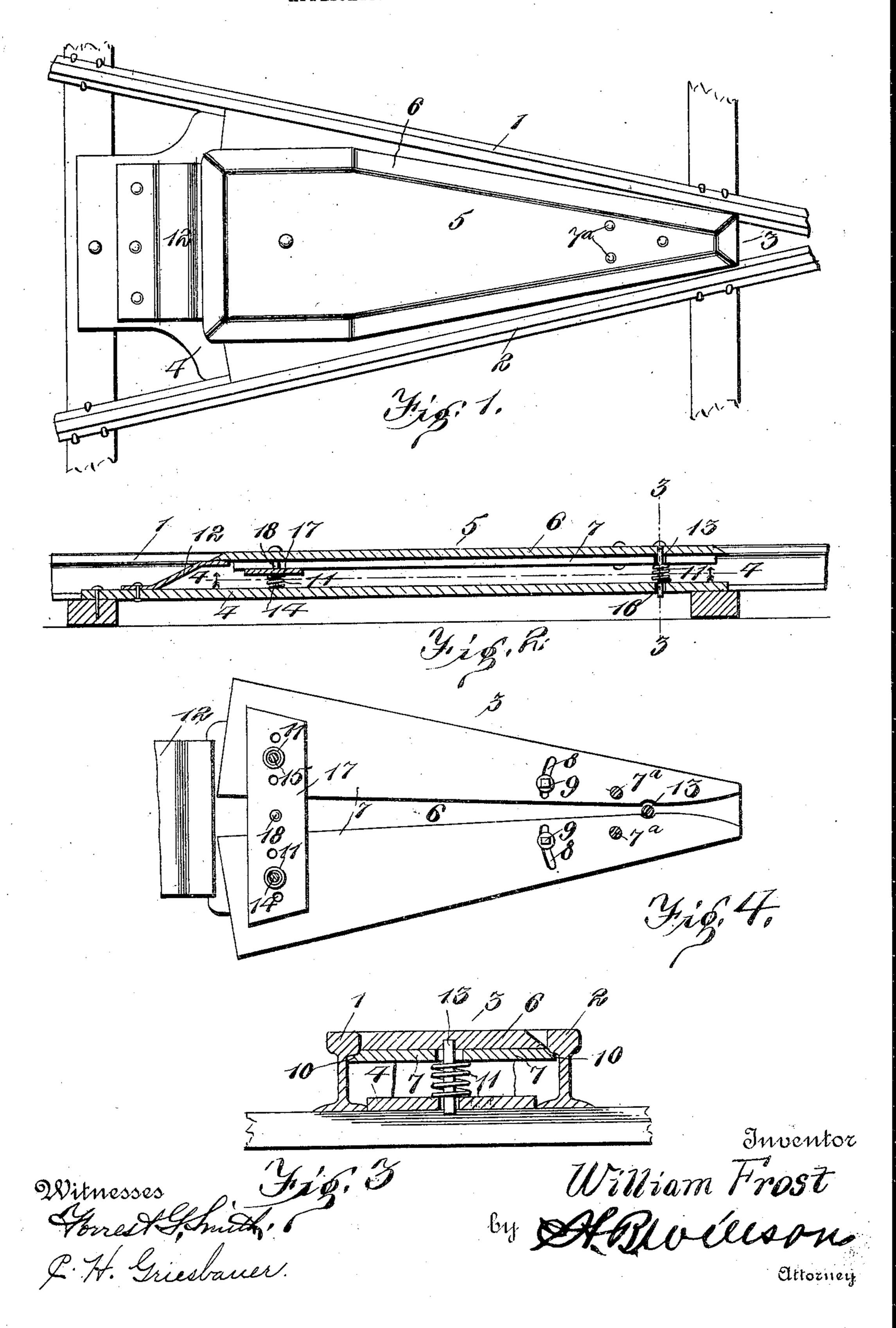
W. FROST.

RAILWAY FOOT GUARD.

APPLICATION FILED MAY 9, 1905.



UNITED STATES PATENT OFFICE.

WILLIAM FROST, OF PETERSBURG, ILLINOIS, ASSIGNOR OF ONE-HALF TO WILLIAM DENTON, OF PETERSBURG, ILLINOIS, AND ONE-FOURTH TO GEORGE S. POWER, OF PETERSBURG, ILLINOIS.

RAILWAY FOOT-GUARD.

No. 798,178.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, William Frost, a citizen of the United States, residing at Petersburg, in the county of Menard and State of Illinois, have invented certain new and useful Improvements in Railway Foot-Guards; and I do 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.

