

S. R. MORÉ.
 AUTOMATIC RAILWAY SWITCH.
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993,187.

Patented May 23, 1911.

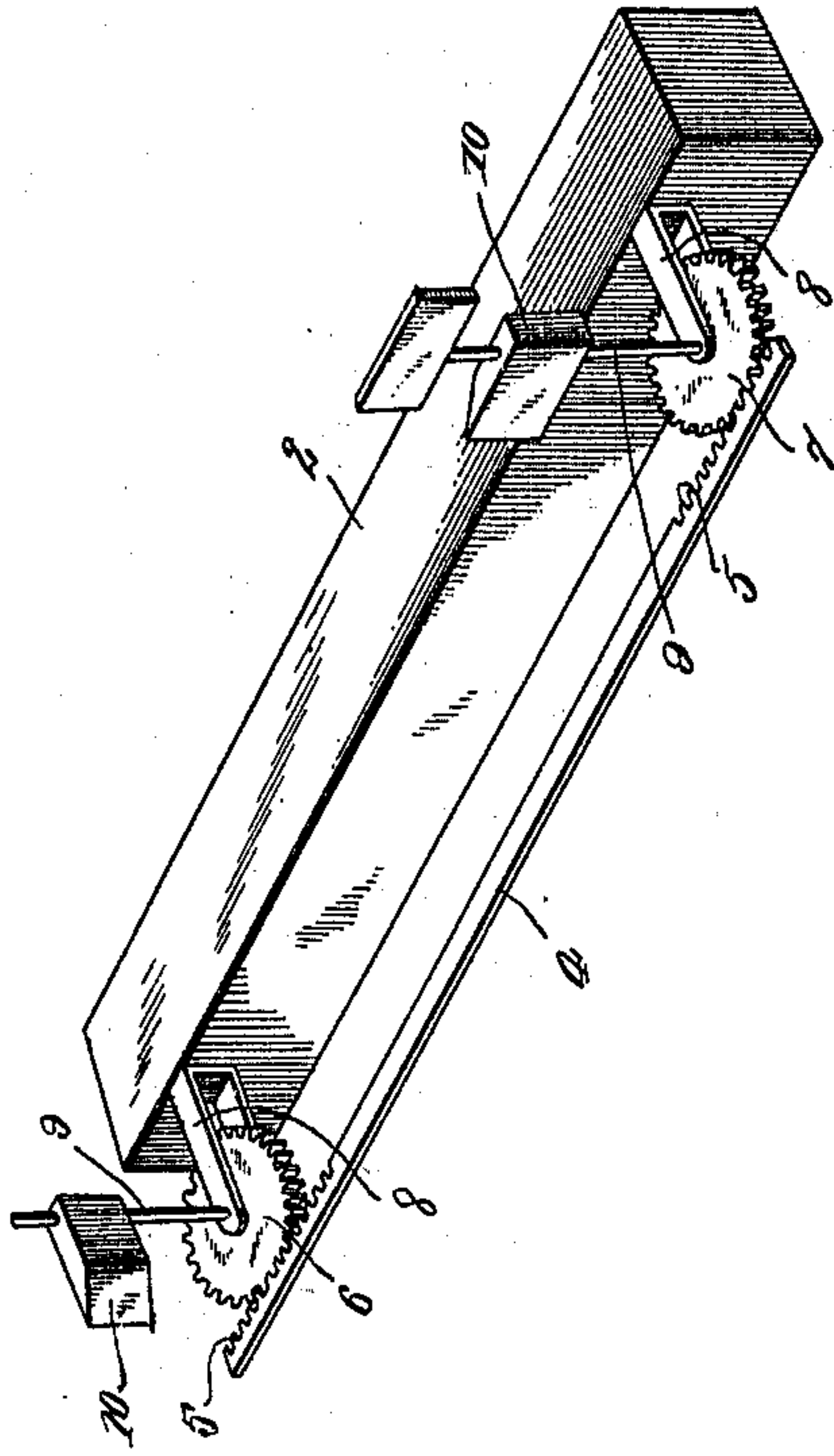


Fig. 2.

