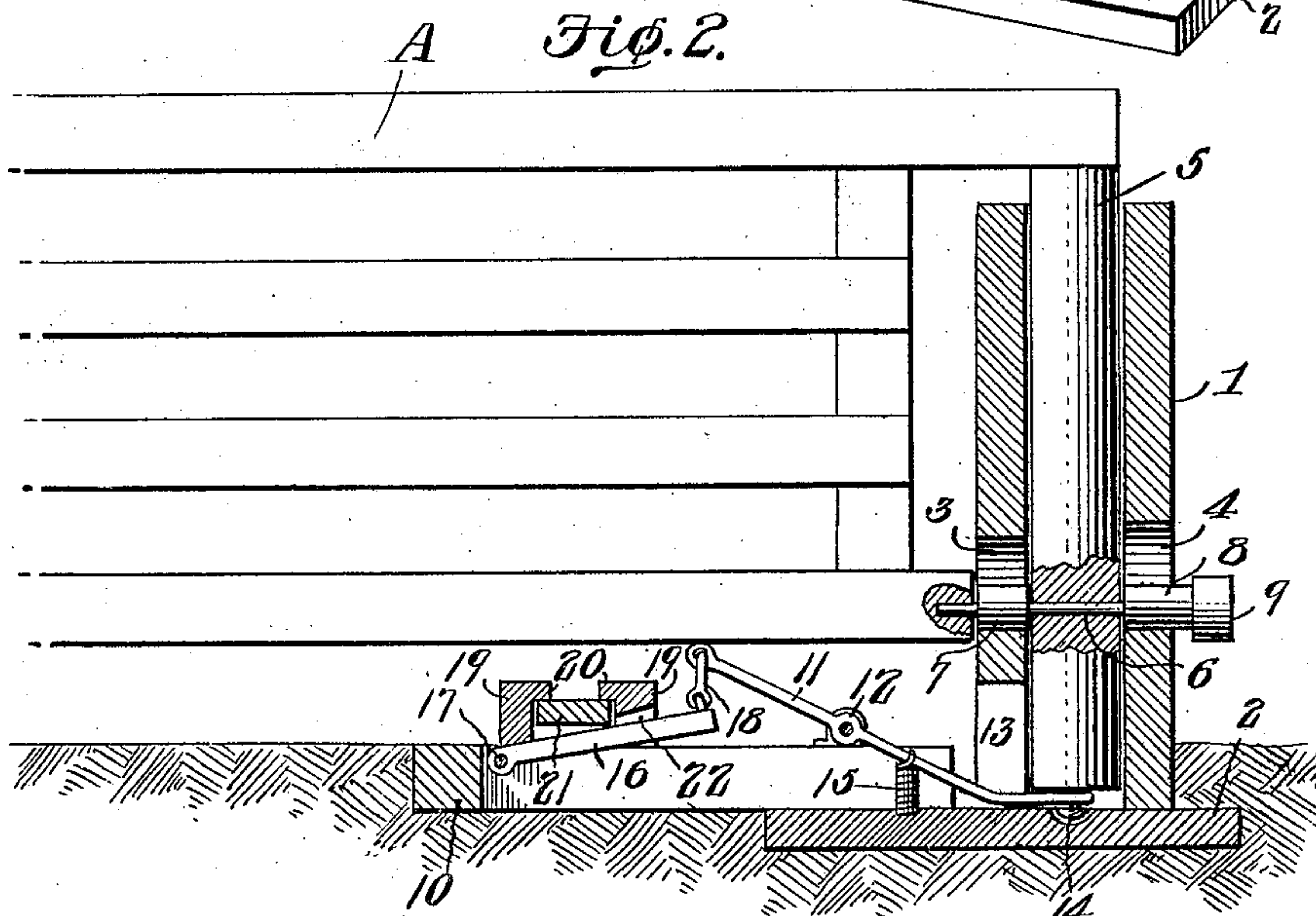
