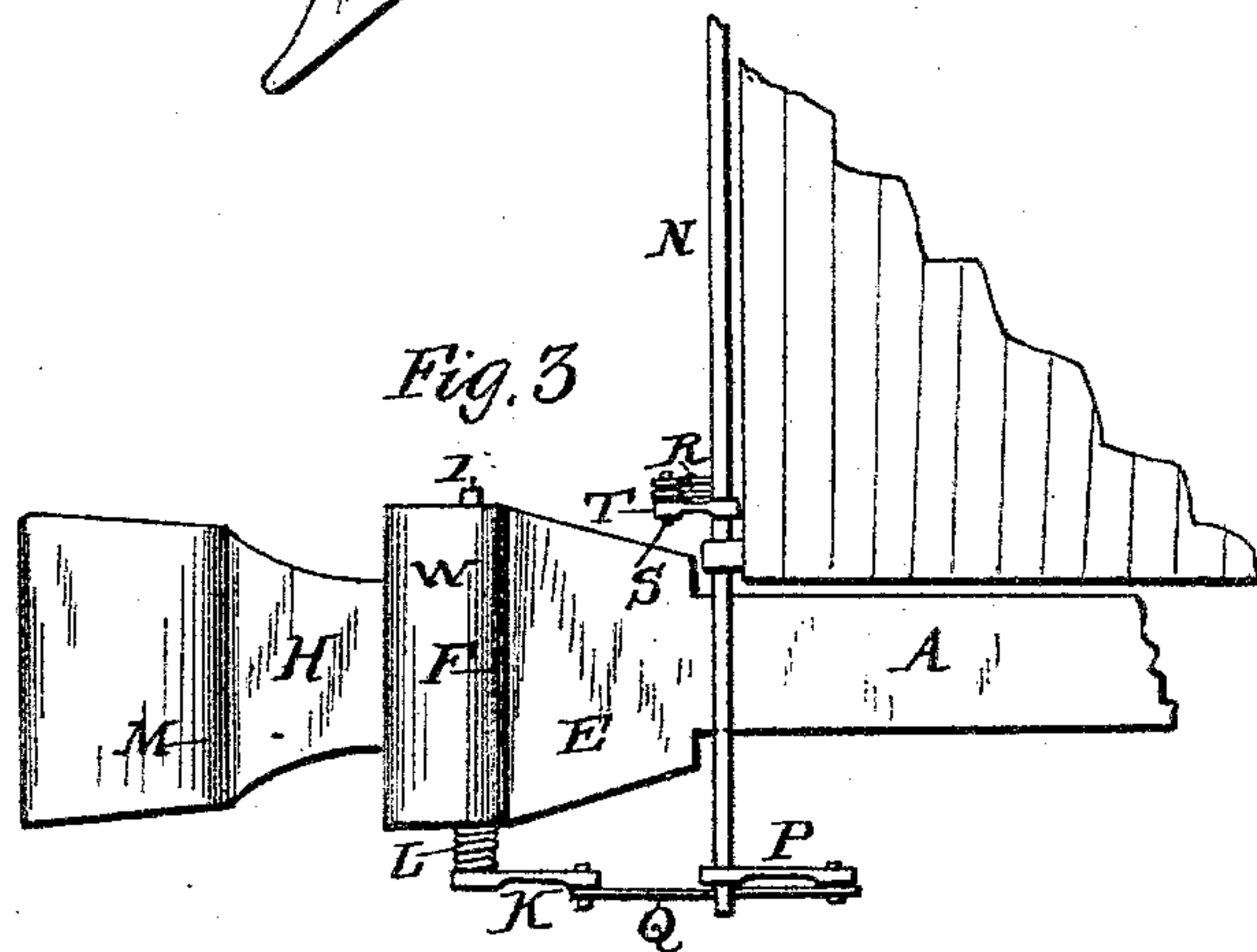