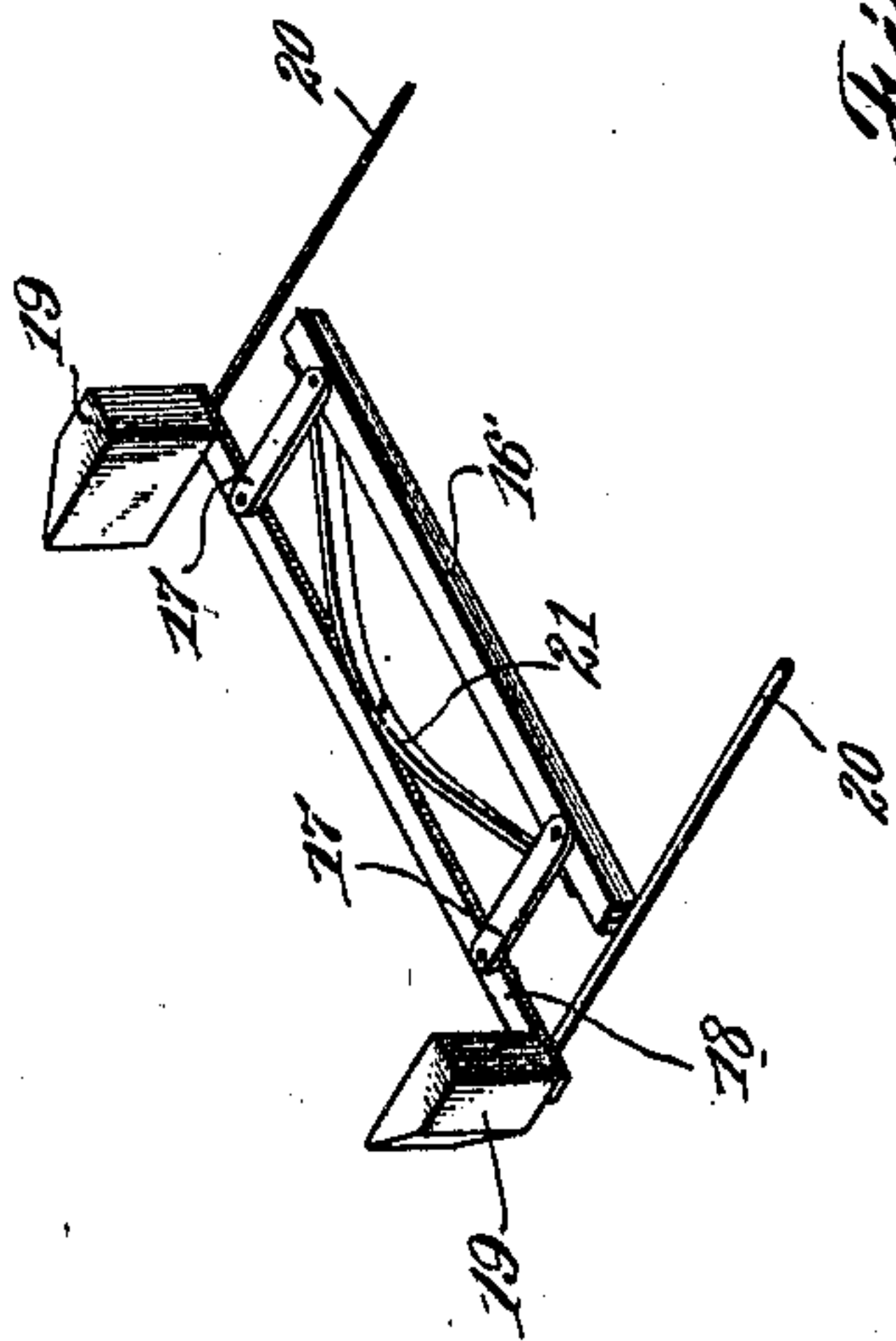


Fig. 3.

