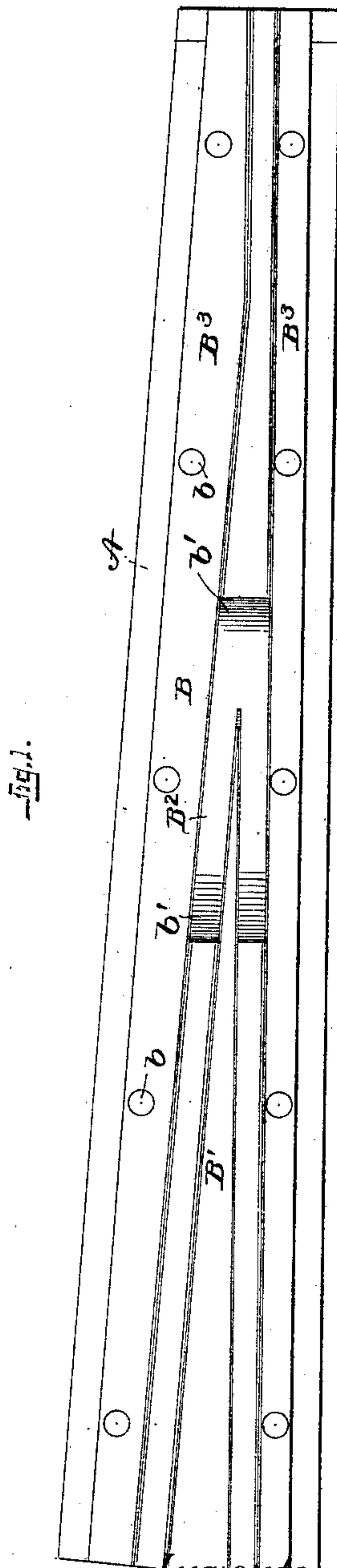
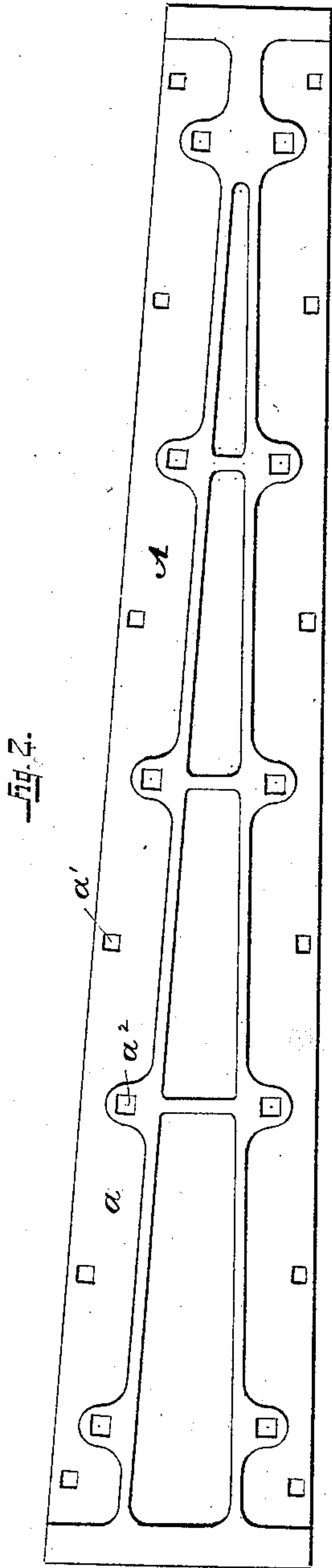
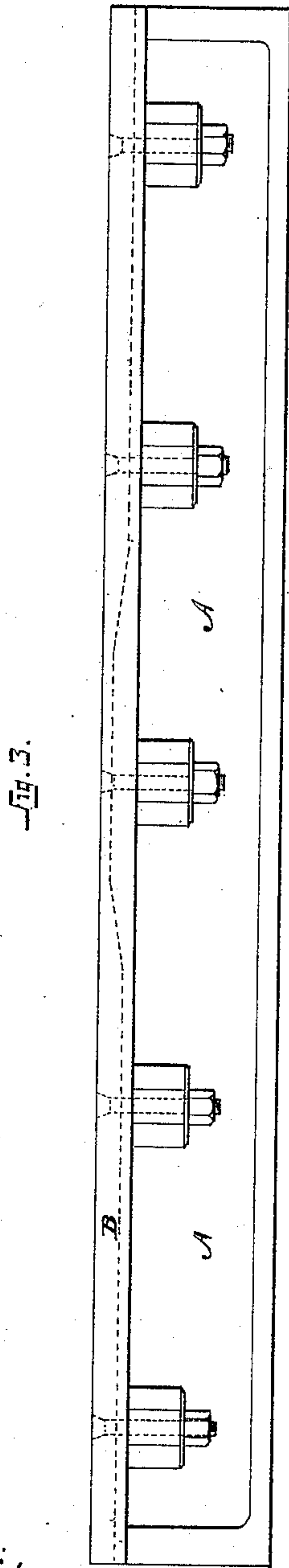