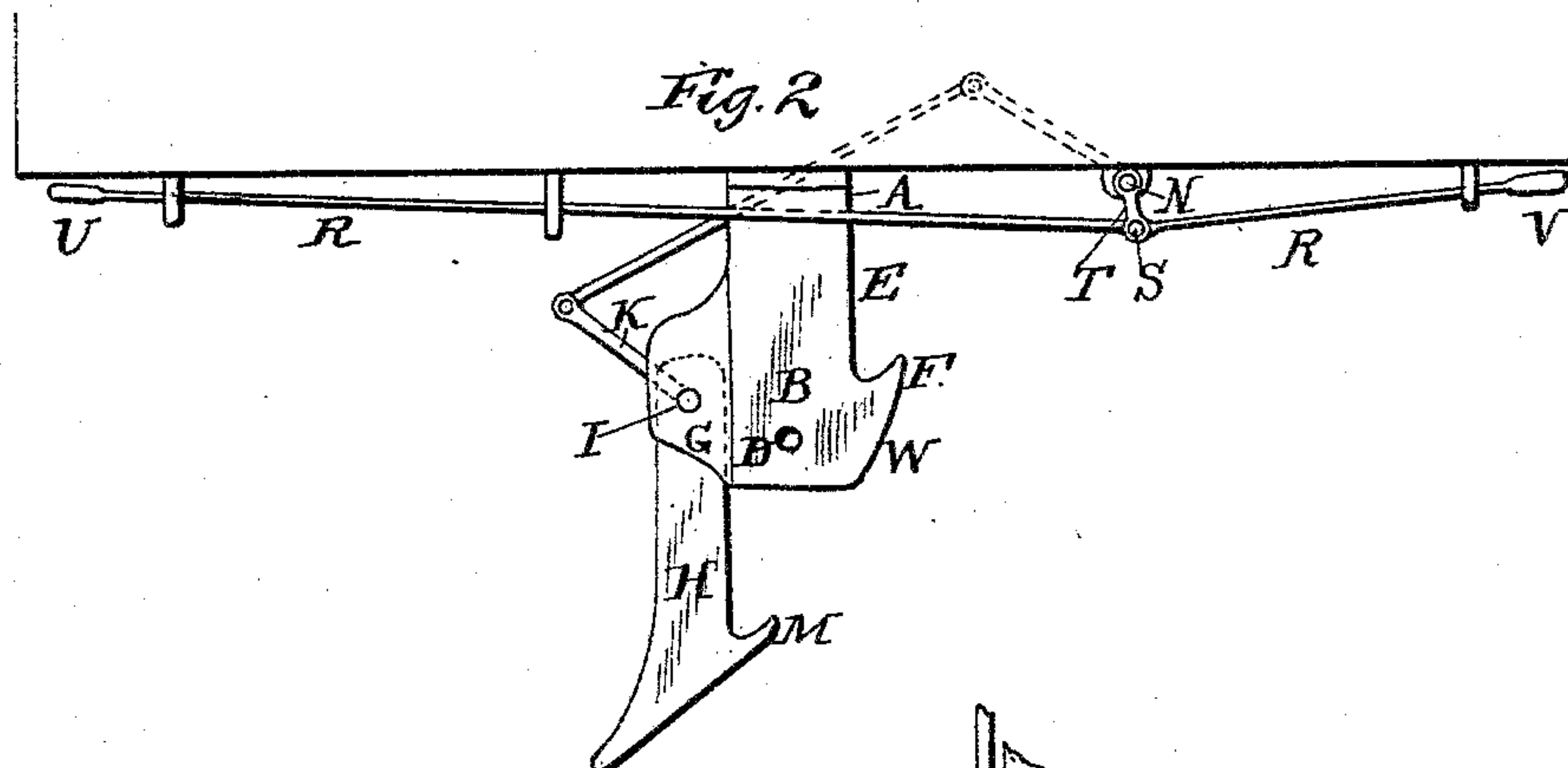
