.

3. The bumper A, having curved front portion and transverse bar on its under side, and

spring C, in combination with the draw-head
B, with rear curved end and pivot *a*, side
arms, E E, bar F, and guide-plate D, attached
to the coupling-pin, and operating means, sub-
5 stantially as shown, whereby the coupling-pin
can be raised and the draw-head elevated, for
the purpose set forth.

In testimony whereof we affix our signatures
in presence of two witnesses.

GEORGE MERRILL.

WILLIAM H. MERRILL.

Witnesses:

DANIEL COOK,

THEODORE N. PERRY.