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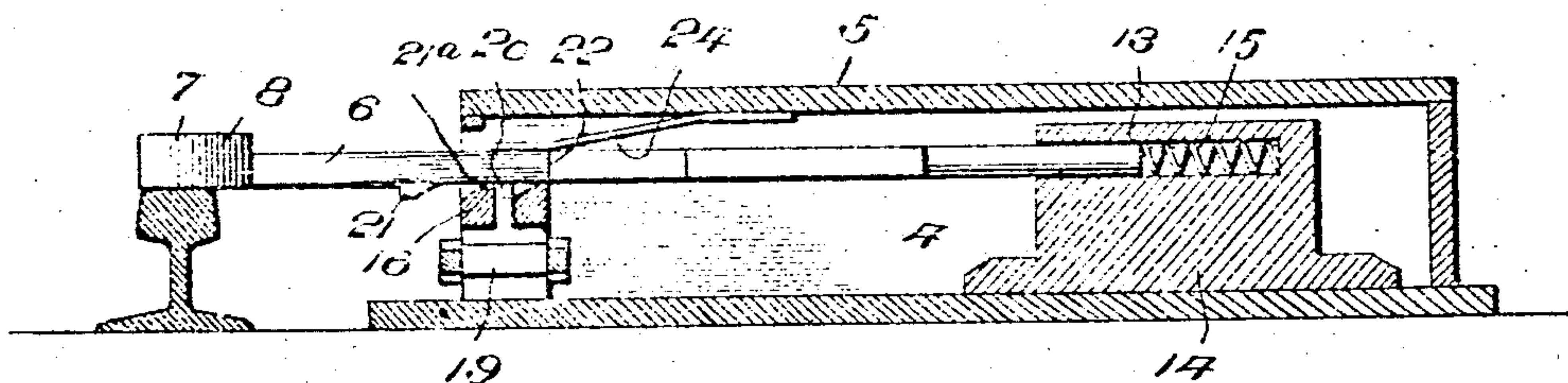
C. W. CLARKE.  
DERAILING DEVICE.

APPLICATION FILED JULY 6, 1907.

