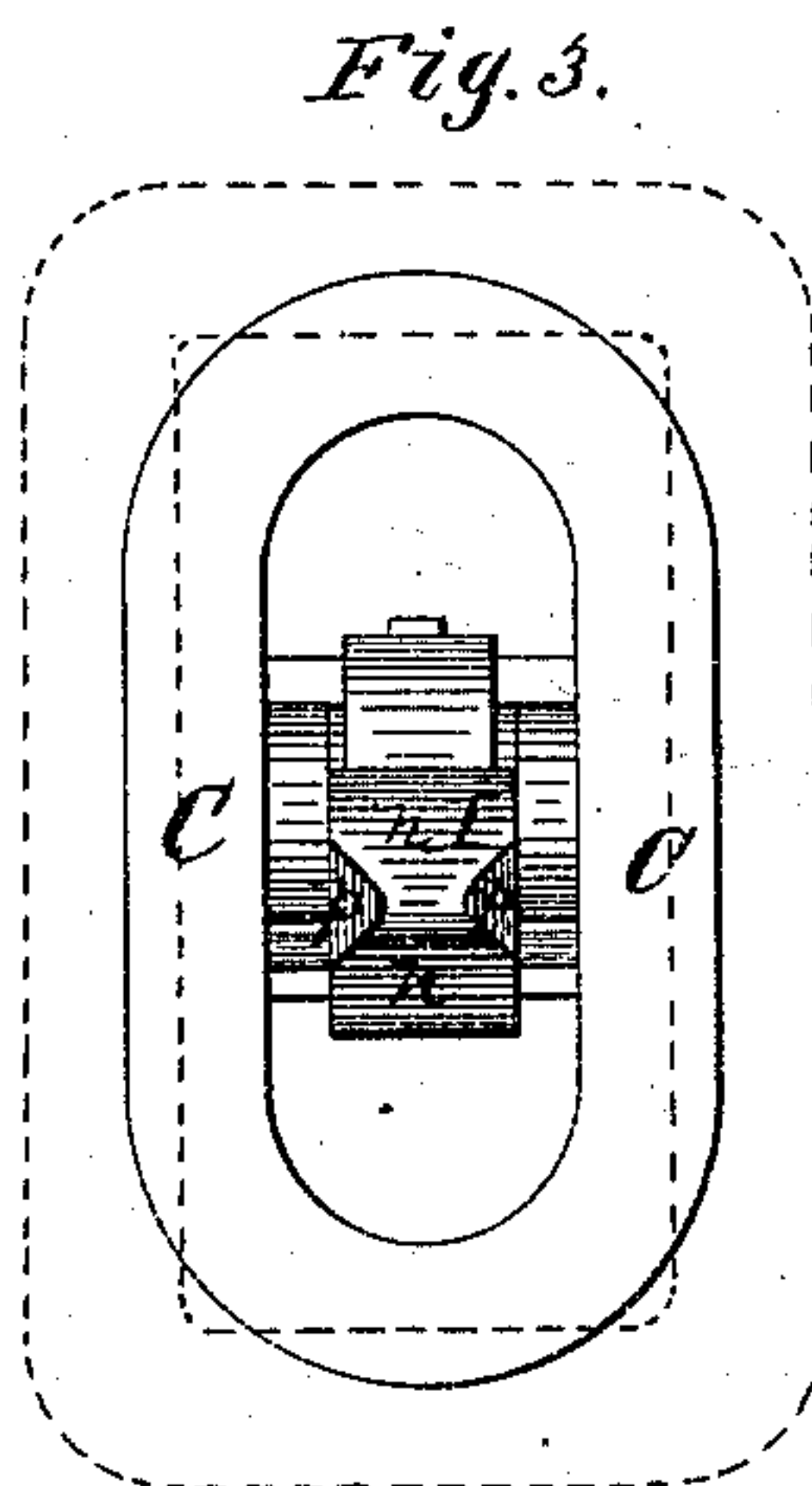
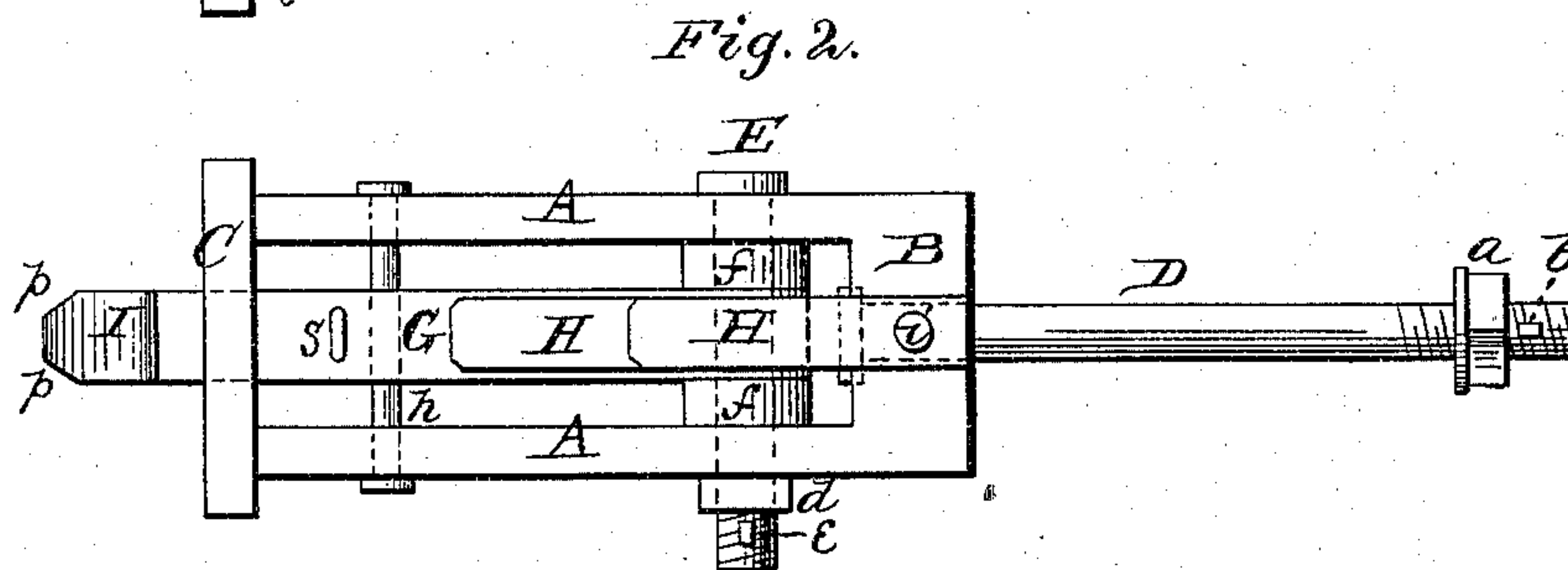