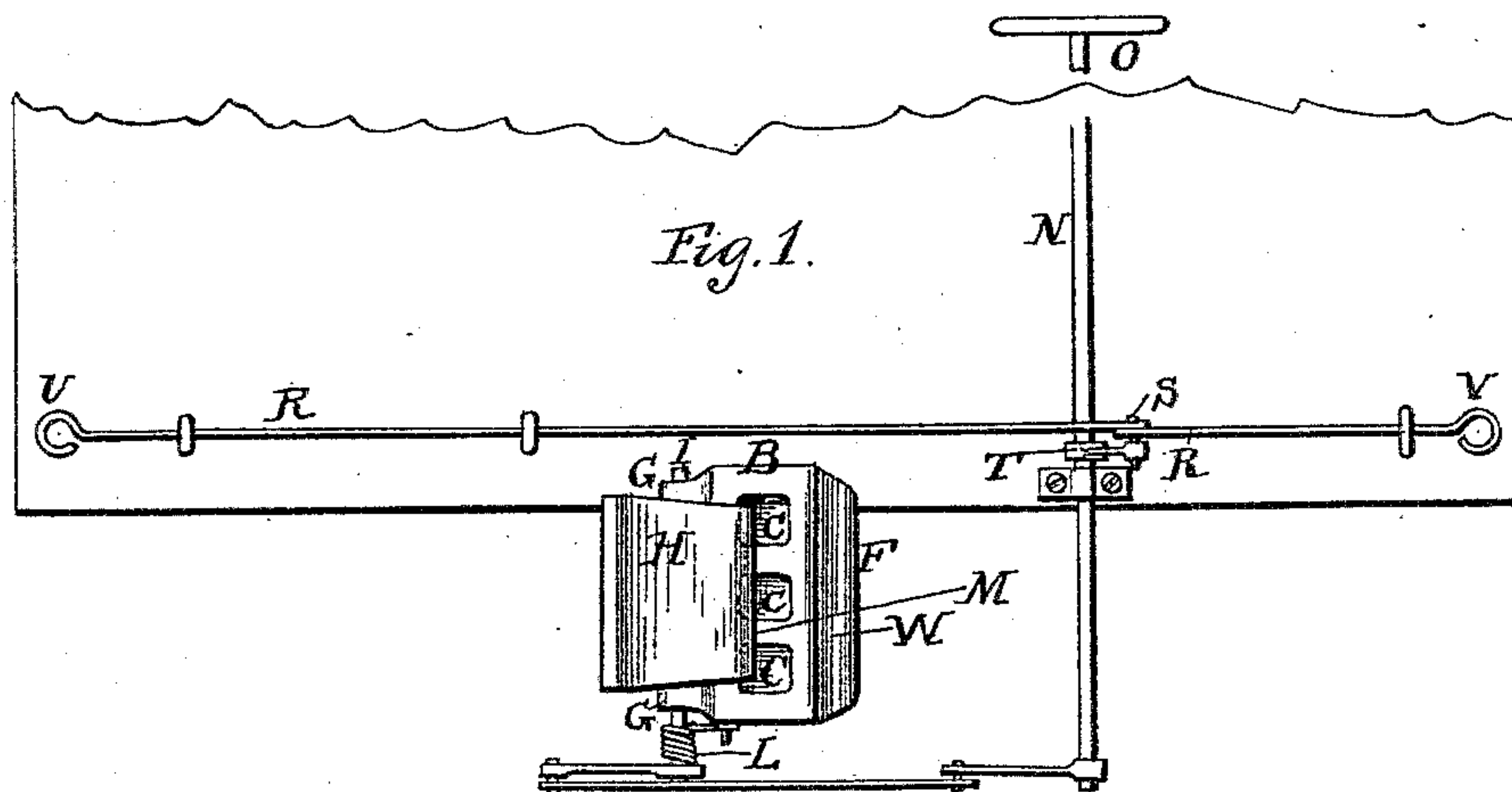


