

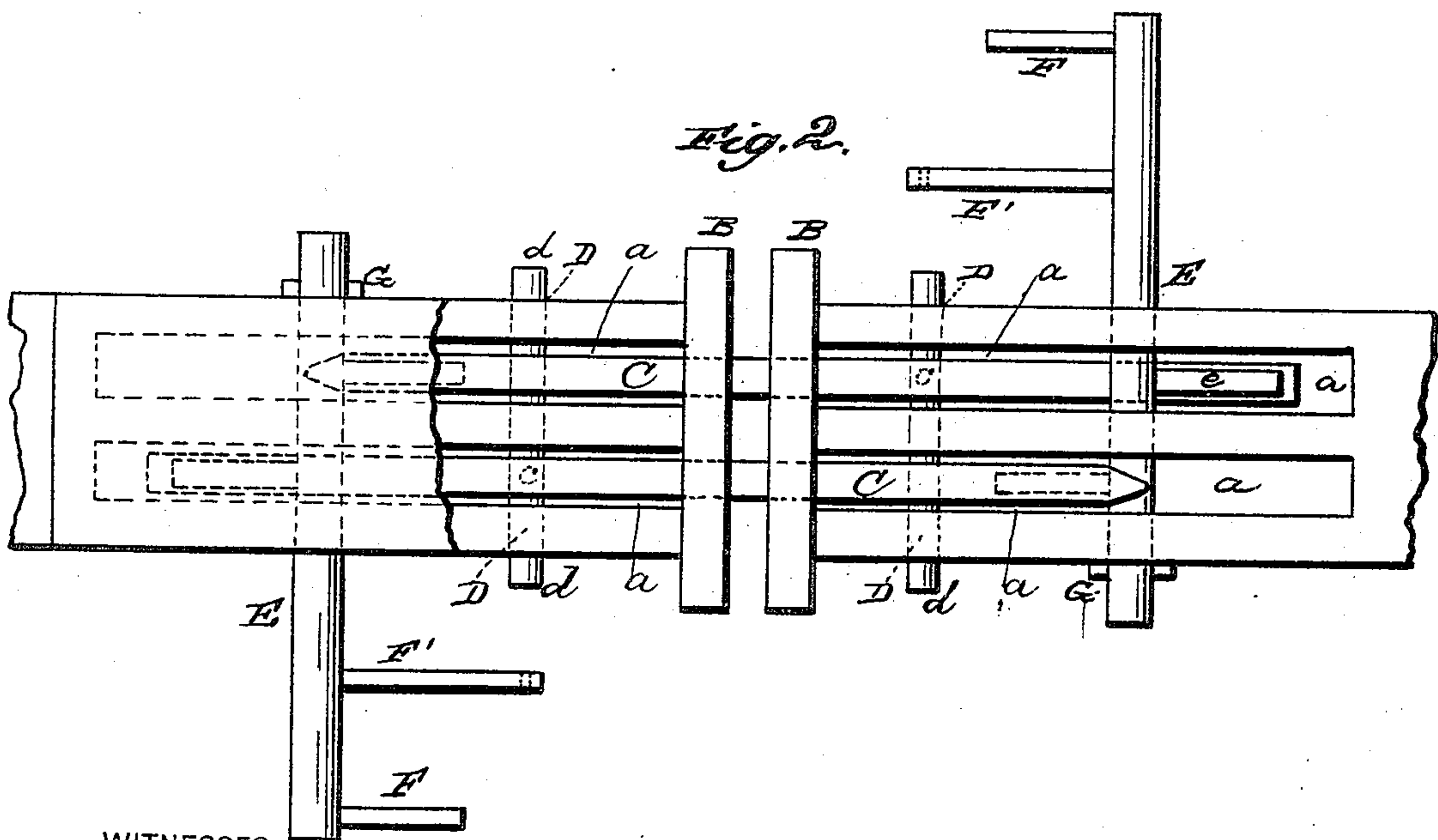