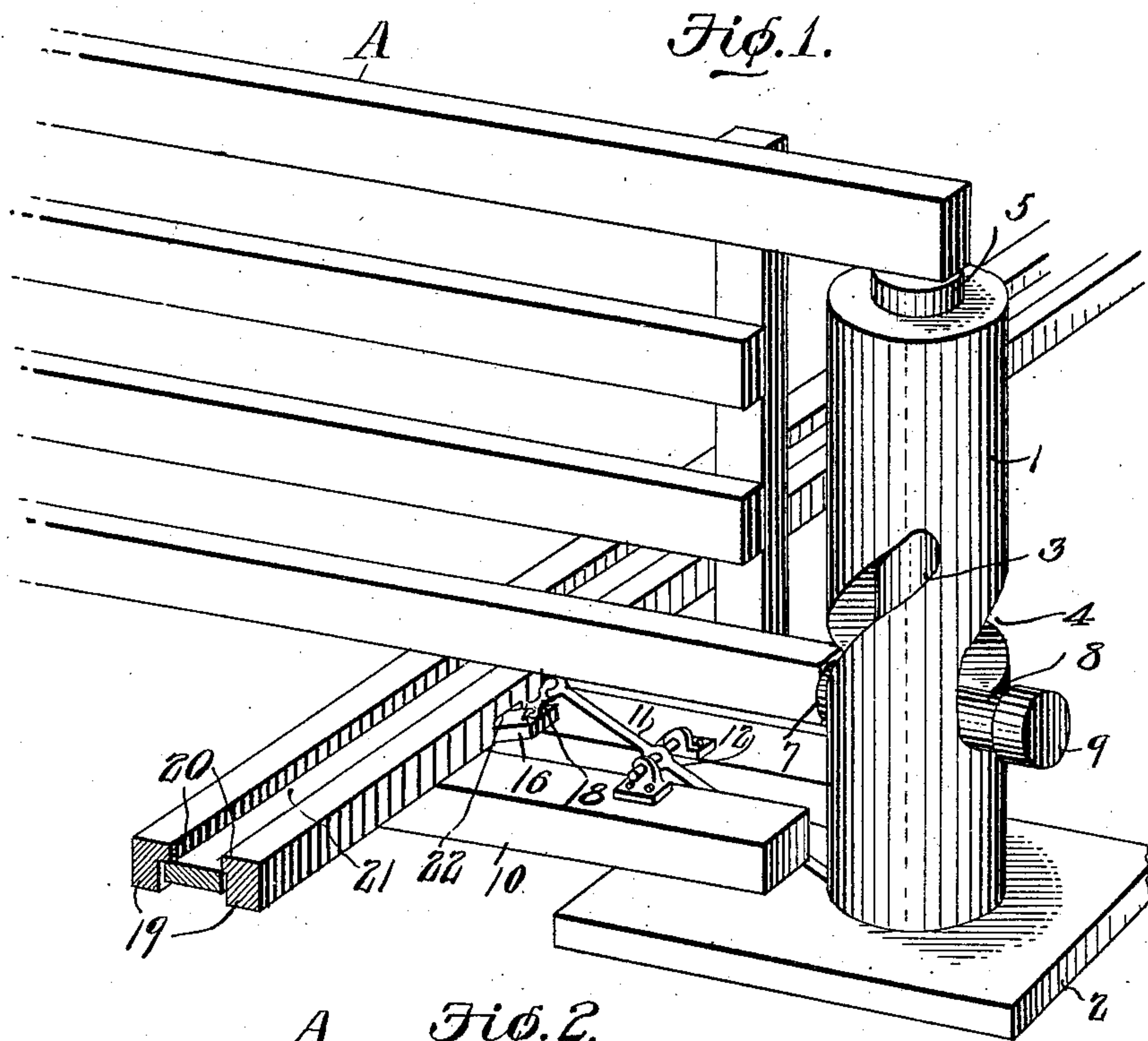


