

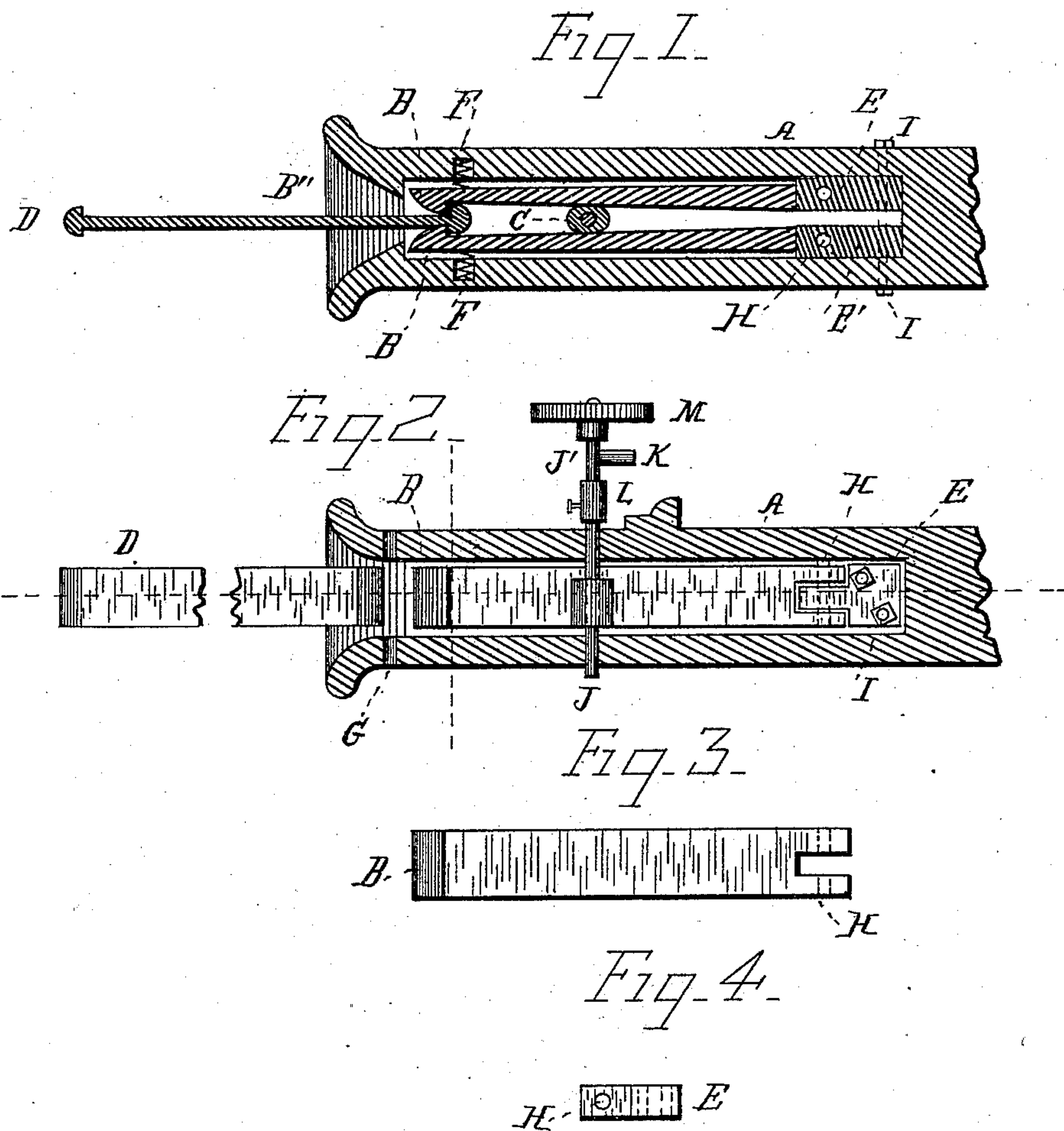
(No Model.)

H. PIDCOCK.

CAR COUPLING.

No. 294,266.

Patented Feb. 26, 1884.



WITNESSES
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UNITED STATES PATENT OFFICE.

HIRAM PIDCOCK, OF BURLINGTON JUNCTION, MISSOURI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 294,266, dated February 26, 1884.

Application filed November 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, HIRAM PIDCOCK, a citizen of the United States, residing at Burlington Junction, in the county of Nodaway and State of Missouri, have invented certain new and useful Improvements in Car-Couplings; and I 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.

The object of this improvement is to provide a car-coupler that will couple itself by the motion of adjoining cars, and that can also be coupled by hand from the ground or end step of the car without danger of injury to any part of the operator's body, and which can also be operated from the top of the car.

The invention consists in the construction and arrangement of the parts, as will be hereinafter fully explained and specifically claimed, reference being had to the drawings herewith filed as part hereof, and in which similar letters of reference denote like parts.

Figure 1 is a horizontal section taken on the line *xx* of Fig. 2. Fig. 2 is a vertical section taken through the center. Figs. 3 and 4 are views of some of the interior parts removed from the draw-head.

A is the draw-bar, which is recessed sufficiently to receive the barbed bars B, which are hinged to the parts E within the draw-bar. Said parts E are made of wrought-iron or steel, and are securely fastened to the draw-bar by two or more bolts, as shown at I. The barbed coupling-bars B are to be made of wrought-iron or steel, and are hinged to the parts E by means of steel pins passing through eyes in the bars B and corresponding eyes in the parts E. The inside of the draw-bar is provided with recesses near the outer ends of the coupling-bars B, for the insertion of spiral springs, which are to be of sufficient tension to firmly press the coupling-bars B together against the sides of the barbed link D. Passing through the center of the draw-bar is a vertical shaft, J, to which is rigidly fixed, within the draw-bar, between the coupling-bars B, an eccentric-block, C. To the vertical shaft carrying the eccentric-piece C is to be affixed by socket J a shaft, J', extending to the top of the car, where it is to be provided with wheel M, for operating the mechanism from above. The

lower part of the shaft J' is provided with a rectangular projection, K, which should be of sufficient length to be conveniently reached by the brakeman from the side of the car, for the purpose of operating the mechanism from the ground or step at the end of the car, when necessary.

Unless there is a great discrepancy between the elevations of the draw-bars of the different cars from their loads or other causes, the motion of the cars provided with this improvement toward each other will cause the barbed link D to press apart the hinged bars B and receive the barbed head of the link D, after which the bars B will instantly close together thereon by reason of the lateral pressure of the spiral springs F. As there is no link-pin to handle, and as the mechanism can be reliably operated at a safe distance from the draw-heads, either from above or below, the danger of personal injury to the operator is entirely avoided or largely reduced. The draw-head is provided with the usual pin-hole, G, in case the inner mechanism of the improvement should be disabled by accident.

To operate the mechanism by hand from the top of the car or from below, it is only necessary to turn the shaft J by means of the lever K or wheel M, and the eccentric-piece C will come in contact with the hinged coupling-bars B and press them apart, either to receive or disengage with the link D.

Having thus explained the construction and operation of my improvement, what I claim as new, and desire to secure by Letters Patent, is as follows:

In a barbed-link car-coupling, the coupling-bars B, hinged in the manner shown, the socketed tension-springs F, and the shaft J', provided with lever K, for operating the cam C from the ground, in combination with the draw-bar, having inward projections covering the ends of the coupling-bars, and the ordinary link-pin hole, all constructed and arranged to operate substantially as specified, for the purpose set forth.

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

HIRAM PIDCOCK.

Witnesses:

J. P. RING,
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