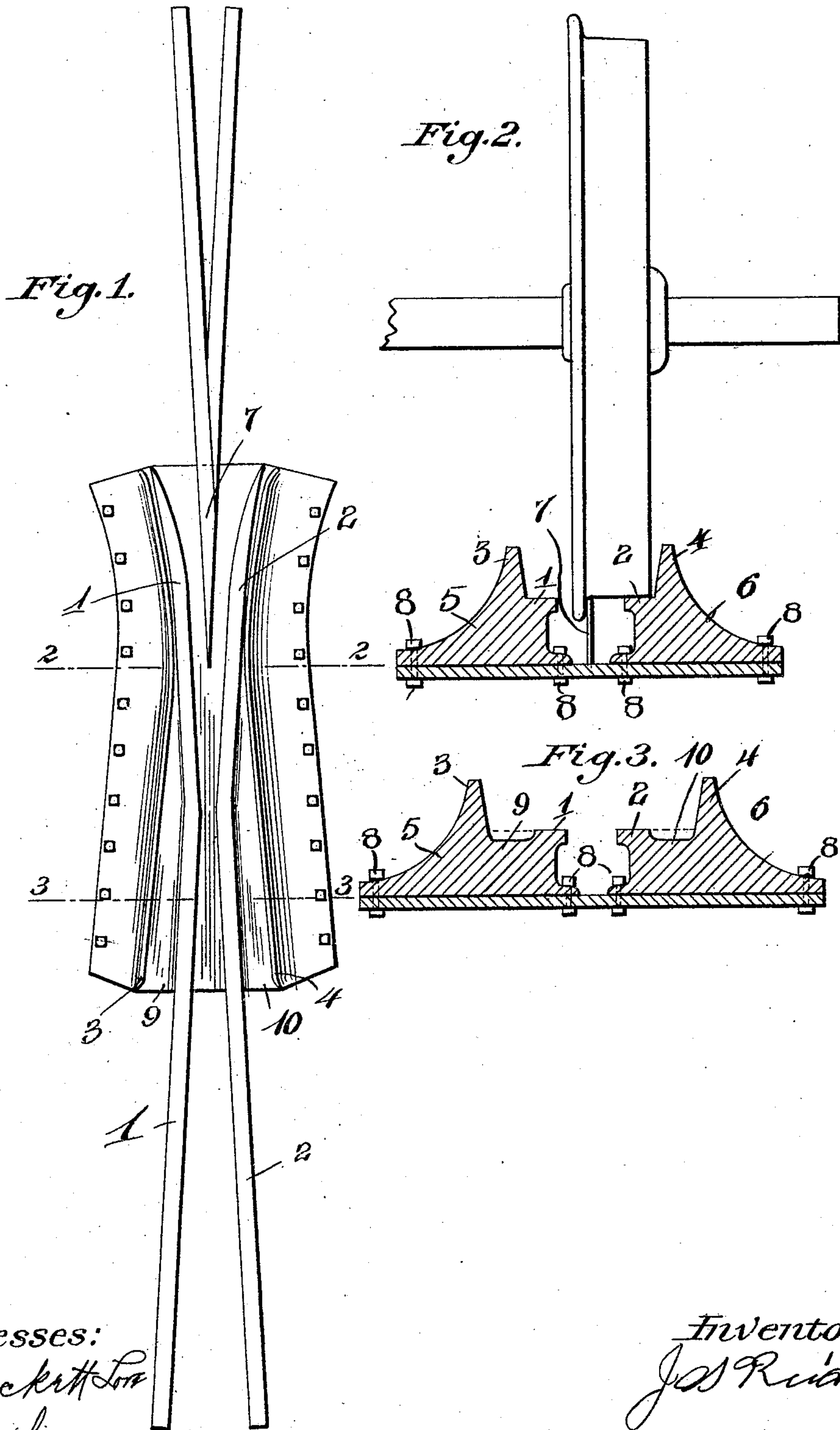


J. REID.  
SAFETY FROG.

APPLICATION FILED SEPT. 3, 1908.

929,249.

Patented July 27, 1909.



Witnesses:

Lockett Lora  
Hewkinson

Inventor:

J. Reid

# UNITED STATES PATENT OFFICE.

JAMES REID, OF DEWMAINE, ILLINOIS.

## SAFETY-FROG.

No. 929,249.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed September 3, 1908. Serial No. 451,626.

*To all whom it may concern:*

Be it known that I, JAMES REID, a citizen of the United States, residing at Dewmaine, in the county of Williamson and State of Illinois, have invented a new and useful Safety-Frog, of which the following is a specification.

This invention relates to improvements in safety railway frogs.

The objects of the invention are to simplify the construction and increase the efficiency of the device, to provide a solid one-piece guard rail and frog point thereby rendering it impossible for the wheel to split the frog, and to dispense with the guard rail on each side of opposite rails and to cheapen the cost of manufacture of such devices.

With these 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 claim.

In the accompanying drawings: Figure 1 is a top plan view of a frog constructed in accordance with this invention; Fig. 2 is a transverse section thereof taken on line 2—2 of Fig. 1 showing an edge view of a wheel in operative position thereon; and, Fig. 3 is a similar view taken on line 3—3 of Fig. 1.

In the embodiment illustrated 1 and 2 designate a pair of frog rails and 3 and 4 guard rails all cast integral with the frog blocks 5 and 6, and 7 is a frog point arranged at one end of the frog between the diverging ends of the rails 1 and 2.

The frog blocks 5 and 6 which are counterparts of each other are held suitably assembled by bolts as 8 and they may be either rolled or cast as desired.

The rails 1 and 2 converge toward each other at a point approximately midway the length thereof and they diverge toward their opposite ends. The integral guard rails 3

and 4 are spaced laterally at one end from the wheel tread engaging rails 1 and 2 and converge toward each other and toward the tread rails at a point opposite the frog point 7 and depressions 9 and 10 are arranged between said guard and tread rails, said depressions tapering out to the level of the top of the tread rails 1 and 2 at the point of the frog as shown clearly in Fig. 2. At the end of the frog which carries the frog point 7 the guard rails conform approximately to the tread rails and are arranged in close proximity thereto as is clearly shown in Fig. 1.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the 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.

I claim as my invention:

A railway frog composed of frog blocks having guard and tread rails formed integral therewith said tread rails converging toward each other near the middle of the block and diverging at their opposite ends, a frog point arranged at one end between said diverged tread rails, the guard rails being spaced laterally at one end thereof, said guard rails converging at the frog point and then extending parallel with and in close proximity to the tread rails throughout the remainder of their length, said frog blocks having depressions in their upper faces arranged between the guard and tread rails at the end opposite the frog point and tapering out to the level of the tread rails at the frog point.

JAS. REID.

Witnesses:

LOCKETT LOVE,  
HERBERT E. WELMAN.