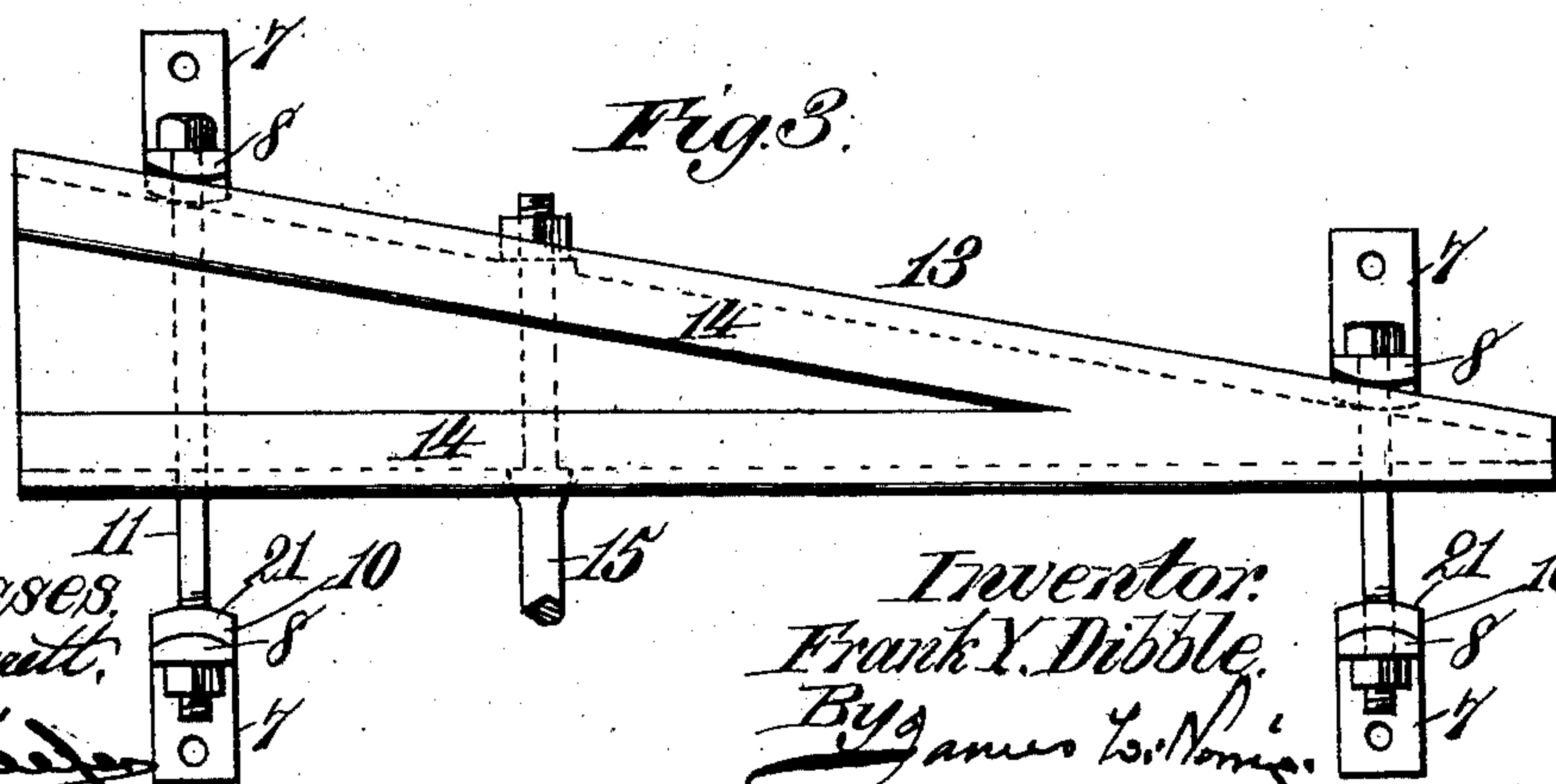
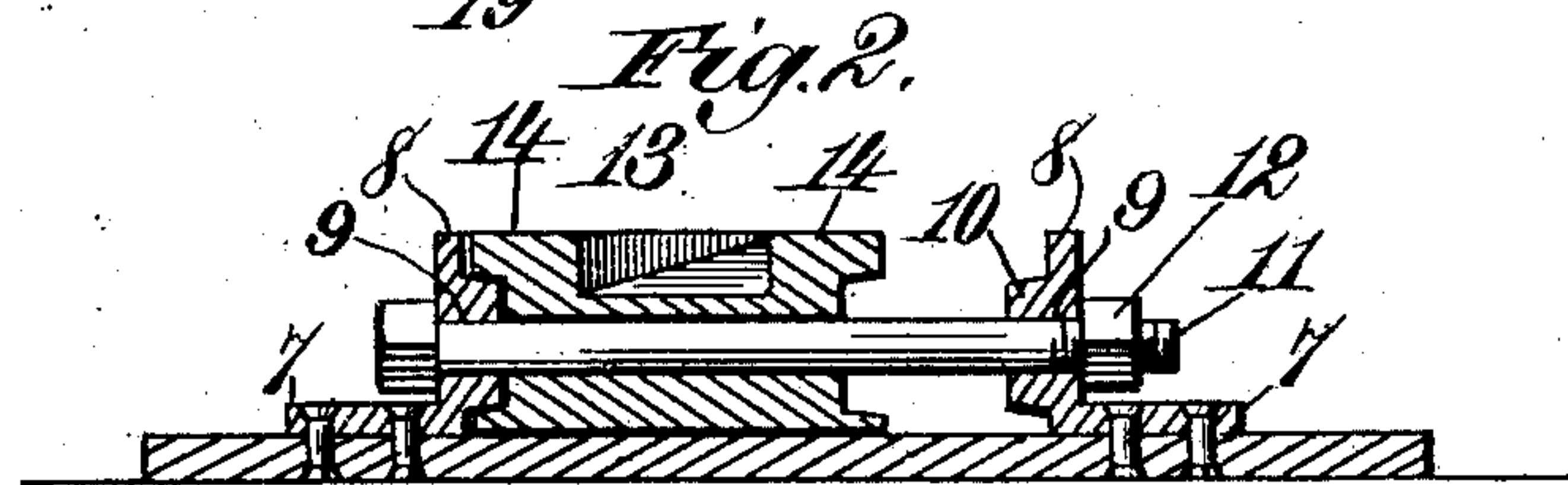