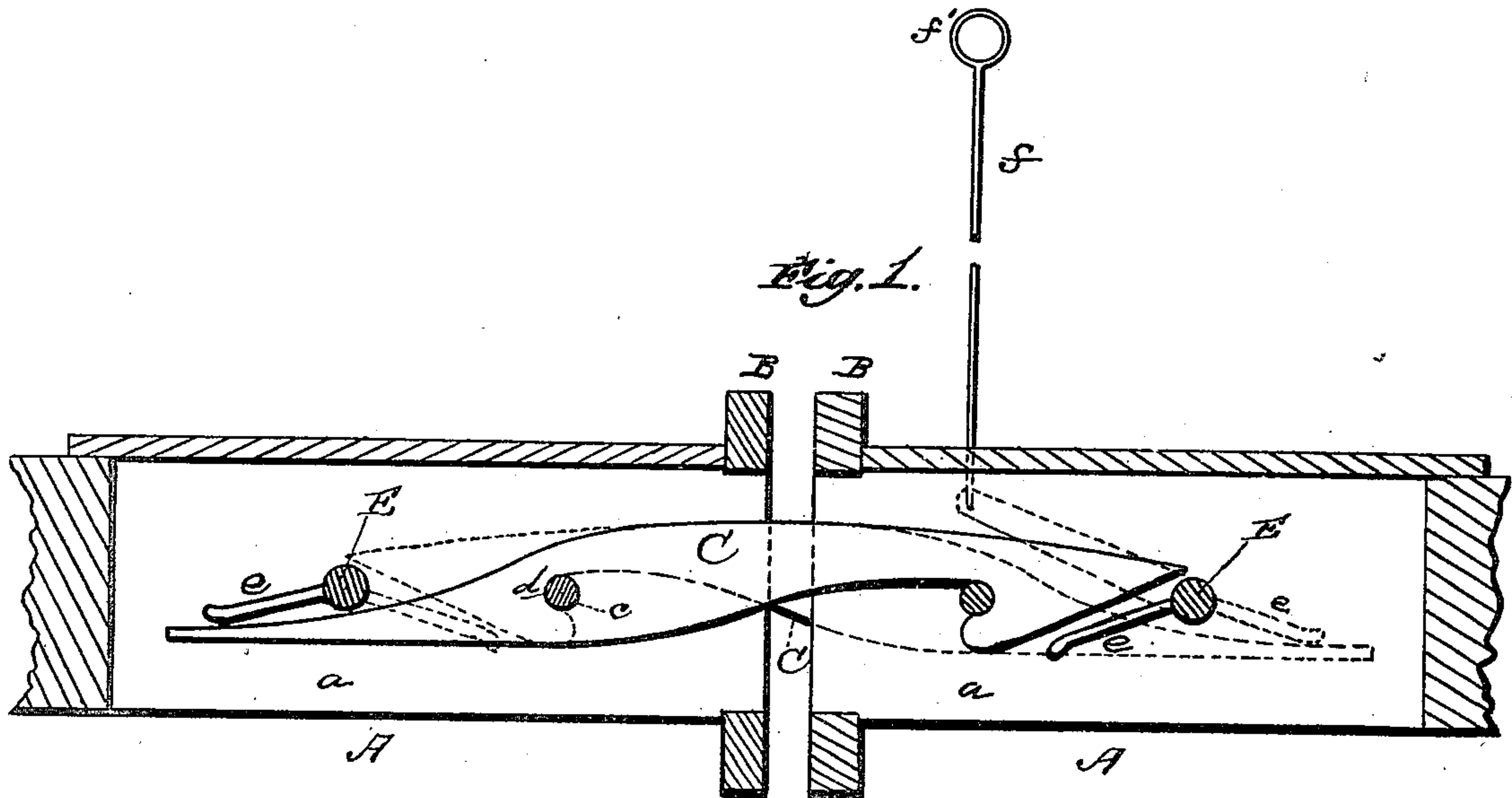
(No Model.)