(No Model.)

J. McKENNA.  
BLIND SWITCH.

No. 359,088.

Patented Mar. 8, 1887.



Witnesses:

*W. W. Mead*  
*David H. Mead*

by

Inventor:  
John McKenna,

*A. S. Dykeman*  
his Attorney.

# UNITED STATES PATENT OFFICE.

JOHN McKENNA, OF JOHNSTOWN, PENNSYLVANIA.

## BLIND SWITCH.

SPECIFICATION forming part of Letters Patent No. 359,088, dated March 8, 1887.

Application filed October 14, 1886. Serial No. 216,204. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN McKENNA, a citizen of the United States, residing at Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Blind Switches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to what is known as "blind switches" designed for use on street and other railroads. The objects are to produce a blind switch of such construction that the parts liable to the most wear may be removed and replaced by others when worn.

Furthermore, the object is to produce a switch over which cars may pass without causing the usual jarring.

Furthermore, the object is to prevent injury to the point from being violently struck by wheels of passing cars.

With these objects in view the invention consists, essentially, in a face-plate for a blind switch provided with wing-rails and point, there being between the wing-rails and the point grooves, the bottoms of which rise and form ledges integral with the face-plate.

Furthermore, the invention consists in the combination, with such a face-plate, of a suitable base.

I have illustrated the invention in the accompanying drawings, in which Figure 1 is a plan view of a blind switch made in accordance with my invention. Fig. 2 is a plan view of the base-plate with the upper or face plate removed. Fig. 3 is a side elevation, the dotted lines showing the raised portion, whereby the wheels of passing cars are elevated.

In the drawings, A represents the base-plates which is to be firmly seated either by attaching it to the cross-ties or by embedding it in the ground. At the upper portion of this plate is a flat surface,  $a$ , provided with holes  $a'$  and  $a''$ , the former for the reception of bolts or spikes for attaching the base-plate to the ties or other body embedded in the ground, and the latter for the reception of screws or bolts by which the upper or face plate is attached to the base-plate.

B represents the upper plate, which forms the upper surface of the switch. This is provided with holes  $b$ , for the reception of bolts or screws which pass through them, and also through the holes  $a''$  in the base plate, and thus firmly secure the two plates together. This upper plate is provided with a frog-point,  $B'$ , and with wing-rails  $B''$ , which form continuations of the rails placed adjacent to the switch.

The frog-point is placed where the wing-rails converge, and the surface of the space between the converging rails is provided with an elevation,  $B''$ , which extends a short distance each way from the frog-point, and is integral with the face-plate. The ends  $b'$  of this elevated portion are gradually inclined, and inasmuch as this elevation is so placed that the flanges of the wheels bear upon it, the wheels, and consequently the car to which they are attached, will be raised and will remain in an elevated position until the frog-point is passed. While the wheels are thus elevated they will be transferred from one track to another. Thus it will be seen that the movement from one track to another will be accomplished without jarring or violent contact with the frog.

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

1. A face-plate for a blind switch provided with wing-rails and point integral with it, and there being between the wing-rails and the point grooves, the bottoms of which rise and form ledges also integral with the face-plate, substantially as and for the purpose described.

2. A face-plate provided with wing-rails and point integral with it, and having between the wing-rails and the point grooves, the bottoms of which rise and form ledges also integral with the face-plate, in combination with a base-plate capable of being firmly fixed in position, substantially as described.

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

JOHN McKENNA.

Witnesses:

STEPHEN QUIRK,  
GEORGE H. BROWN.