

W. S. PECK.
Car-Couplings.

No. 158,517.

Patented Jan. 5, 1875.

Fig. 1.

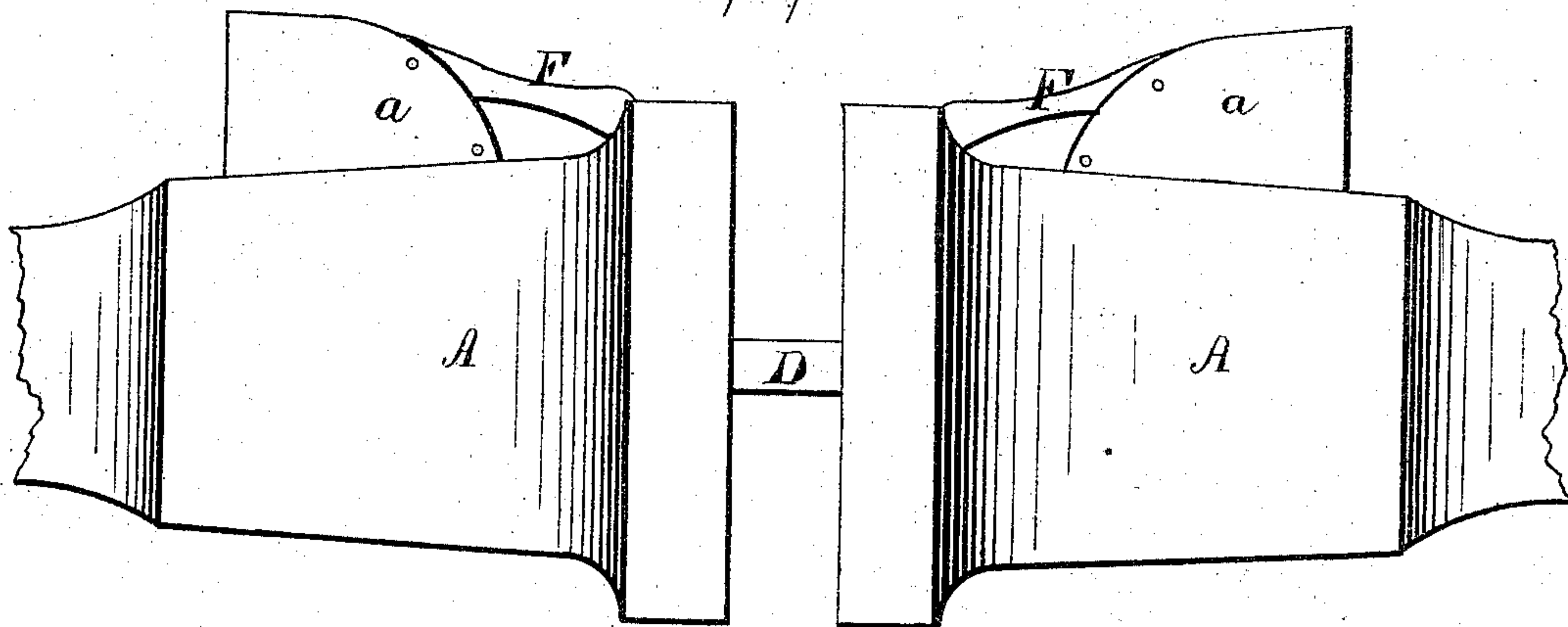
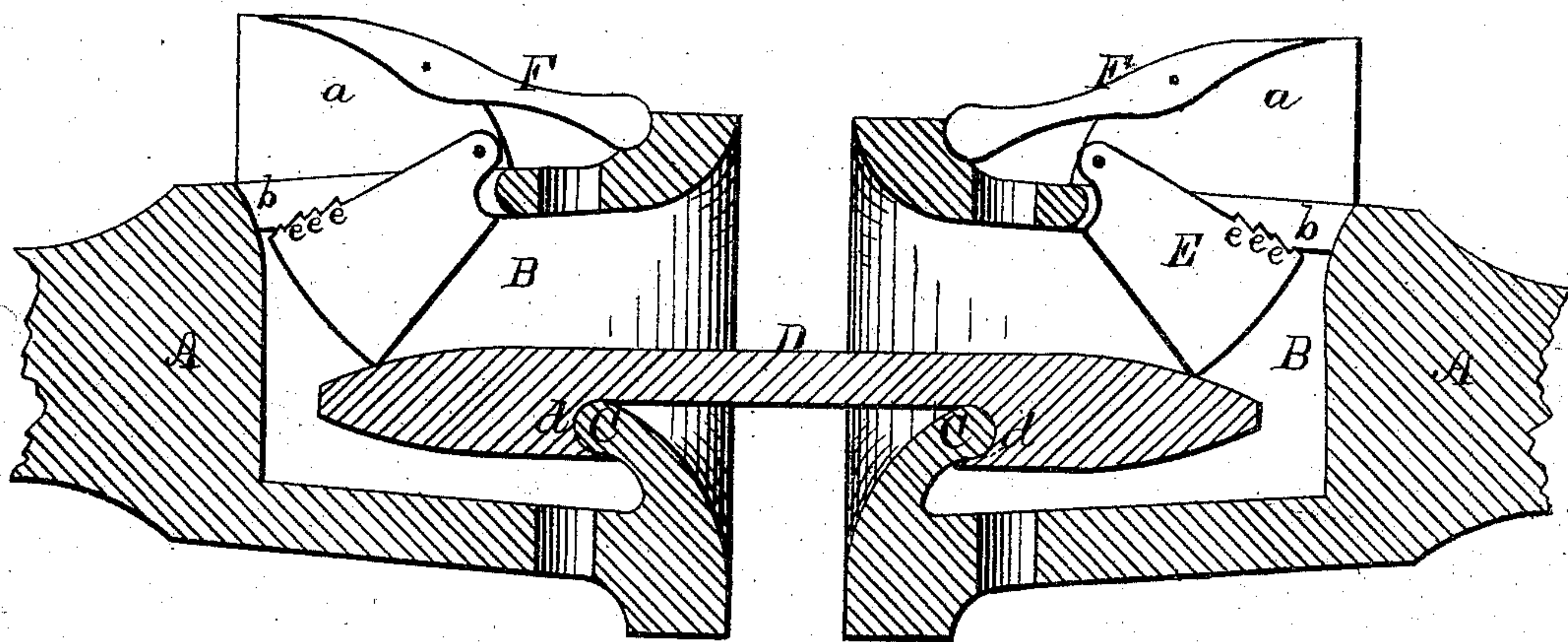