(No Model.)

J. BENDER.  
CAR COUPLING.

No. 414,368.

Patented Nov. 5, 1889.



Attest:

L. M. Bartlett.  
T. W. Johnson.

Inventor:

John Bender  
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Atty.



# UNITED STATES PATENT OFFICE.

JOHN BENDER, OF MARION, KANSAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 414,368, dated November 5, 1889.

Application filed May 23, 1889. Serial No. 311,826. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN BENDER, a citizen of the United States, residing at Marion, in the county of Marion and State of Kansas, have  
5 invented certain new and useful Improvements in Car-Couplings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable  
10 others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specifica-  
tion.

15 My invention relates to car-couplers.

The object of my invention, more particularly, is to provide freight-cars with automatic couplers which are also adapted to couple with the ordinary link-and-pin coupling in  
20 general use at the present time on freight-cars. My invention, however, is equally applicable for use upon passenger and other cars.

My improvements consist in the following construction and combination of parts, which  
25 will be fully described first, and the points of novelty then set forth in the claims.

To enable those skilled in the art to make and use my invention, I will now proceed to describe the same in connection with the ac-  
30 companying drawings.

Figure 1 is an end view or elevation of the body of a freight-car to which my improve-  
ments have been applied. Fig. 2 is a plan  
35 view of the same, showing a section of the end of the car. Fig. 3 is a side view of the coupler.

A represents the draw-bar or coupler-bar.  
B is the draw-head.

40 C are a series of recesses formed in the draw-head, in the usual manner of the link-and-pin couplers, for the reception of a link whenever it may be desired to couple with the ordinary coupler on freight or other cars.

D is the pin-hole, which receives the usual  
45 coupling-pin.

The draw-head B is cut away on one side, as shown at E, and a hook F is formed on the head. The other side of the head is similarly cut away, and ears or bearings G are formed  
50 on the top and bottom of the side of the draw-head. Within the bearings G is pivoted the spring-hook H.

I is the pivot-shaft, which passes through the hook H and bearings G. The shaft I is prolonged below the draw-head and an arm  
55 K is attached at right angles thereto.

L is a coiled sleeve-spring, which is slipped on the shaft-pivot I and interposed between the draw-head and the arm K. This spring exerts a constant tendency to throw the hook  
60 against the head, but yields in the act of automatically coupling with the corresponding coupler.

M is the hook proper, beyond which the hook-arm H is prolonged and beveled, so that  
65 the draw-head on which it engages may slide freely past the hook. Its shape is well illustrated in Fig. 2.

N represents a rod device for uncoupling the couplers from the tops or roofs of the cars.  
70 O is an operating-arm above, and P a similar arm at the lower end of rod N.

Q is a link chain or rod pivotally connected to both the arm K and arm P, and serves to transmit to the hook-arm H the movement  
75 necessary to uncouple the hooks. Provision is made also for coupling and uncoupling the cars from the side—one side or the other. For this purpose I employ the rod R, extending horizontally across the car and hung in suit-  
80 able bearings. This rod is a double one and is jointed at S, both rods R being pivoted to the arm T, which is rigidly keyed to the vertical rod N.

U V are handles on each end of the rod R.  
85 By pulling out upon rod U the hook-arm H will be thrown back, and a similar result is obtained by pushing in upon handle V. The rotation likewise of rod N throws back the hook and uncouples the cars.  
90

W is a beveled face upon the side of the draw-head B. This face comes in contact with the hook-arm H of the corresponding coupling on another car and deflects it, so that it springs  
95 over the hook F and couples thereon.

It will be noticed that the coupling locks with a double grip and that the pivoted hook on both couplers engages the hooks on the draw-heads.

Having described my invention, what I  
100 claim, and desire to secure by Letters Patent, is—

1. In a car-coupler, a draw-head having a hook on one side, a pivoted hook-arm on the

other, a rod operative from each side of the car and a rod operative from the top of the car, and connections between the spring-hook and each of the rods.

- 5 2. In a car-coupler, a draw-head having a hook on one side, a pivoted hook-arm on the other, a sliding horizontal rod extending across the car, and connections between the rod and the pivoted hook.

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

JOHN BENDER.

Witnesses:

FRED L. FRAZER,  
WM. H. DUDLEY.