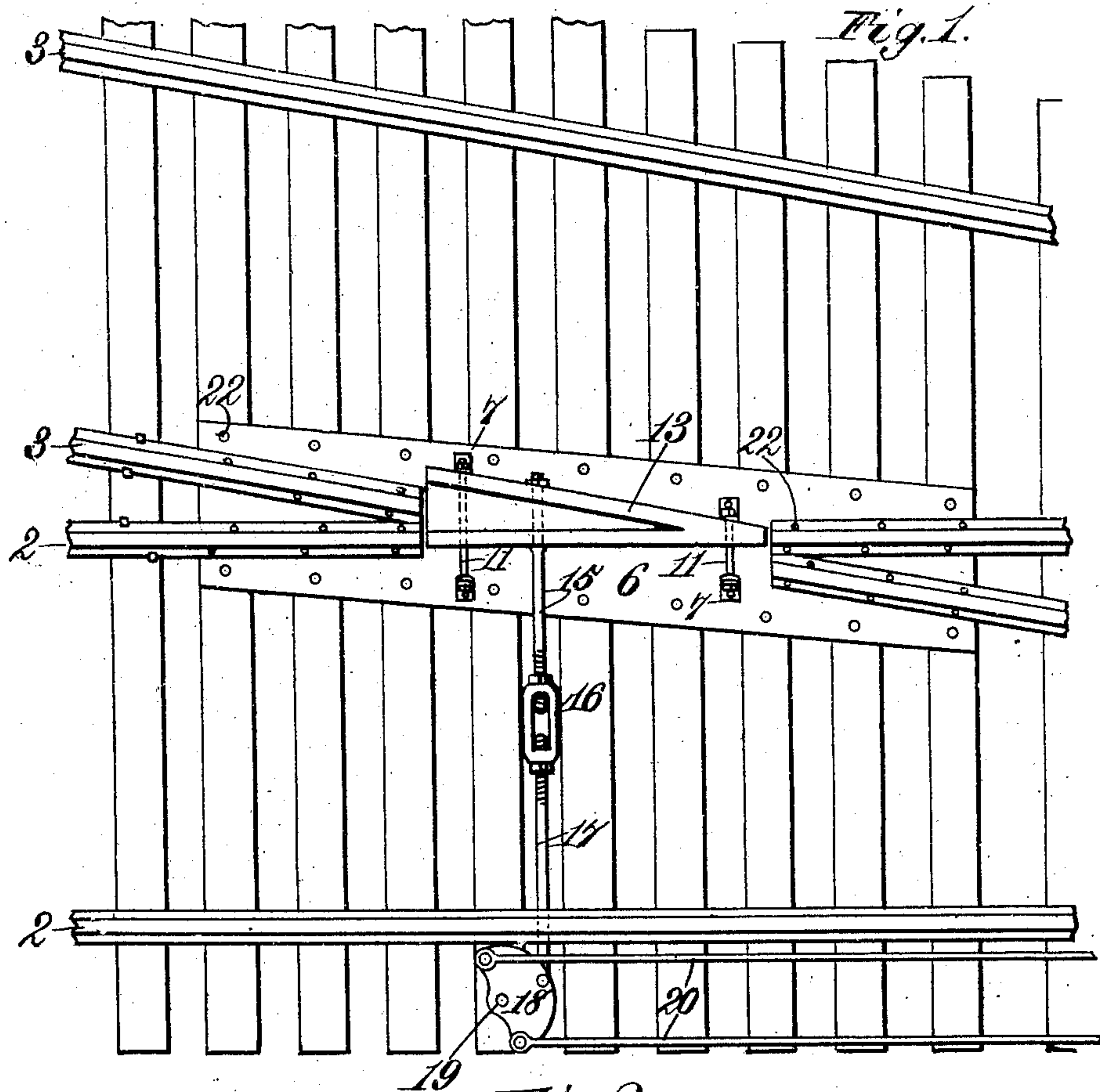


