A. J. WILBANKS.

GATE OPERATING DEVICE.

APPLICATION FILED SEPT. 13, 1919.

1,331,836.

Patented Feb. 24, 1920.

Fig 1.

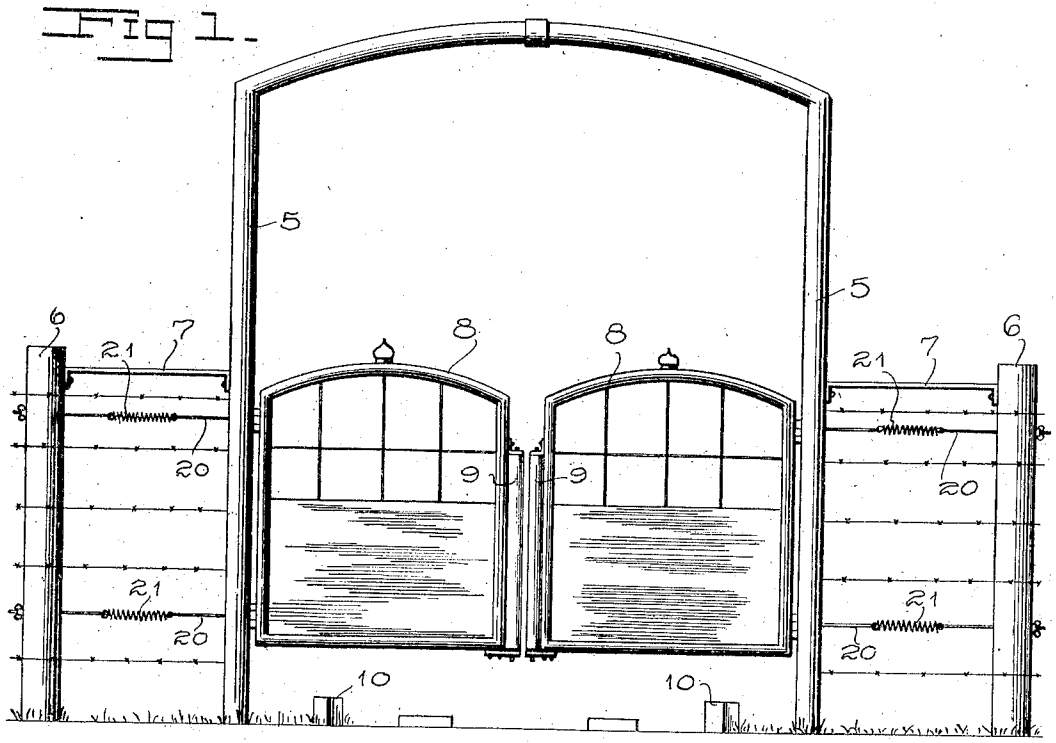


Fig 2.

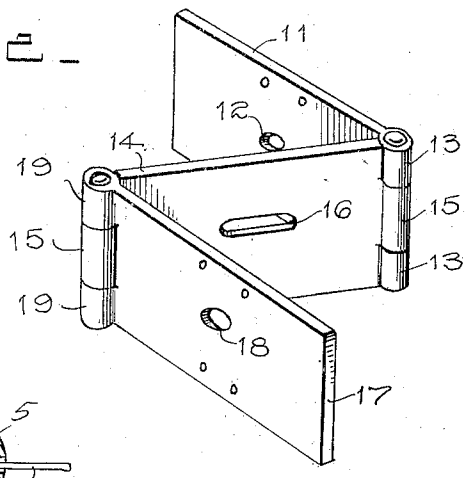
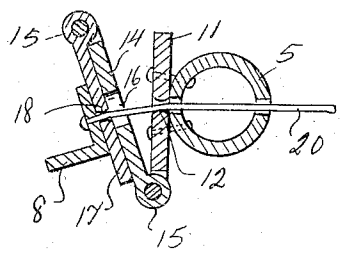


Fig 3.



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UNITED STATES PATENT OFFICE.

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GATE-OPERATING DEVICE.

1,331,836. Specification of Letters Patent. Patented Feb. 24, 1920.

Application filed September 13, 1919. Serial No. 323,612.