No. 819,332.

PATENTED MAY 1, 1906.

C. BELIVEAU.
GATE.

APPLICATION FILED JAN. 15, 1906.



WITNESSES:

E. J. Stewart
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CYRIL BELIVEAU, OF HENDERSON, MINNESOTA.

GATE.

No. 819,332.

Specification of Letters Patent.

Patented May 1, 1906.

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To all whom it may concern:

Be it known that I, CYRIL BELIVEAU, a citizen of the United States, residing at Henderson, in the county of Silbey and State of Minnesota, have invented a new and useful Gate, of which the following is a specification.

This invention relates to swinging gates, and has for its object to provide novel mechanism for swinging the gate open by the approach of a vehicle.

It is also proposed to effectually maintain the gate open until the vehicle has passed clear of the gate and to insure prompt and effectual closing of the gate after the passage of the vehicle.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a gate and the mechanism for opening and closing the same. Fig. 2 is a view of the gate in its closed position, parts being broken away to show the mounting and connection of the several parts of the gate-actuating mechanism.

Like characters of reference designate corresponding parts in both figures of the drawings.

In carrying out the present invention I employ a tubular post 1, which is rigidly mounted upon a base 2, set in the ground. In the front and rear of the post adjacent the bottom thereof are corresponding spiral slots 3 and 4. Within the post 1 is a bar 5, cylindrical in form and mounted to rotate and also to work endwise within the post 1. The upper end of the bar rises through the open top of the post and has the upper longitudinal rail of the gate A connected thereto. A cross-bar 6 pierces the bar 5, its ends working in the slots 3 and 4, said ends being provided with the antifriction-rollers 7 and 8. Upon the rear extremity of the cross-bar 6 is a head 9 separate from the antifriction-roller 8 and designed to limit endwise play of the cross-

bar. The forward end of the bar 6 is rigidly connected to the lower rail of the gate in any suitable manner—for instance, by being driven into the rail.

From the foregoing description it will be understood that any upward movement of the bar 5 of the gate will also rotate the same by reason of the cross-bar 6 working in the slots 3 and 4, and therefore it is proposed to provide for elevating the gate, so as to swing the same open. In carrying out this feature of the invention the base 2 is provided with a slotted extension 10, upon which is mounted a lever 11 in a fulcrum-bearing 12, located substantially midway between the ends of the lever and carried by the extension of the base, the lever being so located as to work in the slot of the base. The bottom portion of the front of the post 1 is provided with a slot or opening 13 to receive the rear end of the lever 11, and said end of the lever is pivotally connected to the bottom of the bar 5 by means of a suitable pivot-pin 14. A helical spring 15 is connected to the base and to the lever 11 in such a manner as to yieldably draw the inner end of the lever downward, so as to maintain the gate closed. In addition to the gate-elevating lever 11 there is a trip-lever 16, fulcrumed at its forward end, as at 17, within the slotted extension of the base, the rear free end of the lever being located beneath the forward end of the lever 11 and connected thereto by a link 18. Disposed longitudinally of the road in the path of vehicle-wheels is a guideway made up of spaced sills 19, suitably set in the roadway and provided with inwardly-directed overhanging flanges 20 to prevent upward displacement of a track-bar 21, which is loose within the guideway and rests upon the trip-lever 16. The inner sill 19 is of course cut away or provided with an opening 22 to accommodate the trip-lever 16.

In practice when a vehicle approaches the gate it is driven so as to have the wheels at one side thereof travel through the guideway upon the track-bar 21, whereby the trip-lever 16 will be depressed and the lever 11 actuated to elevate the gate, and as the elevating of the gate also swings the same, as hereinbefore explained, the gate will be automatically swung open. When the vehicle has passed the gate and its wheels have run off of

the track-bar 21, the gate will gravitate to its closed position and remain closed with the cross-bar 6 at the bottoms of the slots 3 and 4.

Having thus described the invention, what is claimed is—

1. In a swinging gate, the combination of a tubular gate-post having corresponding front and rear spiral slots, an upright bar movable endwise and rotatable within the post and projecting above the top thereof, a gate connected to the top of the bar, a cross-bar connecting the gate and the upright bar and working in the slots, and means to elevate the gate.

2. The combination of a post having a spiral guideway, a swinging and vertically-movable gate having a guide working in the guideway, a lever for elevating the gate, and a yieldable track connected with the lever and disposed for engagement by vehicle-wheels to elevate the gate.

3. The combination of a post having a spiral guideway, a swinging vertically-movable gate having a guide working in the guideway, a lever for elevating the gate, a guideway disposed in the path of vehicle-wheels, and a yieldable track carried by the guideway and connected with the lever for elevating the gate.

4. The combination with a post having a

spiral guideway, of a vertically-movable and swinging gate having a guide working in the guideway, a lever fulcrumed intermediate of its ends and pivotally connected to the gate, a trip-lever connected to the first-mentioned lever, and a yieldable track associated with the trip-lever and disposed in the path of vehicle-wheels.

5. The combination of a tubular post open at its upper end and provided with front and rear corresponding spiral slots, a rotatable and endwise-movable bar mounted in the post and rising above the same, a gate connected to the post, a cross-bar carried by the upright bar and working in the spiral slots, a lever fulcrumed intermediate of its ends and pivotally connected to the bottom of the upright bar, a trip-lever connected to the first-mentioned lever, a guideway disposed in the path of vehicle-wheels, and a yieldable track mounted in the guideway and associated with the trip-lever for elevating the gate.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CYRIL BELIVEAU.

Witnesses:

CAMILLE BINON,
H. J. SCHAFER.