N. AMBUEHL.

CAR COUPLING.

No. 271,394.

Patented Jan. 30, 1883.



WITNESSES
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NICHOLAUS AMBUEHL, OF LONE GROVE, FAYETTE COUNTY, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 271,394, dated January 30, 1883.

Application filed November 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAUS AMBUEHL, a citizen of the United States, residing at Lone Grove township, in the county of Fayette and State of Illinois, have invented certain new and useful Improvements in Car-Couplers; 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.

This invention relates to improvements in car-couplings, and has for its object devices which will more readily and expeditiously uncouple and couple cars from the top of the same, or from standing on the ground; and it consists of the novel construction and arrangement of parts, as will be hereinafter more fully described and specifically claimed.

In the accompanying drawings, Figure 1 is a sectional view, and Fig. 2 is a top or plan view, of the same.

A A represent two rectangular draw-heads or bumpers provided with oblong slots *a a* and buffer-heads B B, into which one end each of two coupling-hooks or hooked bars C C pass in opposite directions, these bars being curved in a peculiar manner, as shown in Fig. 1 of the drawings. These bars C C are further provided with holes *c c*, which are made nearer to the opposite ends than those which are hooked, for a purpose hereinafter explained. Through the rectangular draw-heads A A, and transversely to their length, are made two holes, D D, and through these holes D D pass removable pins *d d*, near the buffer-heads B B, upon which are loosely or pivotally secured the hooks or hooked bars C C, their pivotal points being nearer to the ends of the bars C C which are opposite those that are hooked, and those ends that are not hooked of the bars C C are made to lie or pass under rocking shafts E E, which are fitted loosely in the holes D D, heretofore mentioned, so that they may rock easily therein. These shafts E E are made smaller in circumference at their inner ends, or those ends which pass through the rectangular bars A A, and said inner ends of the shafts are provided with tappets or arms *e e*, projecting in opposite directions to each other from said shafts, two of them being directly over the

pivoted ends of the hooked bars C C and in contact therewith, and the other two directly under the free or hooked ends of said bars. The larger or outer portions of these rocking shafts are further provided with two levers, F F', the lever F' being made longer and placed about midway of the shafts, and the other, F, being shorter than F' and placed near the outer ends of the same, and just beyond the outer edge of the car, but not sufficiently far to meet with any obstruction, the longer levers having attached to their outer or free ends vertical rods *f*, which pass up through loops on the ends of the car to keep them in a vertical position. These rods *f* are provided with handles or loops *f'* for grasping them from the top of the car to automatically operate them, while the shorter levers are used to operate the shafts by hand from the ground. Both sets of levers, when in their normal position, lie in the same plane with the draw-bars A A, and the longest lever resting on the pins *d d*. The shafts E E, which hold these levers, are secured in the draw-bars A A by means of pins G G on the side opposite to that on which the levers are placed. The slots in the draw-bars A A are covered to exclude ice or snow, which might clog or impede the operation of the hooks or hooked bars C C.

Having thus fully described my invention, I will now proceed to explain the operation thereof.

It will be obvious from the foregoing description that when the cars are set in motion and come together the free or hooked ends of the coupling-bars, which point directly opposite to each other and run into the slots in the draw-bars, will naturally fall over the pins near the buffer-heads on the draws-bars, said pins being provided for them, and the cars then will be securely coupled together, and the train will then be ready for its destination, and when it has reached its destination and it becomes necessary to uncouple them the brakeman has only to pull upon the vertical rods attached to the long levers of the shafts from the top of the cars, or if from the ground by the short or hand levers, and the levers will then assume a vertical position, and through the medium of the arms or tappets on the

rocking shafts release the hooks, and the cars are easily and expeditiously uncoupled from each other.

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

The combination, with the covered draw-bar A, the same being provided with the double oblong slots *a a* for the reception of the coupling-hooks C C, curved at their rear or un-
10 hooked ends, of the rock-shaft E, having tappets *e*, long and short levers F F', and pins *d*,

said long lever F' having attached thereto rod *f*, whereby a simultaneous movement is given to each of the hooks C C and the cars coupled or uncoupled at one operation, substantially 15 as described.

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

NICHOLAUS AMBUEHL.

Witnesses:

ADOLPH AMBUEHL,
EMIL FISCHER.