To all whom it may concern:

Be it known that I, ANDREW J. WILBANKS, a citizen of the United States, residing at Hansford, in the county of Hansford and State of Texas, have invented certain new and useful Improvements in Gate-Operating Devices, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to a gate operating device, and has for its object to provide a device of this character which is operated by a slight pressure from a vehicle or pedestrian and automatically swings to the side to provide an entrance.

Another object of the invention is to provide a device of this character having a novel hinge to which a cable and spring is attached, the hinge and cable remaining in inoperative positions when the gate is in alinement with the cable, and operative when the gate is moved slightly out of alinement with the cable.

These objects are attained by the mechanism illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of a gate with the operating device applied.

Fig. 2 is a perspective view of one of the hinges of the device.

Fig. 3 is a transverse sectional view through the gate post, hinge and gate.

Referring to the drawings, 5 designates a gate post, and 6 the fence post, the gate post being held in position by means of a brace 7 secured to the fence post. A pair of gates 8 are hinged to the gate post, in spaced relation to the ground, and are provided at their meeting ends with rollers 9, which engage the fenders of an automobile or wheels of other forms of vehicles when the same is passing through the gate-way, to prevent scratching of the vehicle.

Guide posts 10 are positioned in spaced relation to the gate posts and serve to guide the wheels of the vehicle.

The hinge of the gate consists of a hinge leaf 11, which is provided with an opening 12 registering with a similar opening in the gate post. One end of the hinge leaf 11 includes a pair of projecting knuckles 13. The leaf 11 is intended to be secured to the gate post. An intermediate hinge leaf 14 is provided and includes at each end a projecting knuckle 15, an elongated slot 16 being formed in the central portion of the intermediate hinge leaf 14. One of the knuckles 15 is intended to register with the knuckles 13 and is pivoted therebetween. A third hinge leaf 17 is provided and has a central opening 18, which registers with a similar opening in the gate, while extending from one end of the hinge leaf 17 is a pair of knuckles 19. This hinge leaf 17 is intended to be secured to the gate, while the remaining knuckle 15 of the intermediate hinge leaf 14 is intended to register with the knuckles 19 and is pivoted therebetween.

An operating cable 20 is provided, and one end extends through the fence post 6 and is adjustably secured thereto, while the other end of the cable 20 is passed through the registering openings 12, 16 and 18 and secured to the gate. Interposed between the ends of the cable 20, is an extension spring 21, which tends to hold the three leaves of the spring in engagement with each other.

In operation, the gate is given a slight movement toward the direction of travel, so as to cause the gates 8 to move out of alinement with the cable 20. This causes the intermediate leaf to leave one of the remaining leaves according to the direction of travel, and swing to one side with the gate and the hinge leaf thereof to permit the entrance of the vehicle. During this operation, rollers 9 engage the fenders or sides of the vehicle to prevent marring of the vehicle by the gate. When the vehicle has passed through the opening, the compression spring causes the intermediate hinge leaf to swing back to its former position, in engagement with the two remaining hinge leaves. By the novel arrangement of the three leaves, the spring permits the gate to operate in either direction, the spring 21 and cable 20 performing the same function regardless of the direction of the movement of the gate.

From the foregoing description, it will be readily seen that this invention provides a novel operation mechanism for gates which does not require the user to leave the vehicle, in order to operate the gate, but operates automatically when pressure is applied to the gate and closes itself after the vehicle has passed through. The novel roller arrangement, of course, prevents marring or scratching of the vehicle and also serves to close the gate opening.

What is claimed is:

The combination with a closure support and auxiliary support, a multiple leaf hinge secured to the closure support, said hinge having a plurality of registering openings, a closure supported by said hinge, of a sectional flexible member, the end of one section being threaded and extended through the auxiliary support, a wing nut on said threaded end adapted to engage the auxiliary support, a spring connected to the other end of said flexible section, the other end of said spring being connected to the end of the other section of said flexible member, the remaining end of said second mentioned section being extended through the closure support and the hinge and connected to said closure, the tension of said spring being regulated by the wing nut through the coöperation of the auxiliary support.

In testimony whereof I hereunto affix my signature.

ANDREW J. WILBANKS.