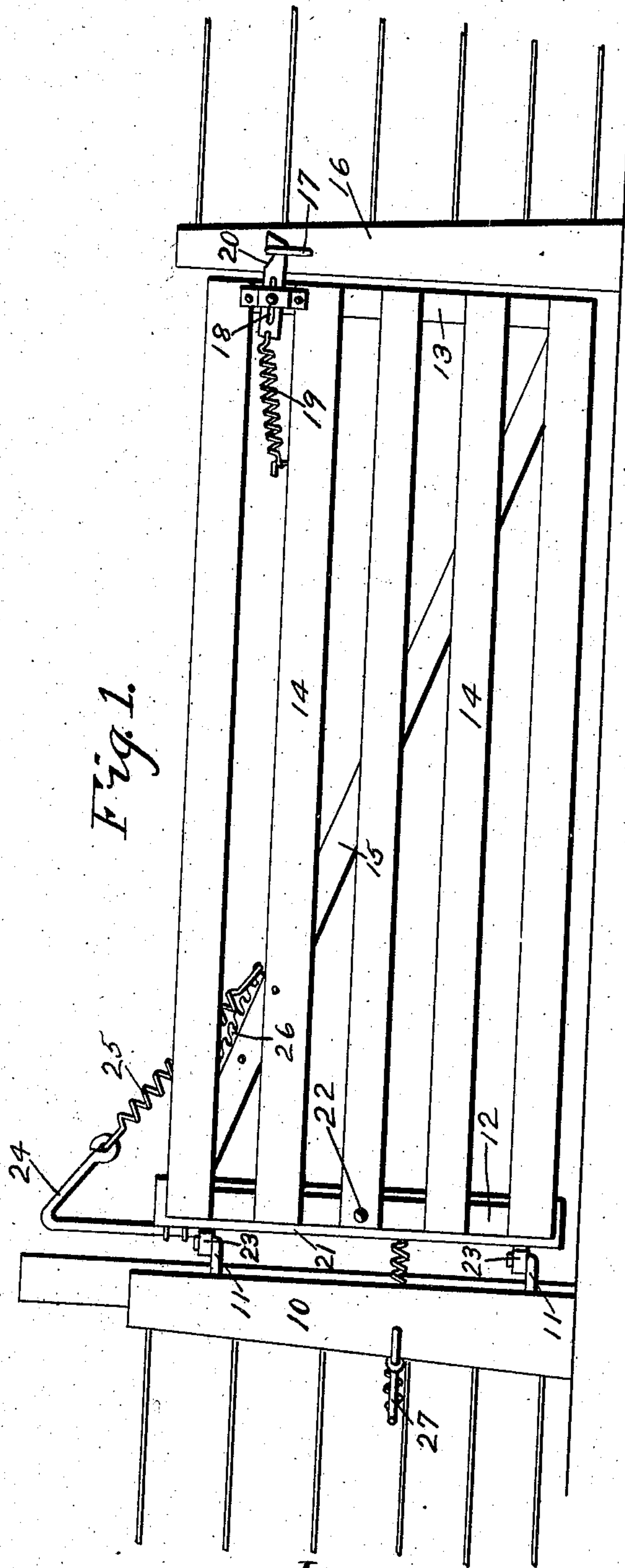
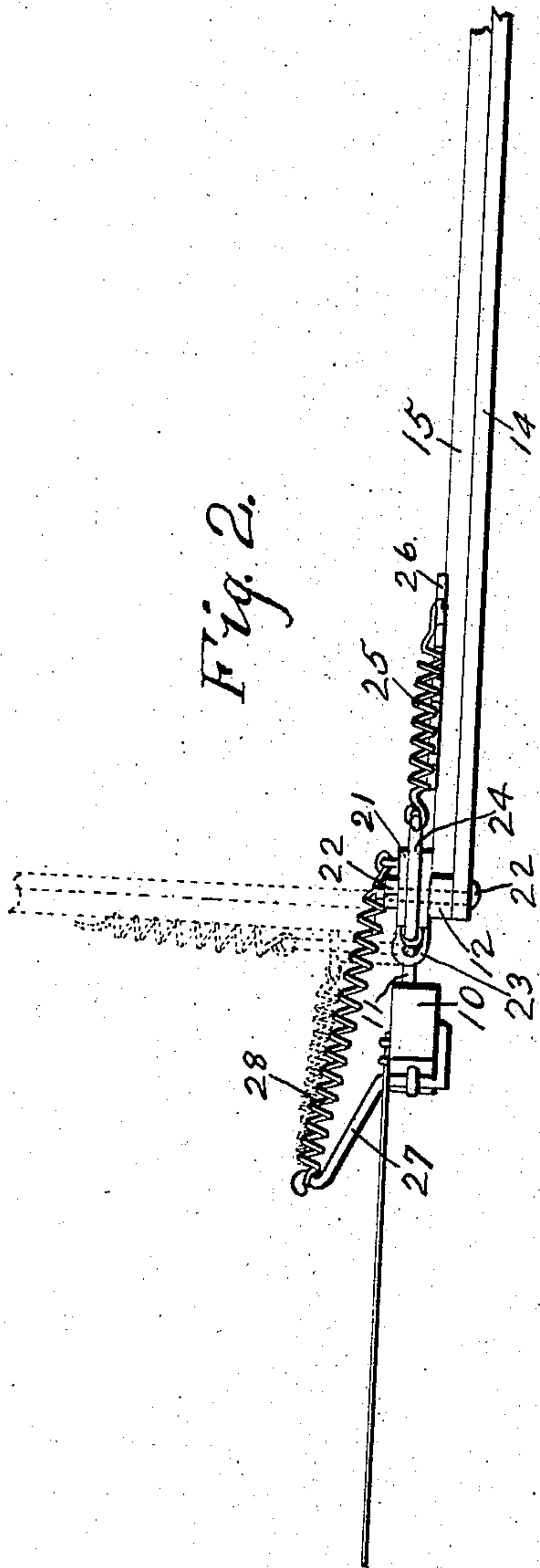


No. 894,742.