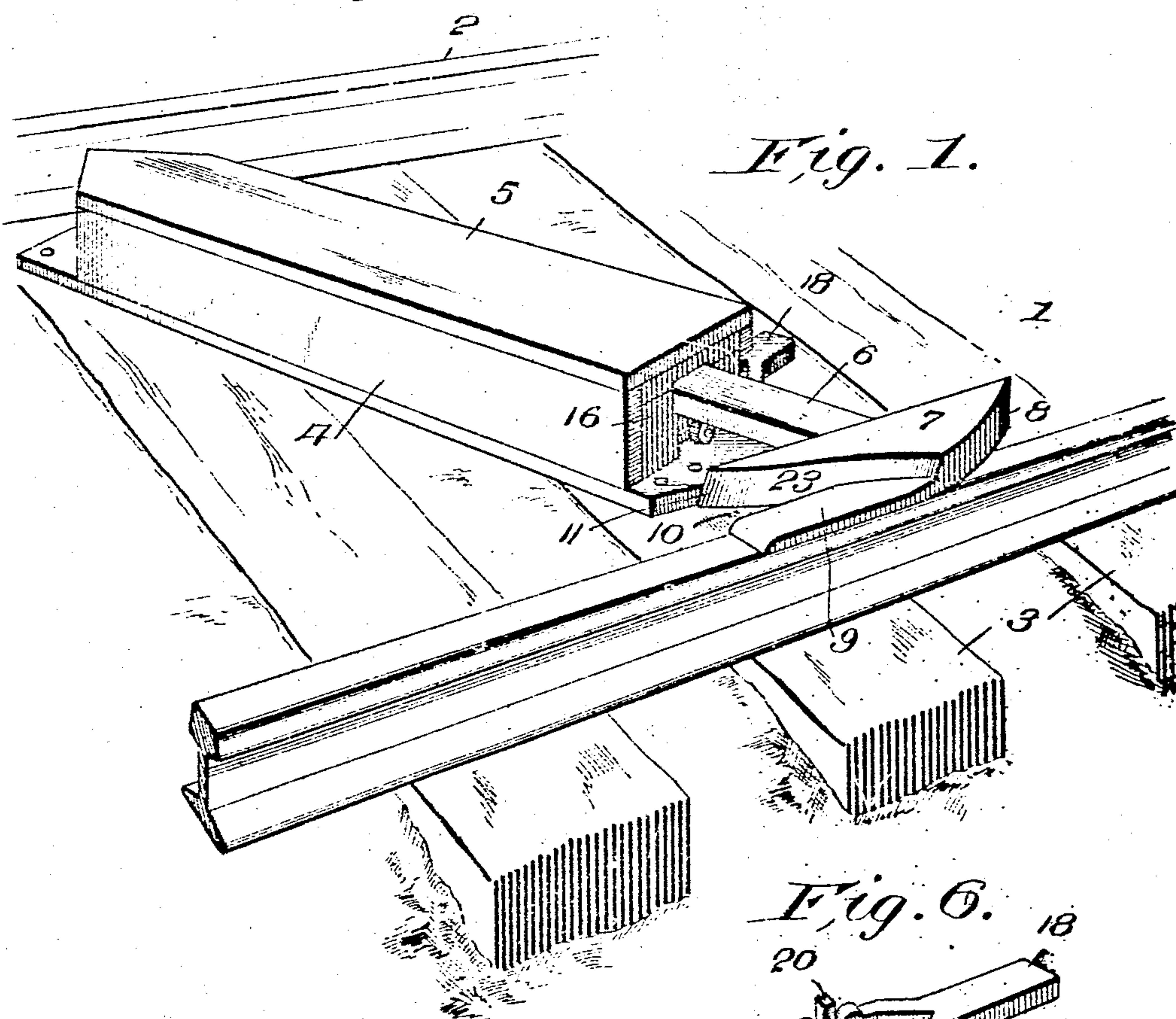
PATENTED MAR. 3, 1908.