Fig. 2.



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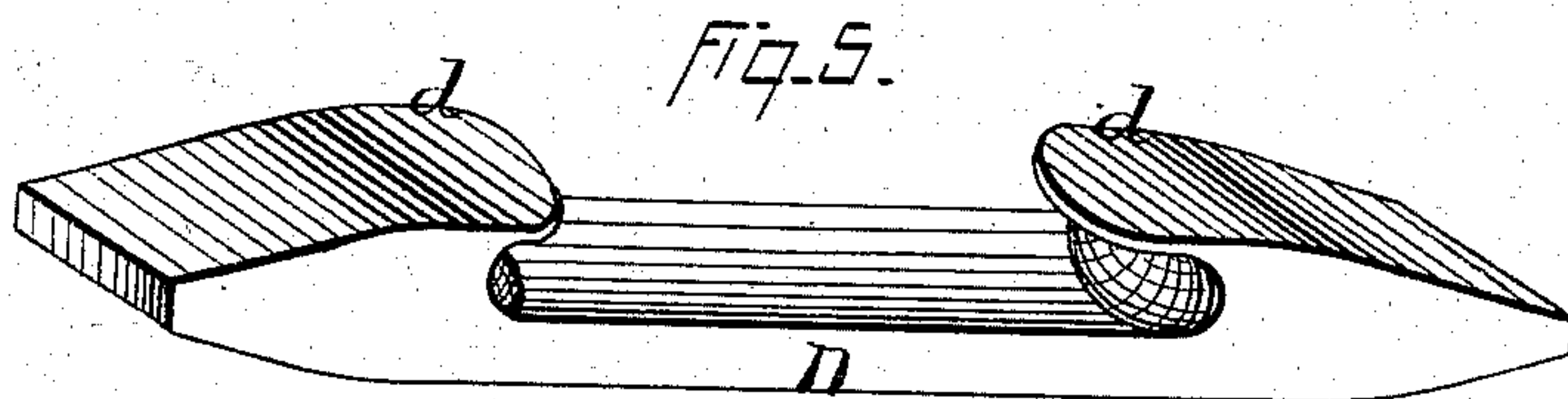
