

No. 681,469.

Patented Aug. 27, 1901.

C. H. WILSON:
RAILWAY SWITCH.

(Application filed Apr. 18, 1901.)

(No Model.)

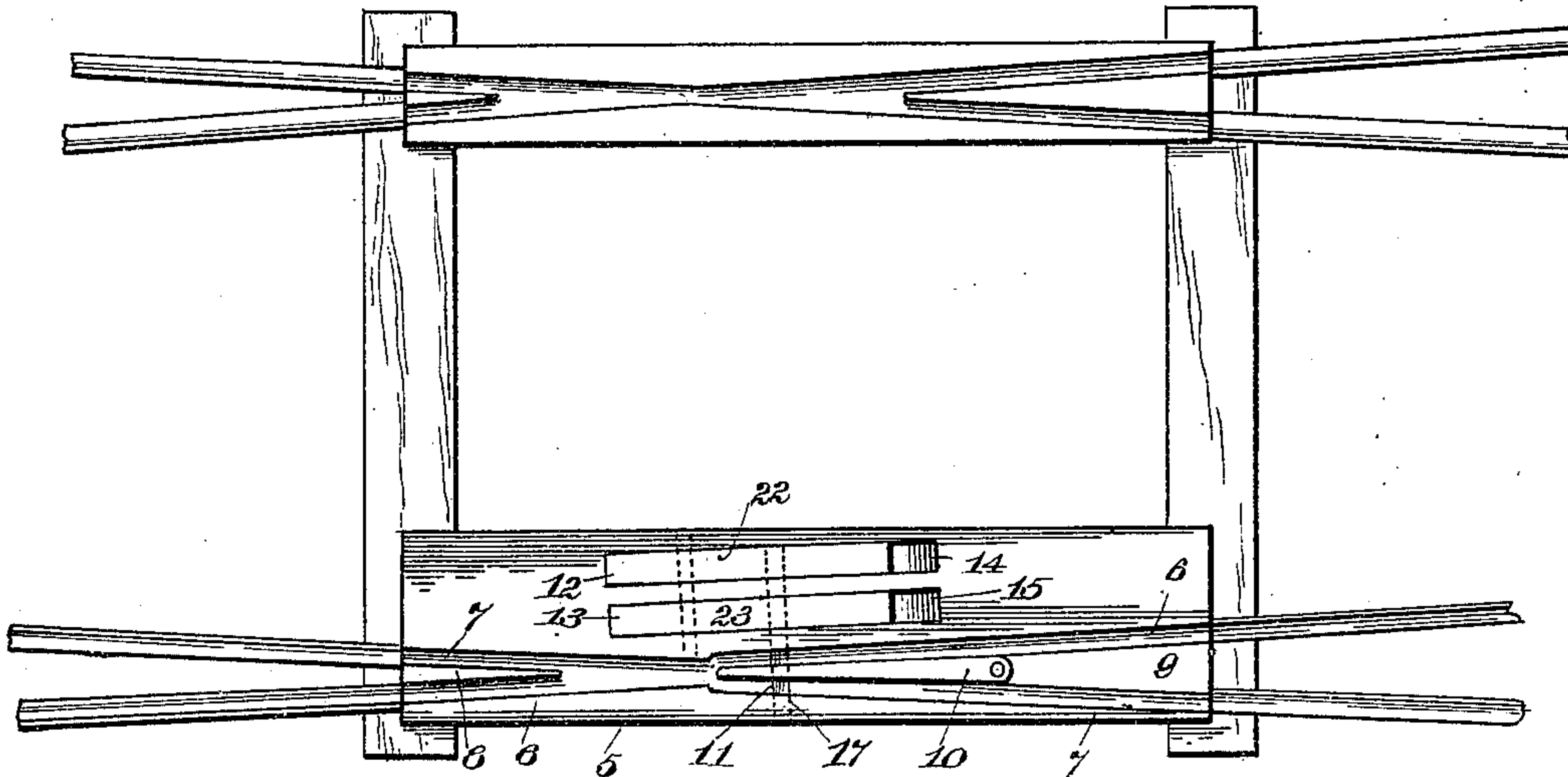


Fig. 1.