No. 837,807.

PATENTED DEC. 4, 1906.

F. Y. DIBBLE.  
RAILWAY FROG.

APPLICATION FILED APR. 21, 1906.



Witnesses  
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By James L. Norris,

Att'y.



# UNITED STATES PATENT OFFICE.

FRANK Y. DIBBLE, OF COLORADO CITY, COLORADO, ASSIGNOR OF ONE-FIFTH TO FRED J. BELLMER, ONE-FIFTH TO JOHN W. FLETMEYER, AND ONE-FIFTH TO GEORGE W. HARRIS, OF COLORADO CITY, COLORADO.

## RAILWAY-FROG.

No. 837,807.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed April 21, 1906. Serial No. 313,057.

*To all whom it may concern:*

Be it known that I, FRANK Y. DIBBLE, a citizen of the United States, residing at Colorado City, in the county of El Paso and State of Colorado, have invented new and useful Improvements in Railway-Frogs, of which the following is a specification:

The invention relates to railway-frogs, and more particularly to the class of movable railway-frogs.

The primary object of the invention is the provision of a movable frog at the crossing-point of railway-rails which is adapted to be shifted transversely with respect to the longitudinal extent of the track-rails.

Another object of the invention is the provision of a movable frog capable of being shifted bodily from the crossing-rail of the side track to one of the rails of the main track, thereby providing a continuous rail over which the wheels of a passing train are to move.

A further object of the invention is the provision of a movable frog which when operated will move in a uniform manner and with the least possible friction.

Other objects of the invention are the provision of means which will be simple, efficient, durable, and least expensive in the manufacture.

With these and other objects in view the invention consists in the construction, combination, and arrangement of parts, as will be hereinafter referred to and as illustrated in the accompanying drawings, which disclose the preferred embodiment of the invention. However, it is to be understood that I may make such changes, variations, and modifications as come properly within the scope of the claims hereunto appended.

In the drawings, Figure 1 is a plan view of a railway-crossing, showing the movable frog in one of its positions. Fig. 2 is a fragmentary cross-sectional view on the line 2-2 of Fig. 1, and Fig. 3 is a plan view of the movable frog and its supporting members detached.

Similar numerals or characters indicate corresponding parts throughout the several views.

In the drawings the numeral 2 designates the rails of the straight or main track, and 3 the rails of the crossing or side track, the lat-

ter adapted to meet the straight or main track through the medium of a slight curve and the switch point or tongue of the usual construction and guide-rails of the usual construction and at a point of intersection of one of each of the straight and main track rails 2 and the crossing or side track rails 3. The same are severed and form abutting terminals. Arranged below the abutting terminals and extending throughout the space between the same is a bed-plate 6, the latter being secured in any suitable manner to the railway-ties of the usual construction, and the same is composed, preferably, of iron or steel. However, any other material may be used as found desirable. On the upper face of the bed-plate 6 are secured brackets 7, suitably spaced from one another and with respect to the abutment-terminals of the rails and arranged opposite one another. Each of the said brackets 7 is provided with upwardly-projecting ears 8, having an opening 9, and the inner face thereof having a protuberance 10, forming a stop. Mounted in the openings of the brackets 7 are guide-rods 11, the same preferably formed in the shape of a bolt having a threaded terminal for receiving a nut 12, so that the said guide-rods 11 can be secured in position in the brackets 7. Slidably mounted on the guide-rods 11 is a frog 13 of substantially V-shaped form and the upper surface thereof providing a sectional V-shaped flange forming guide-rails. The surface of the space intermediate the flanged portion 14 of the frog 13 and at the widest extremity produce a tapering inclination direct toward the reduced extremity of the frog 13, so as to provide a bearing-surface for the flange of the wheel as the same leaves either the rail 2 of the main track or the rail 3 of the side track for assuring the travel from the frog 13 onto the continuation of either the rails 2 or 3 of the tracks.

