

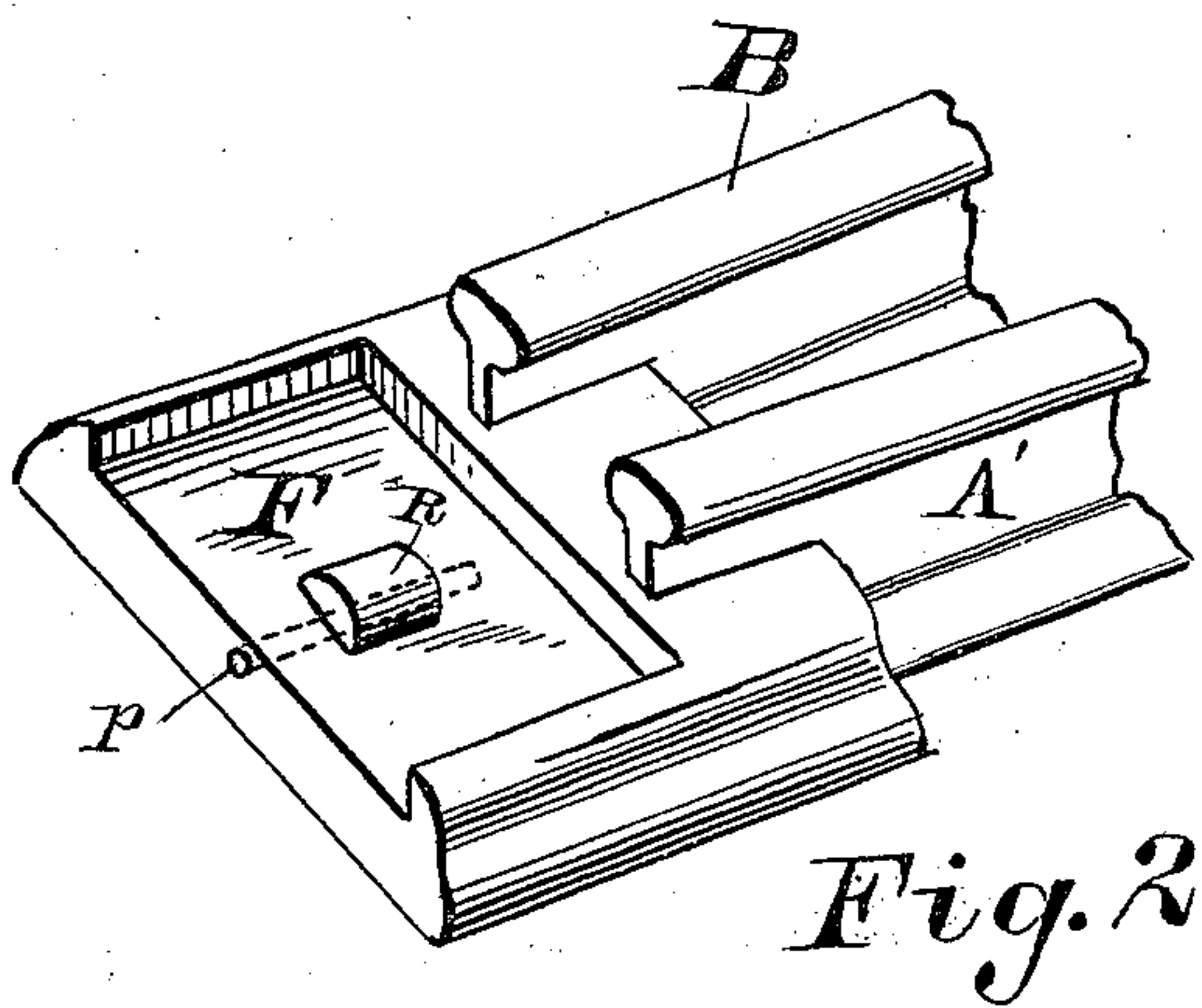
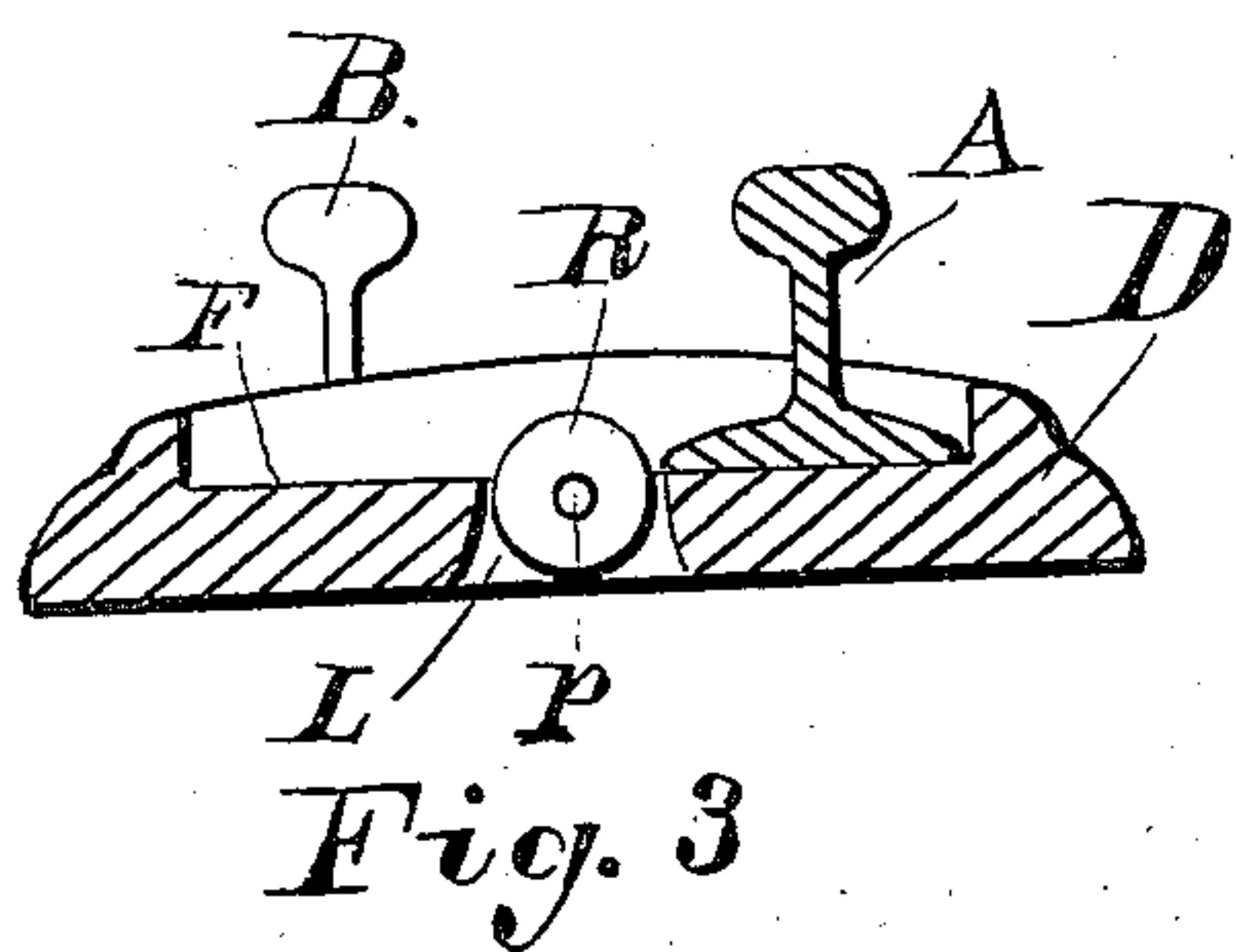