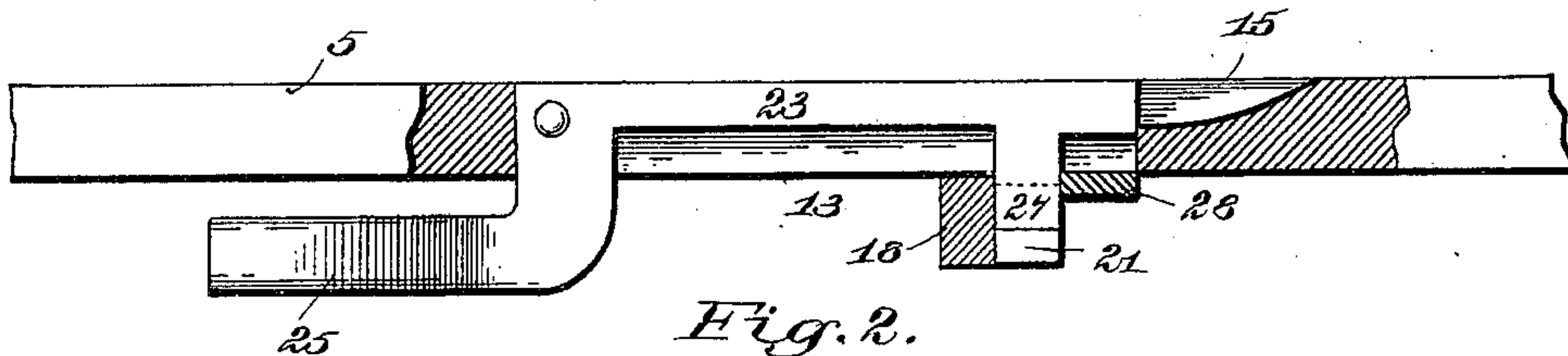


Fig. 2.

