

C. E. FRANCISCO.
 GUARD DEVICE FOR RAILROAD CROSSINGS.
 APPLICATION FILED FEB. 24, 1912.

1,042,102.

Patented Oct. 22, 1912.

FIG. 1.

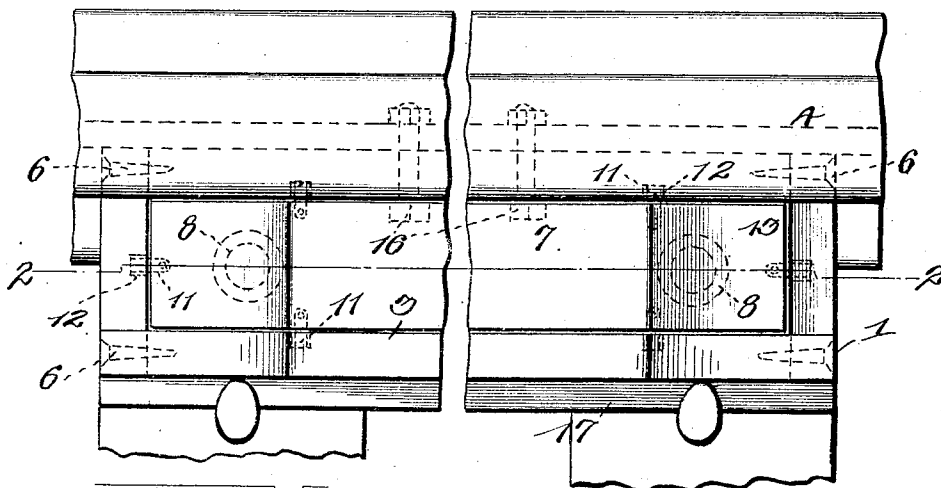


FIG. 2.

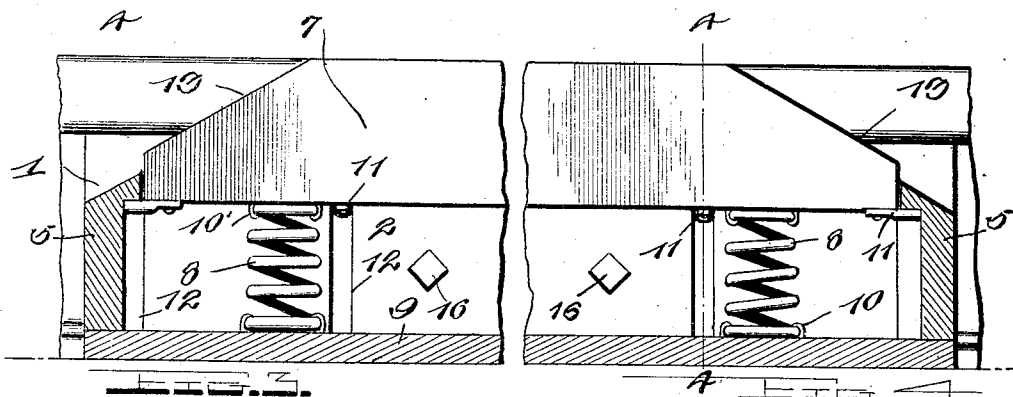
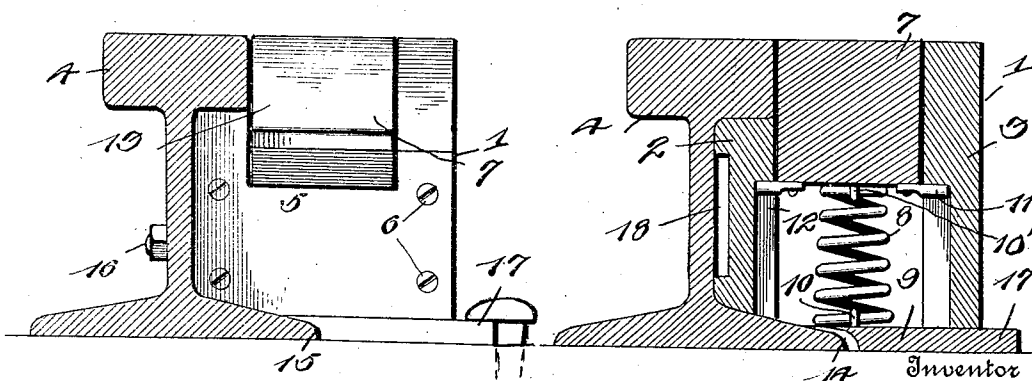


FIG. 3.



Witnesses
 Chas. L. Grinstead.
 A. B. Norton.

By

C. E. Francisco,

Watson E. Coleman
 Attorney

UNITED STATES PATENT OFFICE.

CHARLES E. FRANCISCO, OF WOODSTON, KANSAS, ASSIGNOR OF FIVE-SIXTHS TO JOHN FRANCISCO, WILLIAM E. FRANCISCO, JOHN W. FRANCISCO, ARTHUR A. FRANCISCO, AND CLARA M. FRANCISCO, ALL OF WOODSTON, KANSAS.

GUARD DEVICE FOR RAILROAD-CROSSINGS.

1,042,102.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed February 24, 1912. Serial No. 679,603.