3 SHEETS—SHEET 1.

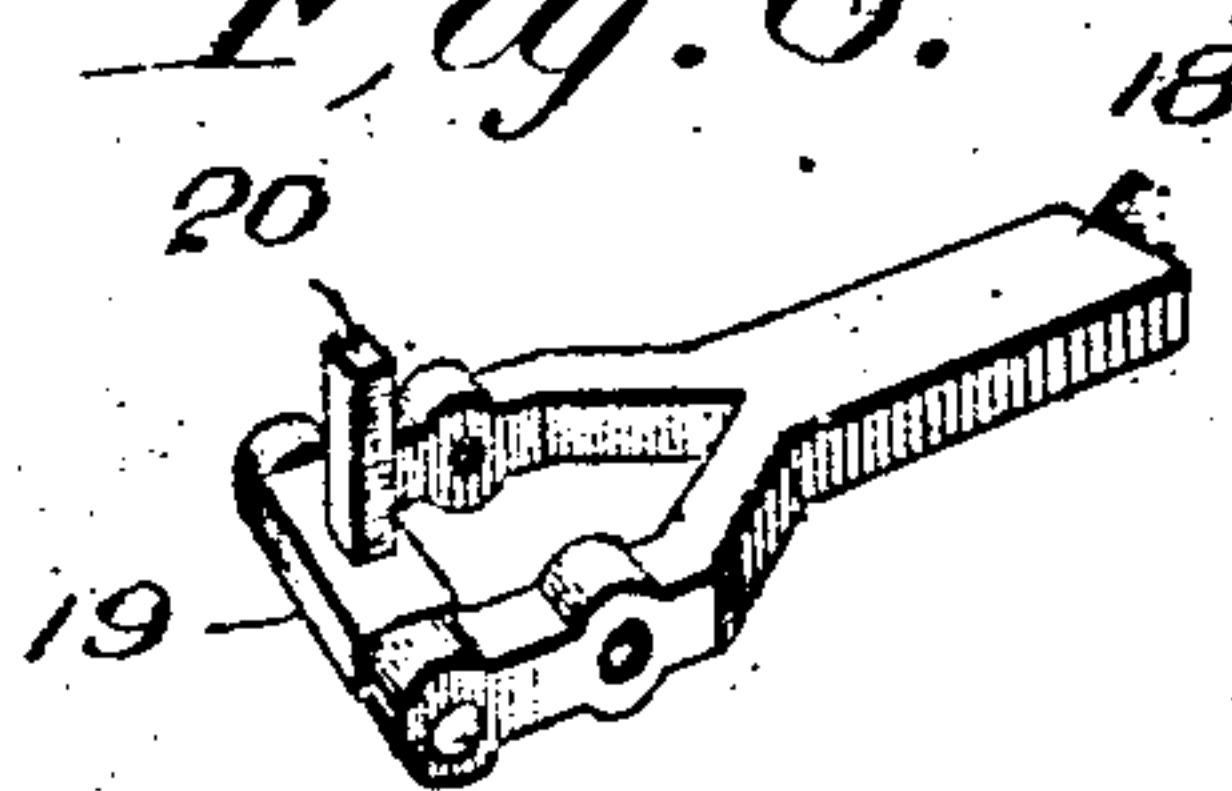
*Fig. 5.*



*Fig. 1.*



*Fig. 6.*



**ឱកាសនៃការ**

C. W. Clark

**Witnesses**

Witnesses  
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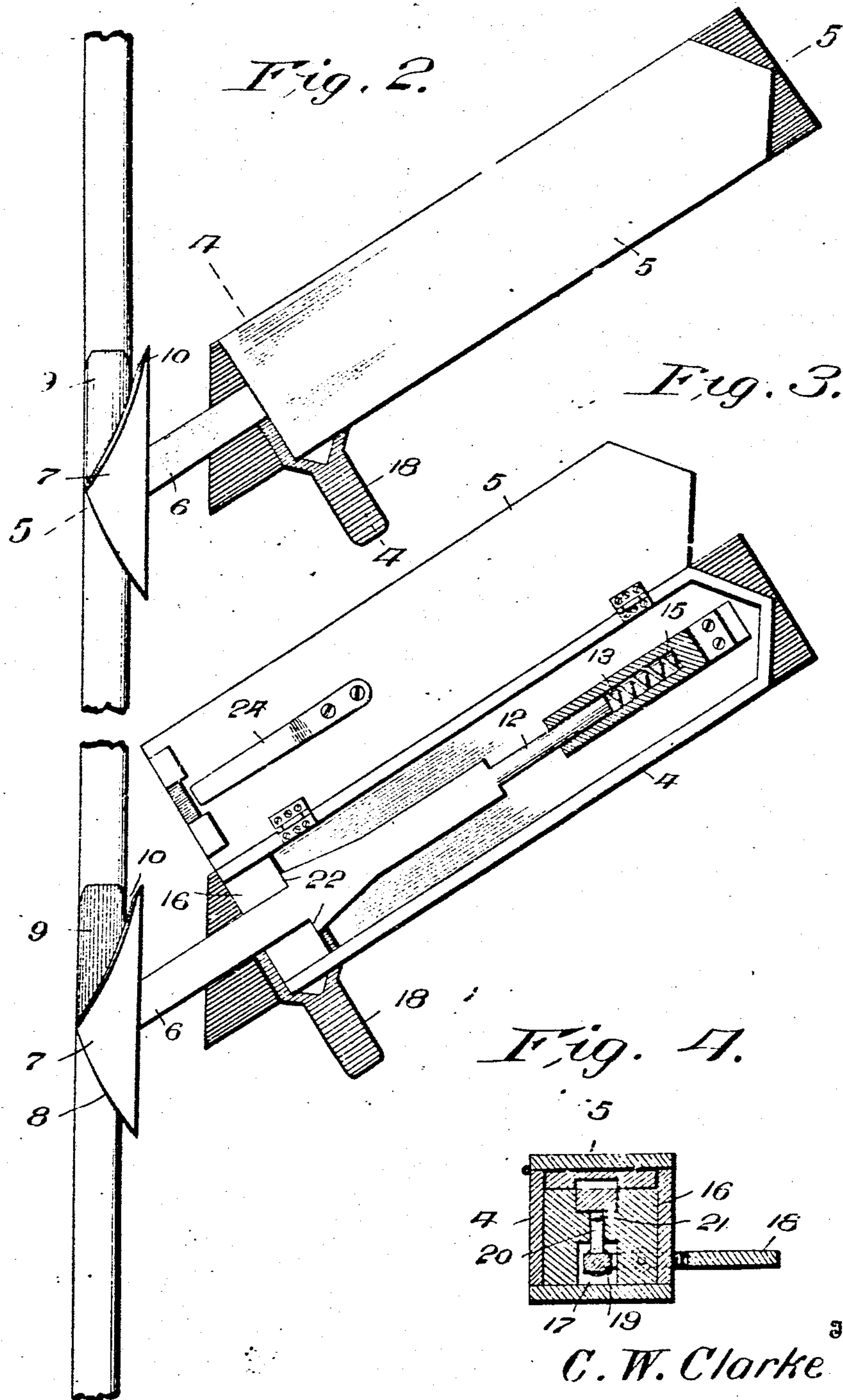
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3 SHEETS—SHEET 2.



