No. 743,803. PATENTED NOV. 10, 1903.

W. A. AUGHINBAUGH.

RAILROAD GATE.

APPLICATION FILED APR. 22, 1903.

NO MODEL.

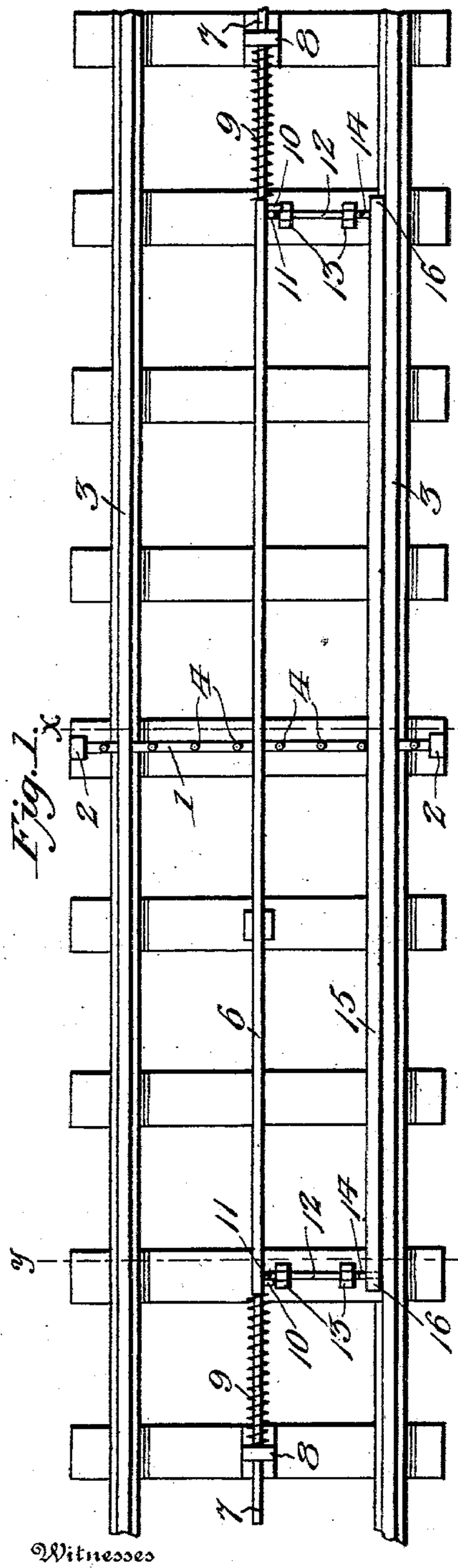

Fig. 1.

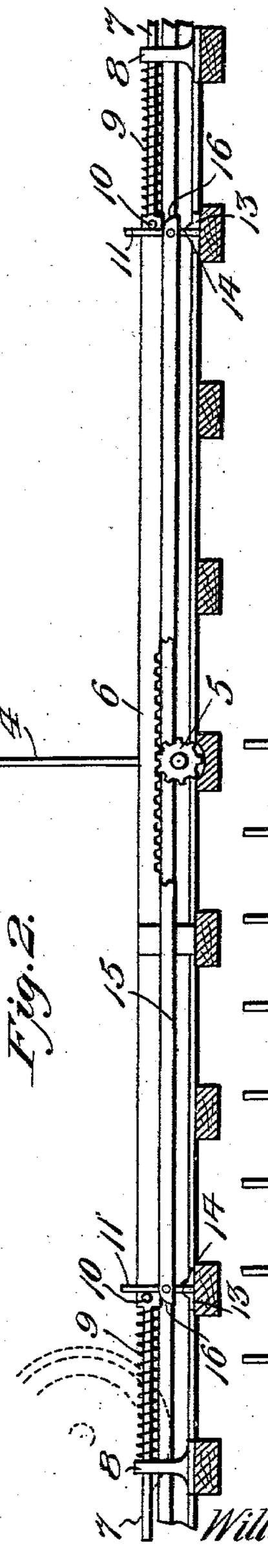

Fig. 2.

Fig. 4.

Fig. 3.