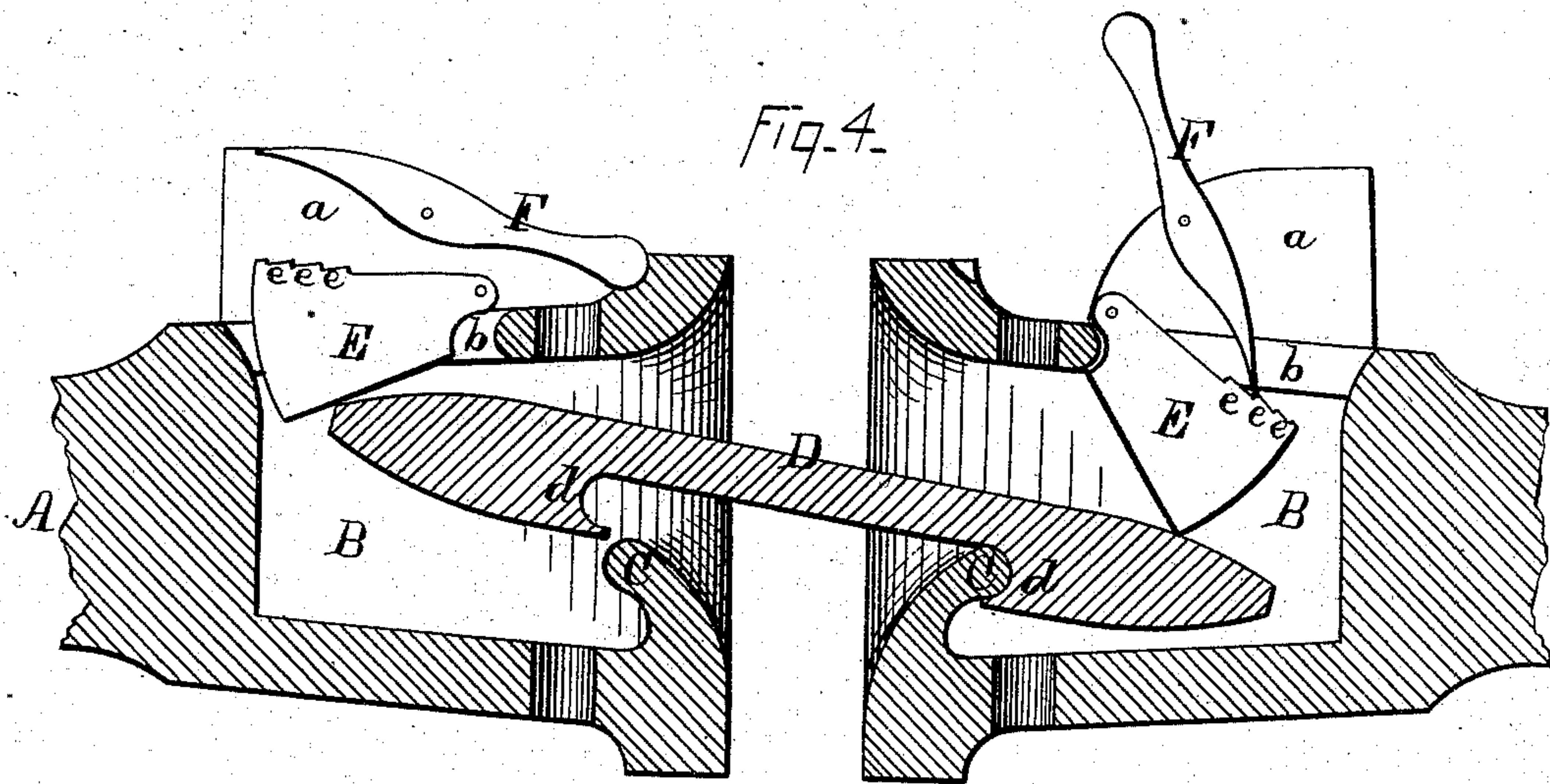
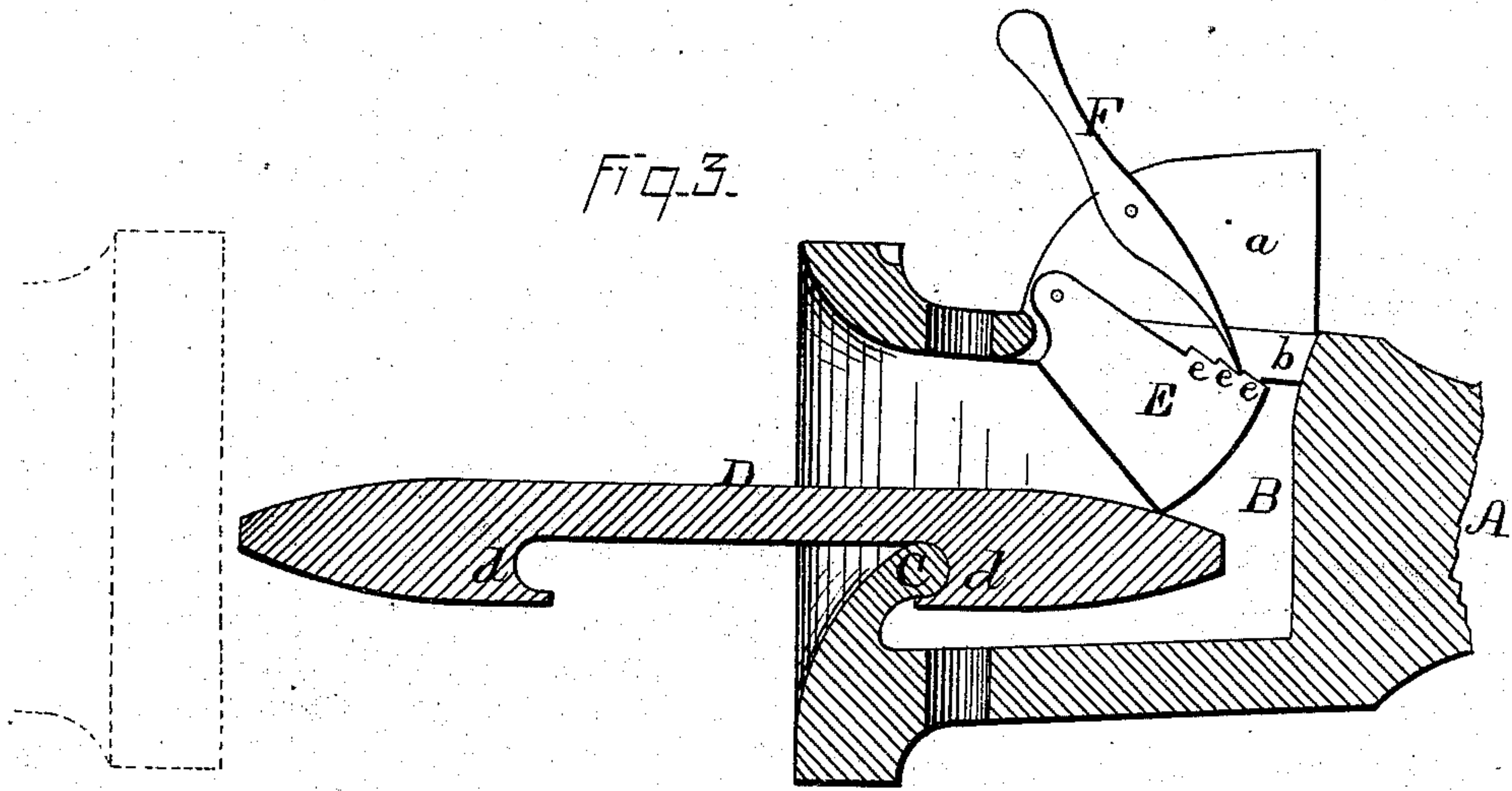
INVENTOR-