Witnesses

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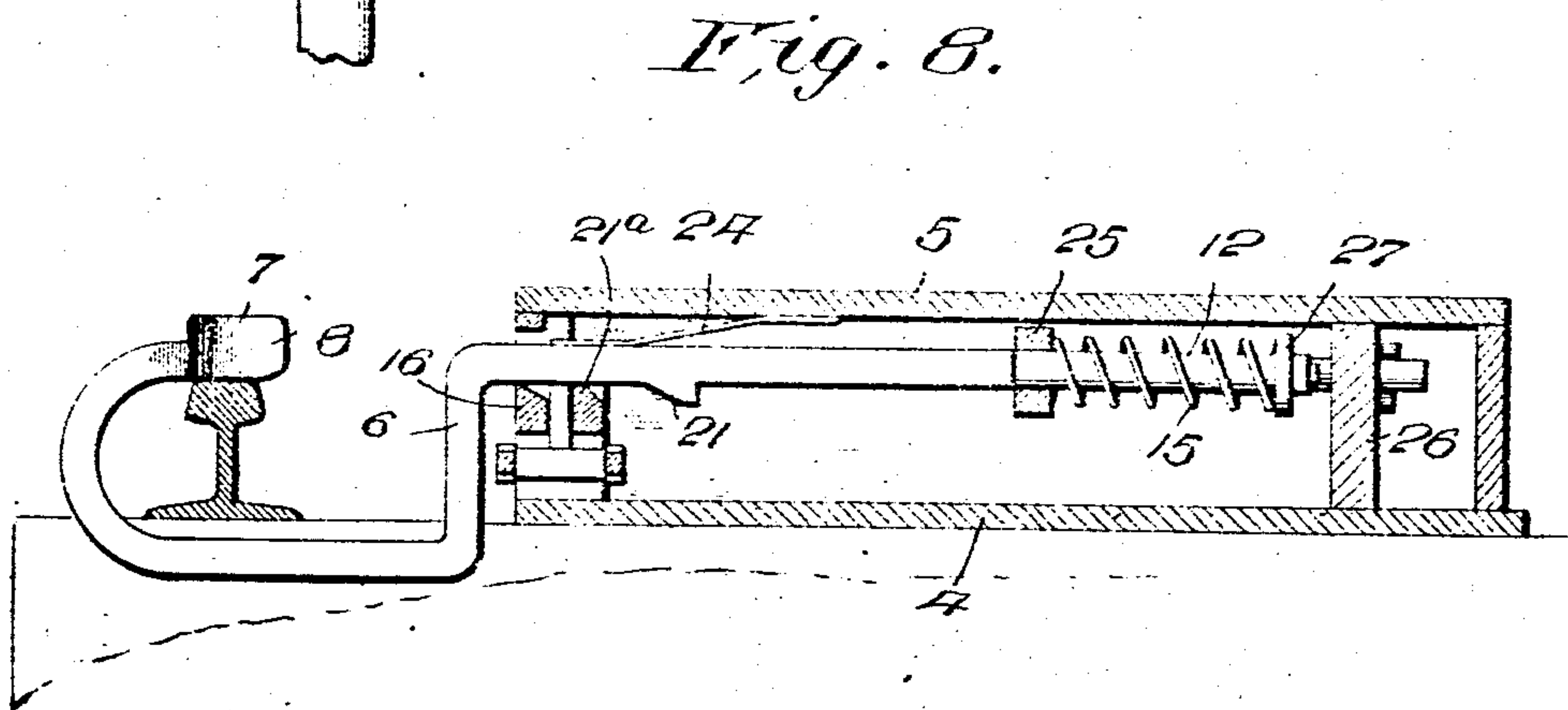