To all whom it may concern:

Be it known that I, CHARLES E. FRANCISCO, a citizen of the United States, residing at Woodston, in the county of Rooks and State of Kansas, have invented certain new and useful Improvements in Guard Devices for Railroad-Crossings, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to new and useful improvements in guard devices for railroad crossings and has for its object to provide a device adapted to be fitted into the space, between the rail and the crossing bed, where
15 the flanges of the wheels run, to prevent this space from becoming filled with dirt, snow, ice and the like.

Another object of this device is to arrange the same between the guard rail and the main rail, so that persons crossing the track at a switch will not catch their feet between the guard rail and the main rail.

Another object of the invention is to provide a device of this character which will
25 possess advantages in points of efficiency and durability, is inexpensive of manufacture and at the same time is simple in construction and operation.

With the above and other objects in view, the invention consists in the novel features of construction and the combination and arrangement of parts hereinafter more fully described, pointed out in the claims and shown in the accompanying drawings, in
35 which—

Figure 1 is a top plan view; Fig. 2 is a sectional view on the line 2—2 of Fig. 1; Fig. 3 is an end elevation; and Fig. 4 is a sectional view on the line 4—4 of Fig. 2.

40 Referring more particularly to the drawings 1 indicates the guard casing which may be secured to the cross ties in any suitable manner, said casing comprising an inner wall 2 which is adapted to abut closely up
45 against the flange of the rail and having its upper edge disposed under the tread of the rail, and an outer wall 3 which is of sufficient height so that its upper edge is on a level with the top of the tread of the rail
50 4. The outer wall 3 is adapted to abut snugly against the crossing bed, which is arranged between the track rails and which may be of any well known construction. End walls 5 are secured to the ends of the

side walls, by means of screws 6 to hold
said side walls securely in place.

A guard member 7 is slidably disposed between the walls 2 and 3, and mounted on the coil springs 8, said springs having their lower ends secured to the base 9 by means
60 of the staples or clips 10 and their upper ends secured to the under side of the guard member by means of the staples 10'. Guide pins 11 are secured to the under side of the guard member 7 and arranged upon the
65 ends and side edges thereof, said pins being slidably arranged in the grooves 12 formed in the side and end walls of the casing 1. This guard member is normally disposed in a position so that the upper face of the
70 guard member is flush with the top of the tread of the rail. The ends of said guard member are beveled off as shown at 13, so that when the flanges of the wheels strike the guard member it will be easily
75 pressed downwardly and compress the springs 8, said springs forcing the guard member back to its normal position when the wheels have passed beyond the ends of the guard member. One side of the base 9
80 is provided with a plurality of notches 14 to provide for the drainage of water which might get into the casing, the edge of said base being designed coincident with the base flange of the rail as shown at 15.

85 The casing 1 may be secured to the rails in any desirable manner, but I preferably provide bolts 16 which pass through the web of the rails and through the side wall 2 of the casing, said bolts having nuts threaded
90 thereon to hold them securely in place. The base 9 may be secured to the rails in any desired manner, but I preferably provide a flange 17 which extends beyond the wall 3 and may be secured to the ties by spikes or
95 other suitable means.

From the above description taken in connection with the drawing, the operation and advantages of my improved guard device will be readily understood. The guard mem-
100 ber 7 is normally disposed so that its upper face is flush with the top of the tread of the rail to prevent any dirt, snow or ice from getting down between the rail and the crossing bed, and when a train passes over the
105 crossing, the flanges of the wheel will run on this guard member and press it down onto the springs 8, said springs forcing the mem-

ber back to its normal position after the train has passed the crossing.

When a joint occurs in the rails at a crossing, I provide a recess 18 on the inner side of the wall 2 to receive the fish plate so the wall 2 will fit snugly against the web of the rail.

While I have shown and described the preferred form of my invention it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope thereof.

It will be understood that various changes in the construction of the device may be made so that the same may be arranged between the main rail and the guard rail at a switch to prevent any person or animal from getting their feet caught between the main rail and the guard rail.

Having thus described the invention what is claimed is:—

1. A guard for railroad crossings, comprising a casing arranged between the rails and the opposed edges of the crossing bed, a vertically movable guard member mounted in said casing, said casing having grooves formed in the side and end walls on the inner face thereof, guide pins carried by said guard member and arranged in said grooves, and coil springs arranged in said casing and bearing against the under side of said guard member.

2. A guard for railroad crossings com-

prising a casing arranged between the rails and the opposed edges of the crossing bed, a vertically movable guard member mounted in said casing and normally disposed so that its upper face is flush with the top of the tread of the rails, said casing having grooves formed in the side and end walls on the inner face thereof, guide pins secured to the bottom of the guard member on the side and ends thereof and arranged in said grooves, coil springs arranged in said casing and bearing against the under side of said guard member to hold it in a normal position.

3. A guard for railroad crossings comprising a base adapted to be secured to the ties, side and end walls securely fastened together, said casing being arranged between the rails and the opposed edges of the crossing bed, one of said side walls being adapted to abut against the web of the rail and disposed under the tread of the rail, means for securing said side wall to the rail, a vertically movable guard member mounted in said casing and normally disposed so that its upper face is flush with the top of the tread of the rail, and coil springs mounted in said casing and bearing against the under side of the guard member to hold it in a normal position.

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

CHARLES E. FRANCISCO.

Witnesses:

T. M. JOHNSON,
MINNIE BRUTON.