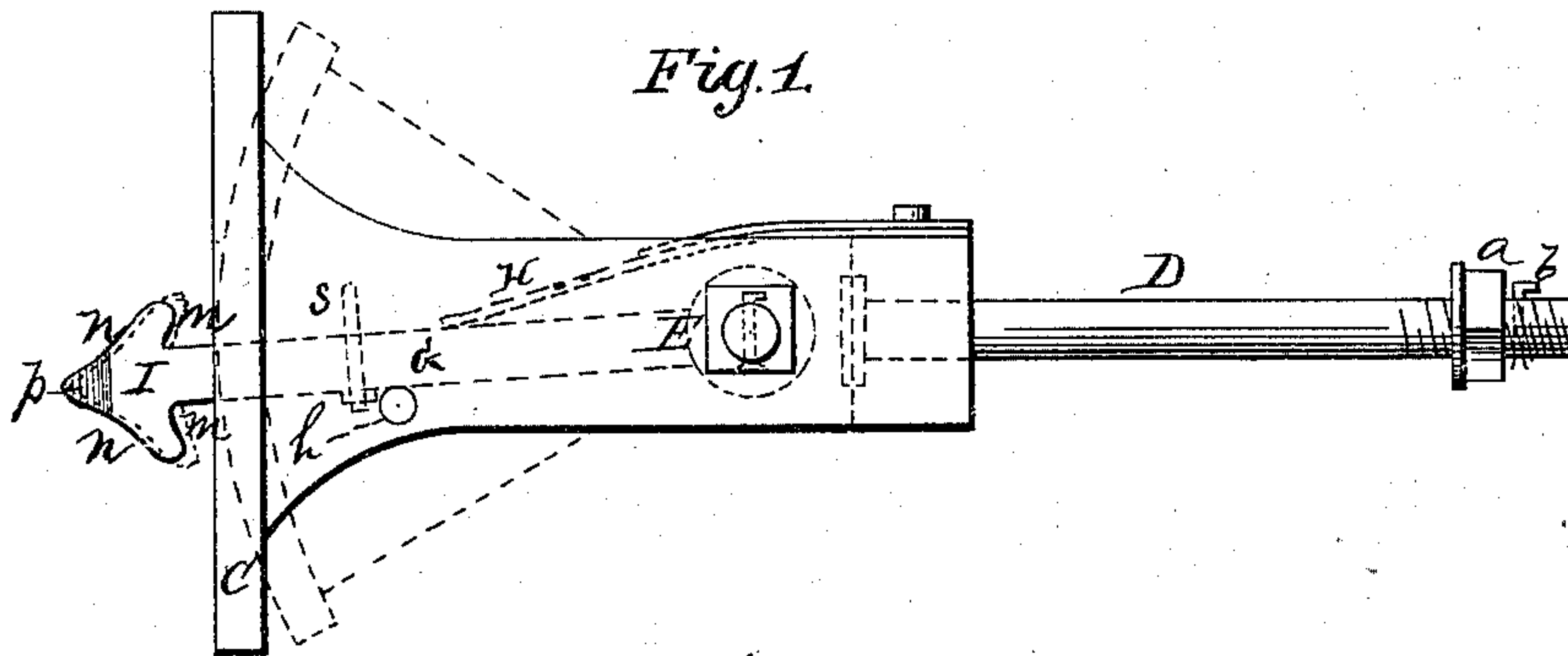