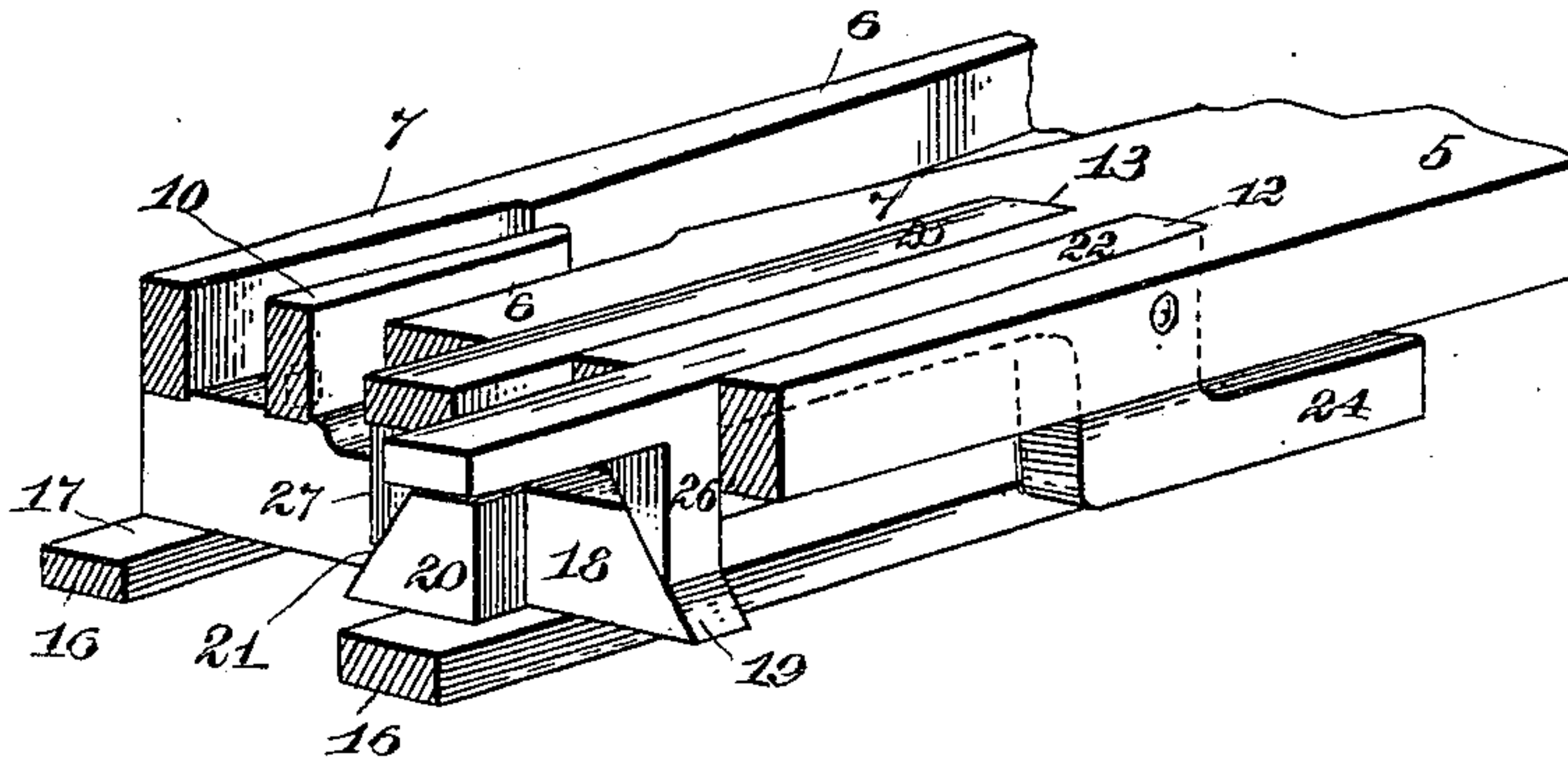


Fig. 3.

Witnesses:

Wm. H. Varnum.

C. S. Miller.

Inventor:

Charles B. Wilson
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UNITED STATES PATENT OFFICE.

CHARLES H. WILSON, OF LYNN, MASSACHUSETTS.

RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 681,469, dated August 27, 1901.

Application filed April 16, 1901. Serial No. 56,076. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. WILSON, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Railway-Switches, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to improvements in railway-switches, and particularly in that class of railway-switches which are adapted to be actuated by depressible mechanism mounted adjacent to the railway.

15 One object of the invention is to provide a simple and compact switch-actuating mechanism.

20 Another object of the invention is to provide a switch-actuating mechanism which shall be positive in its operation.

The further object of the invention is to improve the general construction of the switch.

25 The invention also consists in such novel features of construction and combination of parts as shall hereinafter be more fully described, and pointed out in the claim.

30 In the drawings, Figure 1 represents a plan view of a railway provided with the improved switch. Fig. 2 represents a side elevation, partially in section, of portions of the same. Fig. 3 represents a perspective view of portions of the same to more clearly show the construction and relation of the parts.

35 Similar numbers of reference designate corresponding parts throughout.

40 In carrying this invention into practice I construct a bed-plate 5, having the grooves 6 6 and 7 7 with the frogs 8 and 9 and provided with the pivoted tongue 10, forming a swinging extension of the frog 9. In the bottom of this bed-plate 5 is formed the lateral slot 11, and through the thickness of the bed-plate are formed parallel openings 12 and 13, 45 which have the inclined exits 14 and 15 and are also parallel to the grooves 6 6. Beneath the bed-plate 5 and mounted to move laterally on any usual supports, as the plates 16 16, is the switch-tongue actuator 17, pivotally connected with the switch-tongue 10, 50 having the portion 18, considerably less in height than the main portion, which is furnished with the inclined or cam end 19 and

with the lateral projection 20, having the inclined cam-face 21. In the openings 12 and 13 are pivoted the plates 22 and 23, each having a weighted arm 24 or 25, the plate 22 having the depending cam 26, the inclined face of which bears against the face of the cam 20. The free ends of the plates 22 and 23 are depressible until their lower surfaces strike the steps, as 28, at which time the upper surfaces of these plates are brought opposite the surfaces of the exits 14 and 15. Means are provided on the cars which may be brought 65 against either of the plates 22 or 23 to depress the same as the car approaches the switch. The depressing of the free end of the plate 22 causes the inclined face of the cam 26 to work against the face of the cam 19, thus 70 forcing the actuator 17 and the free end of the switch-tongue toward the rail 7, while the depressing of the free end of the plate 23 causes the cam 27 to work against the cam 20 to move the actuator 17 in the opposite di- 75 rection and to cause the seating of the end of the tongue 10 against the rail 6, the mechanism which bears against the plates 22 or 23 passing out from between the walls of the openings 12 and 13 by means of the inclined 80 exits 14 or 15 and the weighted arms 24 or 25 of the plates then causing the raising of the plates to the plane of the bed 5.

It is of course obvious that any usual depressing means may be used to depress the 85 plates 22 or 23 and that the proportions of these plates must depend somewhat upon the nature and size of this depressing means as also of the precision of its operation.

Having thus described my invention, I 90 claim as new and desire to secure by Letters Patent—

The combination with the bed-plate 5 having the openings 12 and 13, and the plates 22 and 23 pivoted in such openings and having the 95 arms 24 and 25 and the cams 26 and 27, of the actuator mounted to move laterally beneath such bed-plate and having the cam 19 and the extension 20 with its cam-face 21, as and for the purpose described. 100

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

CHARLES H. WILSON.

Witnesses:

CHAS. ALLEN TABER,
H. J. MILLER.