Witnesses

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No. 743,803. Patented November 10, 1903.

UNITED STATES PATENT OFFICE.

WILLIAM A. AUGHINBAUGH, OF QUEBECK, TENNESSEE.

RAILROAD-GATE.

SPECIFICATION forming part of Letters Patent No. 743,803, dated November 10, 1903.

Application filed April 22, 1903. Serial No. 153,835. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. AUGHINBAUGH, a citizen of the United States, residing at Quebeck, in the county of White and State of Tennessee, have invented new and useful Improvements in Railroad-Gates, of which the following is a specification.

My invention relates to new and useful improvements in railroad-gates; and its object is to provide a gate of simple construction having mechanism whereby it may be automatically lowered upon the approach of a train and will be held in such position until after the train has passed thereover.

The invention consists in providing a revoluble shaft having pickets extending upward therefrom, said shafts extending transversely of the track. A gear is secured to the shaft and meshes with a rack which is normally held in such position as to hold the pickets upright. A series of cranks are employed whereby longitudinal movement may be imparted to the rack by the depression of an operating-bar located adjacent to one of the rails and adapted to be depressed by the flange of a car-wheel.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a plan view of the gate in its normal position upon a railroad-track. Fig. 2 is a side elevation thereof with one of the rails removed and the operating-bar broken away. Fig. 3 is a section on line $x\,x$, Fig. 1; and Fig. 4 is a section on line $y\,y$, Fig. 1.

Referring to the drawings by numerals of reference, 1 is a shaft which is journaled in brackets 2 at opposite sides of the track and preferably extends through the webs of the rails 3. Pickets 4 extend upward from this shaft and are normally in an upright position. A gear 5 is secured to and rotates with shaft 1 and meshes with a rack 6, which extends thereover and longitudinally of the track. This rack is preferably centrally located between the rails and has stems 7 at the ends thereof, which are slidably mounted in suitable brackets 8. Coiled springs 9 inclose these stems and are adapted to hold the rack normally in such position as to retain the pickets 4 upright. A pin 10 extends laterally from each end of rack 6, and bearing against the inner surface of each of these pins is an upwardly-extending arm 11, formed at the inner end of a rod 12, journaled in suitable brackets 13. A crank 14 is formed at the other end of each rod and engages an operating-bar 15, which is arranged along the inner face of one of the rails 3 and is normally flush with the upper surface or tread thereof. The ends of this operating-bar are tapered, as shown at 16.

It will be seen that when a car approaches this gate the flanges of the wheels will ride upon the tapered ends of the bar 15 and throw it longitudinally and downwardly, thereby causing rods 12 to turn and forcing the rack 6 longitudinally. This rack will rotate gear 5 and its shaft 1, and the pickets 4 will be thrown downward and held in such position as long as one of the wheels of the car is bearing upon the bar 15. As soon as pressure is removed from said bar, the springs 9, which are tensioned by the lowering of the gate, will return the rack, pickets, and other parts of the apparatus to normal positions.

It will be seen that the gate is extremely simple and inexpensive in construction and will be operated by cars approaching it from either direction.

In the foregoing description I have shown the preferred form of my invention, but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. In an apparatus of the character described, the combination with the rails of a track, a shaft extending transversely thereof, a gear upon the shaft, and pickets extending from said shaft; of a longitudinally-extending spring-pressed rack between the rails and engaging the gear, an operating-bar extending longitudinally of one of the rails and adapted to be depressed by the flange of the car-

wheel, rods, cranks at the outer ends thereof engaging the operating-bar and arms at the inner ends of the rods engaging the rack.

2. In an apparatus of the character described, the combination with the rails of a track, a shaft extending transversely thereof, a gear upon the shaft, and pickets extending from the shaft; of a longitudinally-movable rack engaging the gear, stems at the ends of the rack, springs inclosing the stems, an operating-bar adjacent to one of the rails and adapted to be depressed by the flange of a car-wheel, rods journaled between the rails, cranks at the outer ends thereof engaging the operating-bar, and arms at the inner ends of the rods engaging the rack.

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

WILLIAM A. AUGHINBAUGH.

Witnesses:

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