F. H. D. NEWHARD.

CAR-COUPLING.

No. 182,466.

Patented Sept. 19, 1876.



WITNESSES
Henry N. Miller
L. L. Evert

INVENTOR
F. H. D. Newhard.
Alexander T. Mason
ATTORNEYS

UNITED STATES PATENT OFFICE.

FRANKLIN H. D. NEWHARD, OF HOKENDAUQUA, ASSIGNOR OF TWO-THIRDS OF HIS RIGHT TO GEORGE BOWER, OF CATASAUQUA, AND BENJAMIN B. LYNN, OF BETHLEHEM, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **182,466**, dated September 19, 1876; application filed August 24, 1876.

To all whom it may concern :

Be it known that I, FRANKLIN H. D. NEWHARD, (assignor to himself, GEORGE BOWER, and BENJ. B. LYNN, each one-third,) of Hokendauqua, in the county of Lehigh, and in the State of Pennsylvania, have invented certain new and useful Improvements in Self Car-Couplings and Buffers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a car-coupling, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of my car-coupling. Fig. 2 is a plan view, and Fig. 3 a front view, of the same.

The draw-head is composed of two side pieces, A A, connected at the rear ends by a cross-piece, B, and at the front by the buffer C, leaving the top and bottom of the draw-head open. Through the back piece B of the draw-head is passed the bolt D, around which the usual buffer-spring is to be placed. On the end of the bolt D is placed the nut *a*, which is locked by a key, *b*, as shown. G represents the draw-bar, formed with an eye at its rear or inner end, and pivoted by means of a bolt, E, passing through said eye and the sides A A of the draw-head, and this bolt is provided on the end with a nut, *d*, and key *e*. On each side of the draw-bar G, on the bolt E, is placed a washer, *f*, to fill up the spaces on the bolt between the draw-bar and the draw-head sides A, and thus prevent any lat-

eral movement of the draw-bar. The draw-bar rests upon a pin or bolt, *h*, passed through the sides A, and held down thereon by means of one or more springs, H, which are fastened by a set-screw, *i*, on top of the rear end of the draw-head. The front end of the draw-bar G is provided with a spear-shaped head, I, forming top and bottom hooks *m m* at the rear. The top and bottom sides *n n* are made concave, as shown in Fig. 1, and the sides *p p*, at the extreme front end of the head, are beveled.

In coupling the cars one draw-bar will slide up on top of the other until their heads interlock, the springs H keeping them close together. On the upper side of the draw-bar is a staple, *s*, or its equivalent, for connecting the uncoupling-levers.

The draw-bars are made of such length that they can under no circumstances catch on the bottom edges of the opposite buffers. If, however, greater play is required for the draw-bars, so that they must be made longer, then the buffers have to be made on a circle, as shown by dotted lines in Fig. 1.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the draw-head A B, open at top and bottom, the buffer C, the gravity draw-bar G, with head I, provided with top and bottom hooks *m m*, top and bottom concaves *n n*, and side bevels *p p*, horizontal pivoting-bolt E, and stop-bolt *h*, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of August, 1876.

FRANKLIN H. D. NEWHARD.

Witnesses:

C. E. W. NEWHARD,
R. CLAY HAMERSLY.