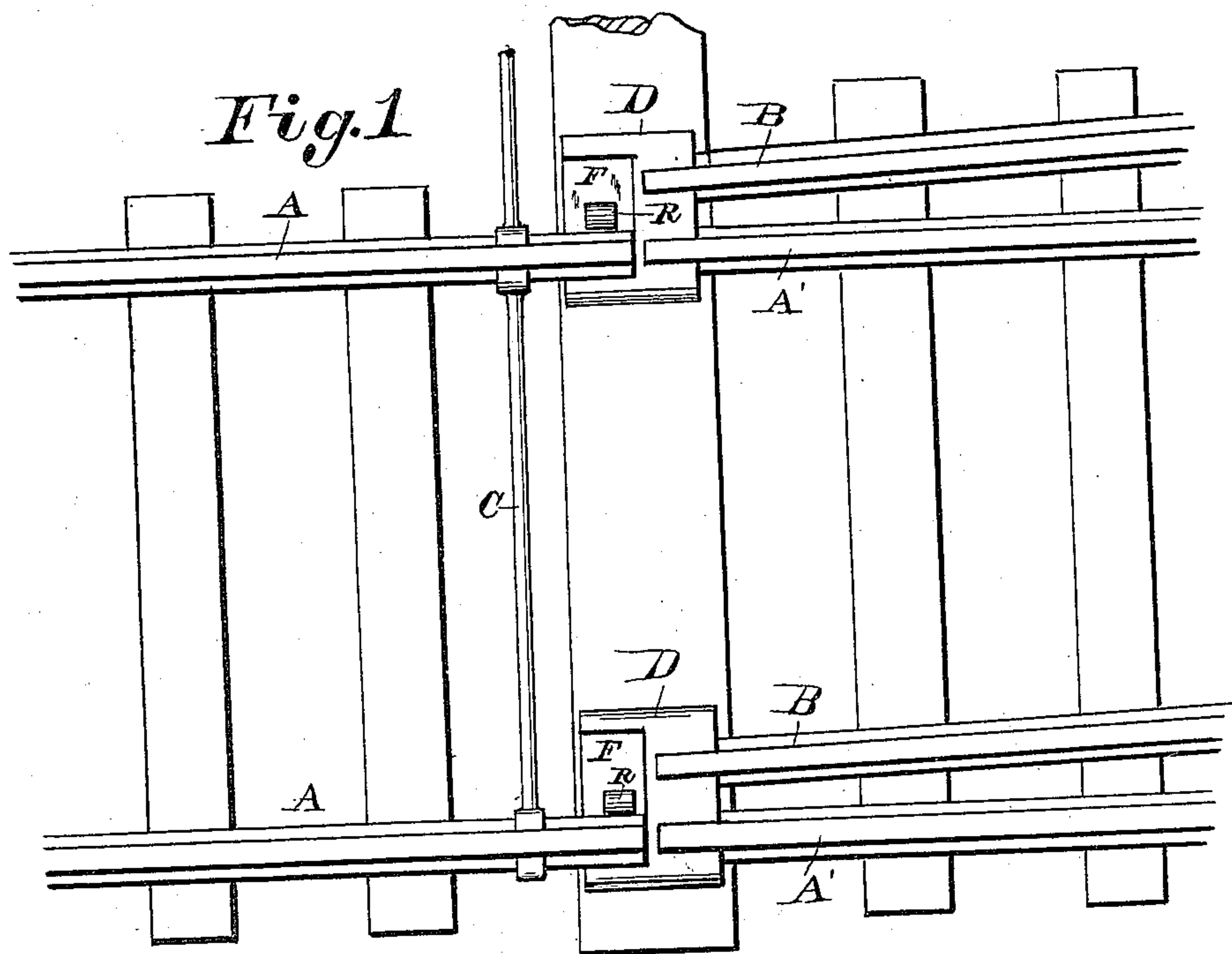
(No Model.)