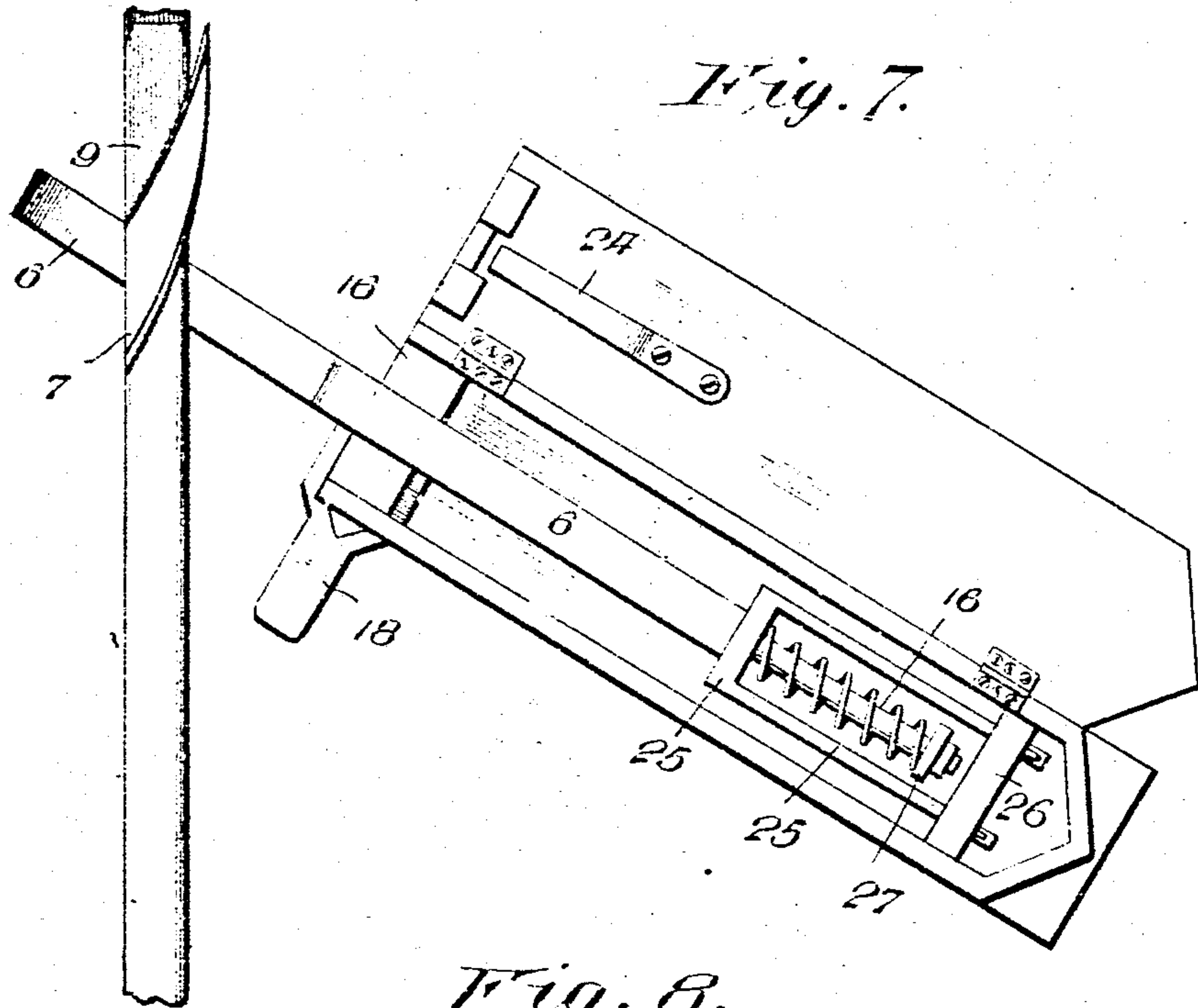
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3 SHEETS—SHEET 3.