PATENTED JULY 28, 1908.

L. P. McVAY.
AUTOMATIC GATE.
APPLICATION FILED OCT. 25, 1907.



Witnesses:
K. K. Keffer.
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UNITED STATES PATENT OFFICE.

LEONARD P. McVAY, OF NEW VIRGINIA, IOWA.

AUTOMATIC GATE.

No. 894,742.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed October 25, 1907. Serial No. 399,231.

To all whom it may concern:

Be it known that I, LEONARD P. McVAY, a citizen of the United States, residing at New Virginia, in the county of Warren and State of Iowa, have invented a certain new and useful Automatic Gate, of which the following is a specification.

The object of my invention is to provide an automatic gate of simple, durable and inexpensive construction, which when the latch is released will automatically have its free end elevated and then swung to an open position so that if there is any obstruction in the roadway adjoining the gate or if the gate should be placed on a hillside, it will clear the ground and move to its closed position.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of a gate embodying my invention and portions of a fence adjacent thereto, and Fig. 2 shows a top or plan view of a gate post and a portion of a gate hinged thereto and embodying my invention, the dotted lines in said figure showing the position of the parts when the gate is open.

Referring to the accompanying drawings, I have used the reference numeral 10 to indicate the gate post having fixed thereto hinge members 11. The gate proper is composed of an upright 12 at the hinged end of the gate, a similar upright 13 at the other end, a number of horizontal rails 14 connecting the uprights and a diagonal brace 15 fixed to both uprights and to all of the rails. A fence post 16 is provided adjacent to the free end of the gate and has a latch loop 17 fixed thereto. Slidingly mounted in the gate adjacent to the latch loop is a latch 18 provided with a spring 19 and a notch 20 in its upper edge. When the said latch is in the position shown in Fig. 1, the gate is held closed by means of the notch 20 engaging the loop 17 and when the free end of the gate is moved downwardly, then the spring 19 withdraws the latch and permits the gate to be opened.

The hinged end of the gate is supported as follows: The reference numeral 21 indicates an upright parallel with the gate upright 12 and pivotally connected therewith by the

bolt 22, which permits the gate to swing up and down relative to the upright 21. This upright 21 is provided with two hinge members 23 designed to engage and coact with the hinge members 11 on the post 10, thus permitting the upright 21 to swing freely in a horizontal plane.

I have provided for raising the free end of the gate when the latch thereon is released as follows: 24 indicates an arm fixed to the upright 21 and having a contractible coil spring 25 fixed thereto and adjustably connected to the gate by means of a notched bar 26 fixed to the brace 15 so that the spring may be adjustably connected with the gate so that the tension of the spring may be varied according to the weight of the gate and the resiliency of the spring. I have also provided means for swinging the gate to its open position after its free end is elevated as follows: 27 indicates an arm fixed to the gate post 10 and projecting away from the gate and laterally. A contractible spring 28 is fixed to said arm and also to the upright 21 so that it will apply a yielding pressure to the gate in a manner tending to swing the gate to its open position.

In practical use and assuming the parts to be arranged, as shown in Fig. 1, then the operator desiring to open the gate need only press the outer end of the gate downwardly, whereupon the latch 18 will be automatically released and as soon as this is done, the spring 25 will swing the free end of the gate upwardly on the pivot 22 and at the same time, the spring 28 will swing the gate and the upright 21 to an open position, as shown by dotted lines in Fig. 2. Obviously if there is any obstruction in the roadway under the gate or in the path of which the gate must swing to open, the raising of the free end of the gate will cause it to clear such obstruction. In many instances, it is desired to place a gate on a hillside and to have it swing uphill in order to open it. In such instances my improvement is especially valuable as the spring 25 can be adjusted to raise the gate to any desired elevation during its opening movement.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States, therefor is—

1. In a gate, the combination of an upright member hinged to swing in a substantially horizontal plane, a spring connected therewith for normally holding it in an open

position, a gate body portion pivoted to the upright to swing in a substantially vertical plane with relation thereto; an arm fixed to said upright and extended above it, a spring
5 connected with said arm and adjustably connected with the gate body portion.

2. In a gate, the combination of an upright hinged to swing in a substantially horizontal plane, a spring connected therewith
10 for normally holding it in an open position, a gate body pivoted to the upright to swing in a substantially vertical plane with relation thereto, an arm fixed to the upright and projected upwardly, a spring connected with the
15 arm, a notched bar connected with the gate and having the other end of the spring adjustably connected therewith and a latch at the free end of the gate body.

3. In a gate, the combination of an upright hinged to swing in a substantially horizontal

plane, a spring connected therewith for normally holding it in an open position, a gate body pivoted to the upright to swing in a substantially vertical plane with relation thereto, an arm fixed to the upright and
25 projected upwardly, a spring connected with the arm, a notched bar connected with the gate and having the other end of the spring adjustably connected therewith, a latch at the free end of the gate body, said latch
30 comprising a slide bolt with a notch in its top and a spring connected with the slide bolt for withdrawing the latch when the free end of the gate is moved downwardly.

Des Moines, Iowa, September 24, 1906.

LEONARD P. McVAY.

Witnesses:

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