

E. B. KEITH.  
Car Coupling.

No. 98,775.

Patented Jan. 11, 1870.

Fig. 1.

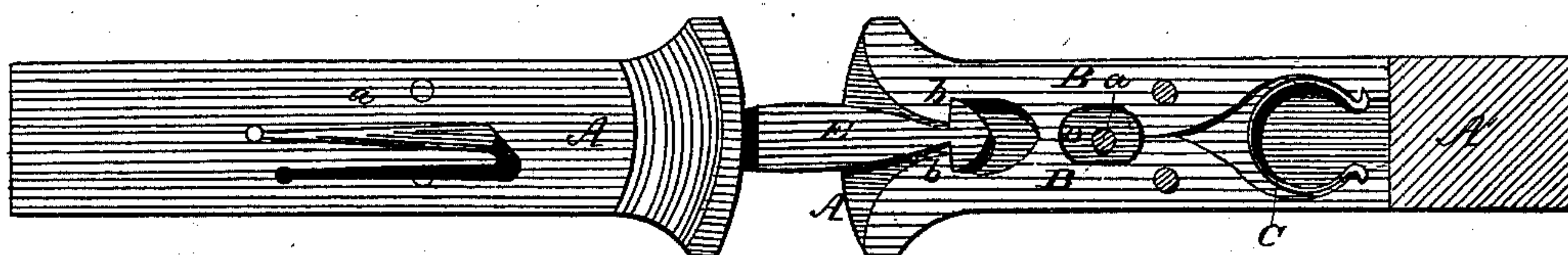
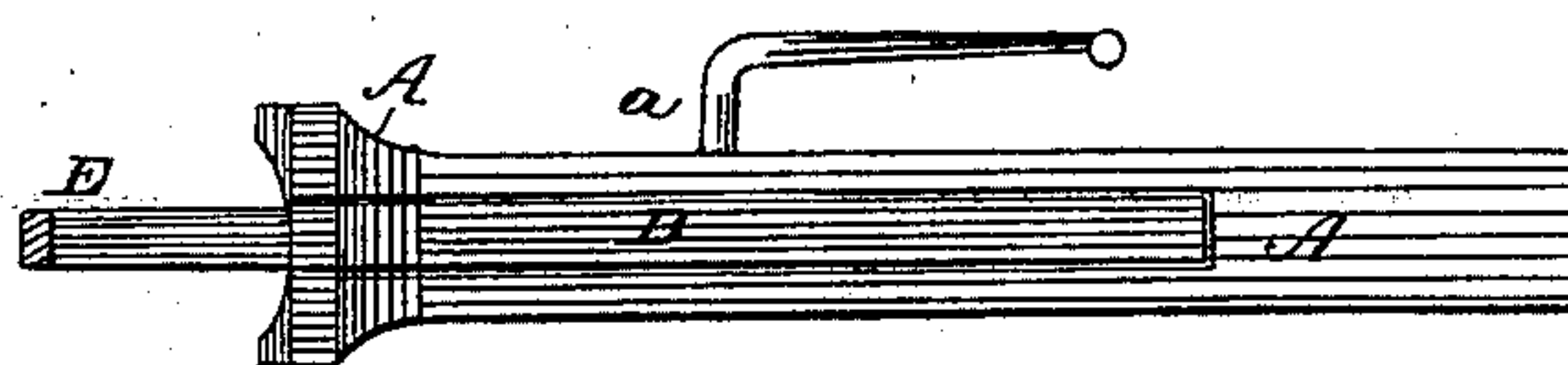


Fig. 2.



Witnesses.

Harry King  
C. L. Quack

Inventor.

E. B. Keith.  
per Charles Mason  
Atty.

# United States Patent Office.

ETHAN B. KEITH, OF GALESBURG, MICHIGAN.

Letters Patent No. 98,775, dated January 11, 1870.

## IMPROVED CAR-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same

*To all whom it may concern:*

Be it known that I, ETHAN B. KEITH, of Galesburg, in the county of Kalamazoo, and in the State of Michigan, 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, 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, which shall be not only self-coupling, but also self-uncoupling, in case of one car running off the track.

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 drawings, in which—

Figure 1 is a plan view, part in section, and

Figure 2 is a side view.

A represents the draw-head or bumper, which is slotted horizontally from its mouth, a suitable distance toward its rear.

On each side of the draw-head, in the slot mentioned, is pivoted a jaw, B, which, when in its normal or proper positions, entirely closes the sides of the draw-head.

The rear ends of the jaws B B are pressed outward, by means of a spring, C, the ends of which are secured, one to each jaw, thus pressing the forward ends of the jaws sufficiently close together to hold the coupling-link or bar, when inserted between them.

At a suitable point in front of the pivot-points of the two jaws, their inner edges are cut oval, as seen in fig. 1, and a shaft, *a*, passes through the draw-head vertically, directly in the centre of the opening formed by these cut-outs in the jaws B B.

On the shaft *a*, within and fitting said opening, is placed a bar, D, rounded at both ends, which bar or block, when the shaft is turned in either direction, will press against the inner sides of the jaws B B, forcing

their front ends outward, and, as soon as said block has, by means of the shaft *a*, been returned to its original position, the spring C will force the front ends of the jaws together again. The shaft *a* may extend up through the platform of the car, and there bent, so as to form a lever, or provided with a handle, for turning the bar D.

The front ends of the jaws B B are rounded on their inner sides, and form, each, a hook, *b*, for catching and holding the coupling-link or bar E, the ends of which are in the shape of a spear-point.

When the cars are brought together, the pointed end of the coupling-bar E forces the jaws B B apart, until the hooks *b b* catch on the same, when the spring C, forcing the jaws together, will hold the coupling-bar firmly, as long as the cars remain on the track. But should, by any accident, one car get off the track, the side-motion of the coupling-bar will at once uncouple the cars, and prevent the next car from going off the track.

I do not broadly claim, under this patent, the use of two flexible jaws, with a cam between them; nor the use of coupling-link, provided with two shoulders on each end.

What I claim, is—

The draw-head A, slotted horizontally from its mouth, a portion of the distance to the rear, within which are pivoted the jaws B B, forming the sides of the mouth, and having a recess formed at their rear ends, within the draw-head, within which is placed the spring C, having hooks at each end, which catch into the jaws, and secure the ends of said jaws within the draw-head, and operated substantially as herein shown and described.

In testimony that I claim the foregoing, I have hereunto set my hand and seal, this 27th day of October, 1869.

Witnesses:      ETHAN B. KEITH. [L. s.]  
R. S. VAN VLEET,  
WM. H. KING.