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# UNITED STATES PATENT OFFICE.

CHARLES W. CLARKE, OF SWISS, WEST VIRGINIA.

## DERAILING DEVICE.

No. 880,717.

Specification of Letters Patent.

Patented March 3, 1908.

Application filed July 5, 1907. Serial No. 382,318.

*To all whom it may concern:*

Be it known that I, C. W. CLARKE, citizen of the United States, residing at Swiss, in the county of Nicholas and State of West Virginia, have invented certain new and useful Improvements in Derailing Devices; and I do hereby 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 new and useful improvements in derailing devices for railway tracks and more particularly to that class adapted to be used in connection with switches to derail any car left standing on the switch which for any reason is moved toward the main track.

The object of my invention is to produce a cheap, durable and efficient device and one that can be automatically operated.

A further object is to provide means for disposing the derailer from off the track when the cars are moving in one direction so that said cars can pass freely over the switch rails.

A still further object is to provide means for releasing the derailing device so that the same will be extended over one of the switch rails and in position to engage the wheels of one side of the car and direct the same off of the track.

Other objects and advantages will be hereinafter more clearly referred to and pointed out in the claims.

In the accompanying drawings, which are made a part of this application, I have shown the preferred forms of my invention.

In said drawings—Figure 1 is a perspective view of my improved derailing device shown in position upon the track-way. Fig. 2 is a top plan view of the same. Fig. 3 is a similar view showing the cover of the housing containing the operating mechanism open. Fig. 4 is a transverse sectional view as seen from the dotted line 4—4 Fig. 2. Fig. 5 is a longitudinal sectional view as seen from the dotted line 5—5 Fig. 2. Fig. 6 is a detail perspective view of the releasing lever removed from position, and, Figs. 7 and 8 are plan and sectional views respectively of a slightly modified form of device.

Referring to the figures by numerals of reference, 1 and 2 indicate the usual form of railroad track rails and 3 the cross ties upon which said rails are secured. Secured to

said ties in any preferred manner is an elongated housing 4, said housing being provided with a lid or covering 5, said cover being removably secured thereto. Preferably centrally disposed in said housing and extending beyond one end thereof is an elongated arm 6, said arm having secured at its outer end a derailing head proper 7, said head being of a greater width than the rail upon which it is disposed and has one of its ends 8 curved and the opposite end thereof partially cut away to form a projection 9, said projection being substantially the same width as the rail upon which it rests, thereby forming a notch 10 between said member 9 and the extended end 11 of the derailing head 7, that portion of the derailing head 7 extending above the member 9 being also curved for a purpose to be hereinafter set forth. The inner end of the arm 6 is reduced as shown at 12 and is adapted to enter a socket 13 in a spring retaining member 14 secured to the inner end of the housing 4. A controlling spring 15 is disposed in said socket, against which takes the inner end of the reduced portion 12 of the member 6. The opposite end of the housing 4 is provided with a closure 16, said closure having in its lower edge a way 17 in which is disposed the inner end of a releasing lever 18, said lever being bifurcated at its inner end and pivotally secured to said closure 16. Pivotaly mounted between the extreme inner ends of the bifurcated portion of the releasing lever 18 is a bar 19, said bar having an upwardly projecting finger 20 which is adapted to be disposed through a vertical opening in the closure 16 and extend into the path of a latch 21 secured to the under side of the elongated arm 6.