W. J. MORDEN.

SAFETY DEVICE FOR SWITCHES.

Patented Nov. 14, 1882.

No. 267,569.



Attest  
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# UNITED STATES PATENT OFFICE.

WILLIAM J. MORDEN, OF CHICAGO, ILLINOIS.

## SAFETY DEVICE FOR SWITCHES.

SPECIFICATION forming part of Letters Patent No. 267,569, dated November 14, 1882.  
Application filed March 13, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM J. MORDEN, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Safety Devices for Switches, of which the following is a specification.

My invention relates to a safety device for stub-switches and other switches.

In switches of this class as heretofore generally constructed the face of the head-chair on which the ends of the throw-rails slide is left perfectly plain, and, in consequence, should the switch-connecting rod from any cause become broken the rails are left free to be moved in either direction by a passing train, which would result in said train being thrown from the track, and in serious damage.

To obviate this difficulty has been the object of my invention; and it consists in providing the head-chairs with a stop so arranged that the rails, by means of the switch lever and rod, may be easily shifted, but which shall prevent the rails from being moved by passing trains should the connecting-rod from any cause become broken.

In the accompanying drawings, Figure 1 is a view of a portion of a stub-switch to which my improvement is attached. Fig. 2 is a perspective view of a head-chair enlarged, and Fig. 3 is a cross-sectional view of the same.

Similar letters of reference refer to similar parts throughout the several views.

In the drawings, A A are the switch or throw rails, and A' A' represent the main-line rails, those A A being movable in the ordinary manner by a connecting-rod, C, connected with the switch-lever.

B B are the siding-rails, secured in the ordinary manner in the head-chairs D D.

R is a roller, journaled in the head-chair D, with its top projecting above the face F of said chair, on which the ends of the switch-rails slide in throwing the switch. These rollers are placed centrally between the main-

track rails A' A' and siding-rails B B, so that when the ends of the switch-rails A A are in either position the edges of one of their flanges rest against the rollers at a point a little above the center of the same. The opening L, in which the roller R is placed, extends clear through the head-chair, preventing any dirt from accumulating therein to the detriment of the good working of the roller. The roller R is to be made of steel or other suitable material, and turns on a pin, p, also preferably of steel.

The action or operation is as follows: When the switch is thrown in the ordinary way by means of the connecting-rod C the flange or bottom edge of the movable rail strikes the roller just above the line of the center, causing said roller to rotate and carry the rail over to the opposite side. Should, however, the connecting-rod C become broken, the rails would be held in their position for passing trains by the roller answering the purpose of a stop, the weight of the train preventing the rails from being lifted by the roller.

I am aware of the patents to McMahan and Craik, No. 193,534, Turner, No. 226,637, and Dodson, No. 233,146, and do not claim the construction therein shown; but,

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

1. In a switch, a head-chair, D, having face F provided with opening L, in which is journaled a roller, R, substantially as shown and described.

2. In a switch, the combination, with the rails A, A', and B, of the chair D, having a face, F, opening L, and a roller, R, journaled in said opening, substantially as shown and described.

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

WILLIAM J. MORDEN.

Witnesses:

CHAS. KRESSMANN,  
FRANK JOHNSON.