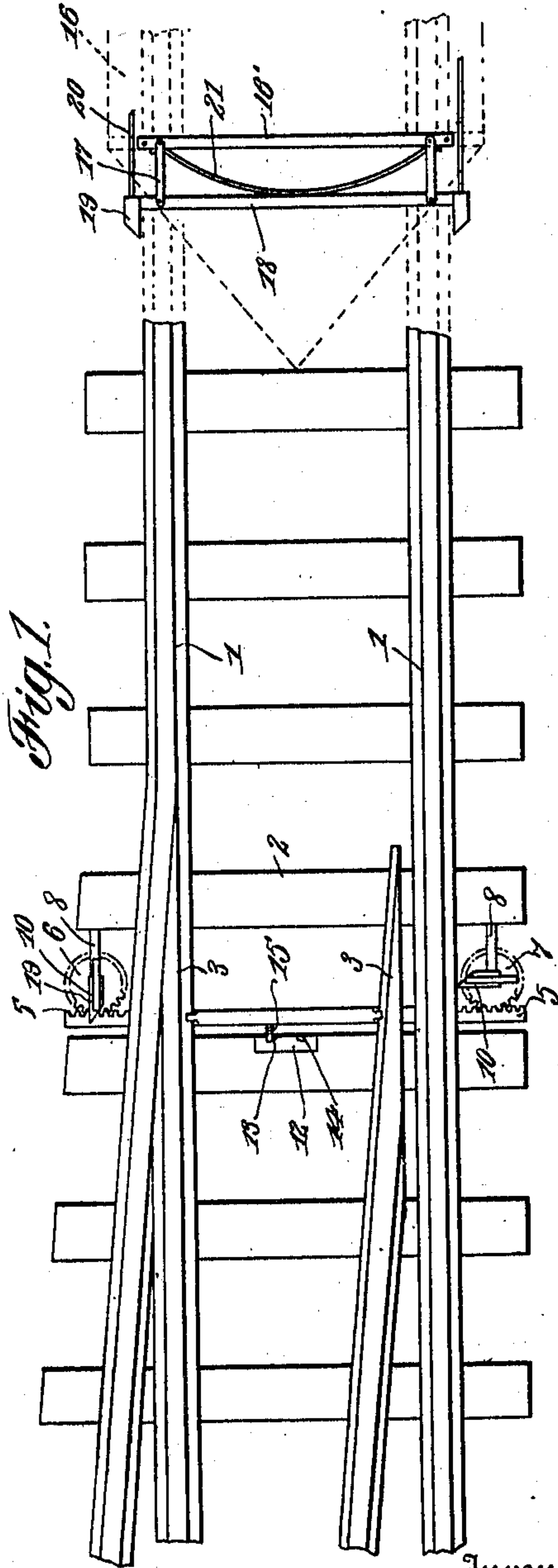


Fig. 1.

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SEBASTIAN RICARDO MORÉ, OF HABANA, CUBA.

AUTOMATIC RAILWAY-SWITCH.

993,187.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, SEBASTIAN RICARDO MORÉ, a citizen of Cuba, residing at Habana, in the Province of Habana and Republic of Cuba, have invented new and useful Improvements in Automatic Railway-Switches, of which the following is a specification.

This invention relates to switch operating means for railways, and the object of the invention is to provide a device of this character of an extremely simple structure, which may be readily operated from mechanism carried by the locomotive of a train, so that a switch may be thrown in either direction.

With the above, and other objects in view, the invention resides in the novel construction and combination of parts, hereinafter fully described and claimed.

In the accompanying drawings, there has been illustrated a simple and preferred embodiment of the improvement, and in which drawings:—

Figure 1 is a top plan view of a railway track and switch therefor provided with the improvement, and showing in dotted lines a portion of a locomotive having the switch throwing device; Fig. 2 is a detail perspective view of the switch connecting members; Fig. 3 is a similar view of the device applied to the locomotive.