In operation the head 7 is normally disposed over one of the rails and when a train is coming into the switch, the flange upon the first wheel will encounter the curved face 8 of the head 7 and direct said head and elongated arm inwardly, the latch 21 being disposed into engagement with a ledge 21<sup>a</sup> formed on the closure 16, thereby holding the head 7 from off the rail until the arm 6 is released. After the train has left the switch, one of the trainmen disengages the latch 21 from the ledge 21<sup>a</sup> by depressing the outer end of the releasing lever 18, thereby forcing the finger 20 upwardly into engagement with the latch 21 and raising said latch above the ledge 21<sup>a</sup>, whereupon the spring 15 will



direct the arm 6 outwardly until the head 7 is again disposed over the rail, the outward movement of said arm being limited by means of shoulders 22 formed on either side 5 of the arm 6. When the head 7 is in this position and a car has been left upon the switch, should said car be moved along the switch toward the main track, the flange of one of the wheels will enter the notch 10 and 10 the tread of the wheel take upon the member 9 and as the car still moves forward, the curved face 23 of the head 7 will direct the car from off the rails, thereby stopping the forward movement of said car and prevent- 15 ing the same from going upon the main track. As best shown in Fig. 5 of the drawings, a spring 24 is employed to more reliably dispose the latch 21 into engagement with the ledge 21<sup>a</sup>, said spring being secured at 20 one end to the lid 5 and its opposite end extended so that said extended end is disposed into engagement with the upper face of the arm 6.

In Figs. 7 and 8 I have shown a slightly 25 modified form in that the arm 6 is disposed under the rail and into engagement with the head 7 on the outside of the trackway. The head 7 is also slightly modified in that the curved face 8 is directed in the opposite di- 30 rection from that shown in the other figures, and in place of the spring retaining member 14, a clevis 25 is substituted, said clevis being secured in the housing 4 by means of a false end 26. It will also be noted that the 35 latch 21 and the ledge 21<sup>a</sup> are reversed. It will also be seen that the controlling spring 15 is disposed around the reduced end 12 of the arm 6 and is held thereon by any preferred means as by a washer and 40 nut 27.

It will be seen from the foregoing that I have provided a construction of but very few parts so that should any of said parts become worn or broken they can be readily 45 replaced at a very nominal cost. It will also be seen that my device is positive in its operation and is one whereby a train can

take the switch without having to stop as is the case with the derailing devices commonly in use at this time as it will be seen that 50 when the train comes in contact with the derailer on entering the switch, said derailer will be disposed at one side and out of the path of the wheels.

What I claim is:—

1. A derailer of the class described comprising a housing, an arm longitudinally movable in said housing and extending be- 55 yond one end thereof, a derailing head secured to said arm, means at the inner end of said arm to direct said head over the rail, a latch secured to said arm, a finger pivotally mounted in said housing and in the path of said latch, a ledge, and means to dispose said latch out of engagement with said ledge 65 whereby the derailing head will be disposed over the rail.

2. A derailing device of the class described comprising an arm, a head secured to one end of said arm, said head having one of its 70 ends curved, a derailing member secured to the opposite end of said head and forming a notch between said member and the extended end of said head, and means to dispose said head over a rail, and additional 75 means to hold said head from off the rail.

3. A derailing device of the class described comprising an arm, a head secured to one end of said arm, a housing for said arm, shoulders on said arm, a latch carried by 80 said arm, a ledge adapted to be engaged by said latch, a member having a finger adapted to disengage said latch from said ledge when desired, and a controlling spring at the inner end of said arm adapted to direct the head 85 over the rail when the arm is released.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES W. CLARKE.

Witnesses:

C. W. NEIL,  
HAZEL HILL.