Winfield S. Peck, by
Brindle and Co., his Attys

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UNITED STATES PATENT OFFICE.

WINFIELD S. PECK, OF NORTH NORWICH, NEW YORK.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **158,517**, dated January 5, 1875; application filed April 28, 1873.

To all whom it may concern:

Be it known that I, WINFIELD S. PECK, of North Norwich, Chenango county, State of New York, have invented certain new and useful Improvements in Car-Couplings; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a side elevation of my improved device. Fig. 2 is a vertical central section of the same upon a line with the draft, the coupling-bar being in engagement with both draw-heads. Fig. 3 is a like view of said parts, with the coupling-bar in position for coupling. Fig. 4 is a vertical central section of the same, showing the position of parts when arranged for disengagement; and Fig. 5 is a perspective view of the lower side of the coupling-bar.

Letters of like name and kind refer to like parts in each of the figures.

The design of this invention is to enable car-couplings to be set so that the moving together or apart of cars shall cause them to couple or uncouple automatically, to which end it consists in the means employed for locking the coupling-bar in a horizontal or an inclined position within each draw-head, substantially as and for the purpose hereinafter specified.

In the annexed drawings, A represent a draw-head, of usual form exteriorly, within the forward end of which is provided a recess, B, that has the usual bell or flaring shape to its mouth. At its lower side said recess extends forward, so as to form a lip, C, as shown. The coupling-bar D consists of a straight bar, made pointed, vertically, at its ends, and cut away at its lower central portion, so as to form at each end a shoulder, *d*, which corresponds in size and shape to the like features of the lip C of the draw-head, and, when in place within the recess B, engages with said lip.

The lip C being formed vertically upon a circular line, and the shoulders *d* of the coupling-bar being formed both vertically and horizontally upon like lines, it will be seen that all usual lateral and vertical motion of the cars can be had without interference with

the firm bearings between said shoulders and lips.

In order that the coupling-bar D may be secured in a horizontal position within either draw-head when it is desired to couple two cars, or may be raised and released from engagement with either draw-head when it is designed to uncouple the same, the following-described mechanism is employed: A block, E, having the form shown, is pivoted at one end within a vertical longitudinal slot, *b*, that is provided in the draw-head A, and, extending rearward and downward, rests upon the upper side near the end of the bar D, when the latter is in place. Within suitable bearings *a* and *a*, that are attached to the upper side of the draw-head A, is pivoted a pawl, F, which, at its rear end, engages, when desired, with any one of a series of teeth, *e e*, &c., that are formed upon the upper edge of the block E, and by such engagement prevents the latter from rising.

The mechanism thus constructed is used as follows: When it is desired to couple two cars the bar D is inserted within one of the draw-heads, and the pawl F moved upward and rearward until its lower end has forced the rear end of the block E and the inner end of said coupling-bar (upon which it rests) downward until the outer end of the latter occupies the required position to enable it to enter the mouth of the opposite draw-head. The weight of the outer portion of the coupling-bar holds the block E in engagement with its pawl until said bar has entered the opposite draw-head, when, said outer end becoming slightly raised by passing over the lip C, the inner end of said bar is depressed sufficiently to release said pawl and permit it to drop to a horizontal position once more, said parts being now free to perform their usual offices. To uncouple two cars the pawl of one draw-head, and the corresponding end of the coupling-bar are depressed until the outer end of the latter is raised above and released from engagement with the lip of the opposite draw-head in which position said parts are locked and the cars left free to move apart.

The advantage obtained by this construction is, that it enables the couplings of any required number of cars to be set for engage-

ment or disengagement, and such operations afterward completed without supervision or manipulation of said couplings, whereby a material decrease is effected in the risk to life and limb that is incurred by the use of ordinary couplings.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

In combination with the draw-head A and

coupling-bar D, the toothed block E, pivoted within said draw-head, and the pivoted pawl F to engage with said block, substantially as and for the purpose specified.

In testimony whereof I hereunto set my hand this 24th day of April, 1873.

WINFIELD S. PECK.

Witnesses:

JOHN WM. STURGES,
PETER L. RUSSELL.