My invention relates to improvements in spring-supported foot guards or blocks for railway-switches, switch-frogs, guard-rails,

and the like.

The object of the invention is to improve and simplify the construction and operation of devices of this character and thereby render the same more efficient in operation, less expensive to manufacture, and adapted for use between rails disposed at various angles to each other.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended

claims.

In the accompanying drawings, Figure 1 is a top plan view of my improved foot-guard, showing the same mounted between two converging track-rails. Fig. 2 is a vertical longitudinal sectional view through the same. Fig. 3 is a vertical transverse sectional view taken on the line 3 3 in Fig. 2, and Fig. 4 is a horizontal sectional view taken on the line 4 4 in Fig. 2 looking in the direction indicated by the arrow.

Referring to the drawings by numerals, 1 and 2 denote two converging track-rails between which my improved foot-guard 3 is mounted. The latter comprises a bottom plate or base 4 of substantially triangular form, which is adapted to be secured upon the crossties by spikes or other suitable fastening

45 means.

Upon the bottom or base 4 is yieldably supported a top 5; which is made adjustable, so as to fit between the heads of rails disposed at different angles to each other. This lateral expansion or adjustment of the top 5 is preferably effected by forming the same of a tapered central section 6 and two sliding and swinging side sections 7, which are also ta-

pered and which have their small ends pivoted, as shown at 7^a, to the under side of the small 55 end of the central section 6. By thus pivoting the side sections 7 they may be swung angularly to increase or decrease the size of the top, as will be readily seen upon reference to Figs. 1 and 4 of the drawings. In order to 60 hold these side sections 7 in an adjusted position, I preferably form them with curved slots 8, arranged concentric with their pivots and adapted to receive set-screws 9, which enter threaded recesses or sockets formed in 65 the under side of the central section 6. The outer edges of the side sections 7 are grooved to form flanges 10, which are adapted to engage the under sides of the heads of the rails.

In order to yieldably support the top 5, so 70 that it may be depressed by the flanges of the car-wheels passing over the track-rails, but not by the weight of a person or an animal stepping thereon, I preferably provide a series of coil-springs 11 and a flat spring 12, 75 which latter is secured at one end of the base or bottom 4 and is adapted to have its free end bearing against the under side of the rear end of the central section 6 of the top 5, as clearly shown in the drawings. The coil- 80 springs 11, which are interposed between the base or bottom 4 and the top 5, surround guidepins 13 14 15, which are carried by the top and are adapted to slide freely in opening 16, formed in the bottom or base 4. The pin 13 85 at the small end of the top 5 is secured to the under side of the central section 6 and projects through recesses or notches formed in the inner edges of the side sections 7, and the two guide-pins 14 15 are disposed adjacent 90 to the large end of the top 5 and are secured in a cross-plate 17, which is disposed beneath the side sections 7 and secured centrally, as shown at 18, to the under side of the central section 6 between the inner edges of the two 95 side sections 7, as clearly shown in Fig. 4 of the drawings.

The construction, operation, and advantages of the invention will be readily understood from the foregoing description, taken in connection with the accompanying drawings.

It will be seen that by making the top of the block or guide laterally adjustable the device may be adapted for use between rails disposed at various angles to each other and that 105 by reason of the simple and durable construc-

tion shown in the drawings the device may be readily applied and will effectively prevent the foot of a person or animal from becoming so tightly wedged between the converging 5 rails as to render it impossible for them to free themselves before the approach of a train.

While I have shown and described the preferred embodiment of my invention, it will be understood that various changes in the 10 form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what 15 I claim as new, and desire to secure by Letters

Patent, is—

1. A railway-switch guard having a top formed of a central section and side sections slidably and adjustably mounted thereon.

2. A railway-switch guard comprising a bottom and a spring-supported top thereon, and pivotally-mounted, laterally-extensible sections upon said top.

3. A railway-switch guard comprising a 25 bottom, aspring-supported top thereon, angu-

larly-swinging side sections upon said top and means for holding said side sections in ad-

justable positions.

4. A railway-switch guard comprising a bottom or base formed with apertures, a top 30 formed of a central section and two side sections, said side sections being pivotally connected to the top section, a slot-and-screw connection between said side sections and said central sections to hold the former in an ad- 35 justed position upon the latter, guide-pins carried by said top and adapted to slide in the apertures in said bottom or base, coil-springs surrounding said guide-pins, and a flat spring secured upon said bottom or base and adapted 40 to engage the under side of said top, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-

nesses.

WILLIAM FROST.

Witnesses: CHARLES FIN, THEO C. BENNETT.