At a suitable point intermediate the extremities of the frog 13 is connected a rod 15, so that when the said frog is moved in its several directions it will cause the same to slide in a uniform manner on the guide-rods 11, thus obviating any unnecessary liability of frictional binding on the latter, and, furthermore, the protuberance 10 on the inner faces of the ears 8 will limit the throw of the said frog 13 and will accurately position the



same with respect to the abutment-terminals of the rails 2 of the main track and the rails 3 of the side track. Connected to the rod 15 through the medium of a turnbuckle 16 is a rod 17, the free terminal pivotally connected to a segment-shaped member 18, the latter movably connected to one of the railway-ties by a pivot 19 and adapted when actuated to move the frog 13 to the desired extent on the guide-rods 11. For actuating the segmental member 18 are connected rods 20, arranged in parallelism at a point outside of the marginal rail of the main track and the opposite terminals thereof pivotally connected to a segmental member of a character similar to the first-mentioned segmental member, said member being pivotally connected to the railway-tie and having pivotally connected thereto a rod, (not shown,) the latter capable of being manually operated for the purpose of shifting the position of the frog 13. However, the organization of parts for shifting the frog 13 in its various positions forms no part of the invention, as I may substitute any suitable organization which could be automatically operable or otherwise, and such construction herein being shown simply to present a suitable operating mechanism whereby the frog can be thrown.

It will be apparent that the upturned ears 8 and the protuberance 10 of the brackets 7 and at the inner faces thereof are convexed, as at 21, for the purpose of preventing the frog 13 when shifted in either direction from sticking, due to the climatic changes in the atmosphere or rusting thereof, and also to allow the correct positioning of the frog 13 with respect to the abutment-rails.

It is obvious that the contraction and expansion of the rails at the end of the movable frog due to climatic changes will not affect the working qualities of the same, as the said rails are secured by anticreepers or by bolts 22 to the bed-plate 6 or in any other suitable manner to prevent wedging of the movable frog, as specified.

Having described the invention, what I claim is—

1. In intersecting tracks, a bed-plate mounted below the same, a plurality of spaced brackets arranged opposite one an-

other, and having stops, guide-rods mounted in the brackets and arranged in parallelism and transversely of the bed-plate, and a slidable frog having a V-shaped flange forming a rail mounted on said guide-rods.

2. In a railway-frog, abutment-rails spaced from one another, a bed-plate mounted below the same; brackets secured to said bed-plate at suitable intervals from one another and oppositely disposed, guide-rods supported by said brackets, and a frog slidably mounted on said guide-rods and having an upwardly-extending V-shaped flange forming a rail, the surface therebetween being on an inclination forming a bearing.

3. In a railway-frog, the combination with intersecting tracks, of a bed-plate, a plurality of brackets having upturned ears connected to said plate, stops on said ears, guide-rods mounted in the brackets and arranged in parallelism transversely of the bed-plate, and a slidable frog mounted on each of the guide-rods for directing a uniform movement of said frog, said frog having an inclined bearing-face.

4. In a railway-frog, intersecting tracks, a bed-plate supporting the intersecting tracks, guide-supports mounted on said bed-plate, and a slidable frog guided by said supports.

5. In a railway-frog, a bed-plate adapted to receive the ends of the main rails and side rails, guide-rods supported by said bed-plate, and a movable frog slidable on said guide-rods and having an inclined bearing-face.

6. In a railway-frog, a bed-plate, brackets secured to said bed-plate and arranged a distance from one another, and oppositely-disposed guide-rods secured to said brackets and in parallel relation to one another, and a frog slidable on said guide-rods, said frog having a V-shaped upwardly-extending flange and the face therebetween forming a tapering bearing-surface.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK Y. DIBBLE.

Witnesses:

FRED J. BELLMER,  
JOHN W. FLETMEYER.