In the accompanying drawings, the numeral 1 designates the spaced railway rails, and 2 the ties upon which the rails are supported.

The numeral 3 designates a pair of movable switch points. Connected with each of the switch points and extending transversely of the rails, between two of the ties thereof, is a sliding bar 4. This bar has both of its outer extremities upon one of its edges provided with teeth 5 and these teeth are adapted to cooperate with teeth provided upon a pair of wheels 6 and 7. Both of these wheels are mounted in suitable bearings 8 and are provided with upwardly projecting axles 9. Rigidly secured to the extremities of both of the axles 9, are angularly arranged contact points or members 10. These members 10 are each arranged so as to lie in a direct right angular plane, so that when one of the contact points faces the rails, the other one will be arranged in a parallel plane with the path of the wheels. Each of the contacts 10 are provided with beveled faces, as clearly illustrated in the several figures of

the drawings, and for a purpose presently to be set forth.

One of the ties 2 is provided with a plate 12, the said plate having one of its faces, adjacent the bar 4, provided with a pair of spaced depressions or pockets 13 and 14, while connected with the bar 4 is a spring pressed pin 15 which is adapted to engage the pockets when the switches are thrown in either direction.

The numeral 16 designates the locomotive. Secured upon the under face of the cow-catcher of the said locomotive, or at any other desired position thereon, is a transversely arranged bar 16'. This bar 16' is provided adjacent its ends with longitudinally extending links 17 and pivotally connected with the said links is a swinging bar 18. This bar 18 has its extremities provided with contact blocks 19, and the bar 18 has its opposite ends provided with suitable rods or other operating means, designated by the numeral 20. The operating means are adapted to extend within the cab of the locomotive, and to be provided with a suitable lever or the like, whereby either of the said rods may be operated to swing the bar 18 in either direction, so as to bring the contact blocks 19 into register with either of the contact members 10 provided by the bar 4. In order to retain the swinging bar 18 in its proper position away from the stationary bar 16', I have interposed between the said bars a flat bow spring 21, the latter having its ends preferably connected with the bar 16' and its central bulging portion contacting with the center of the bar 18.

From the above description, taken in connection with the accompanying drawings, it will be noted that should the switch be opened, the position of the contact members 10 will be readily apparent to the engineer, and if desired, some sort of a signal may be connected with the axle of the toothed wheels. When the signal is observed, the engineer will understand which of the operating bars or members 20 is to be manipulated, and while I have illustrated and described the preferred embodiment of the improvement, as it now appears to me, minor details of construction, within the scope of the following claims, may be resorted to, if desired.

Having thus described the invention, what I claim is:

1. In combination with rails and switch

points therefor, of a bar connected with the switch points, said bar having its ends provided with teeth, toothed wheels engaging the teeth of the bar, inclined contact members arranged at a direct angle to each other upon the toothed wheels, and an operating device adapted to engage one of the contact members for throwing the switch.

2. In combination with rails and switch points for the rails, of a transversely arranged bar connected with the switch points, said bar having its ends provided with teeth, toothed wheels mounted in bearings co-acting with the teeth of the switch bar, a shaft for each of these wheels, a contact member having an inclined face upon each of the shafts, said contact members being arranged at right angles to each other, a separable means for engaging one of the inclined faces of the contact members, to rotate the same and throw the switch, and means for retaining the switch in its thrown position.

3. In a device of the class described, engaging means for switch points, retaining

means, independent throwing means, said throwing means comprising a swinging bar having offset ends, and a member connected with each end of the bar for swinging the same in either direction.

4. In a device for the purpose set forth, switch engaging means, retaining means, means for sliding the switch retaining means, said means being provided with contact members arranged at angles to each other, means for engaging either of the contact members, said means comprising a stationary bar and a movable bar, links connecting the movable bar with the stationary bar, a tension device between the stationary bar and the movable bar, offset members upon the movable bar, and means for swinging the movable bar.

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

SEBASTIAN RICARDO MORÉ.

Witnesses:

VICTOR NORMAND,
A. ROGERS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
