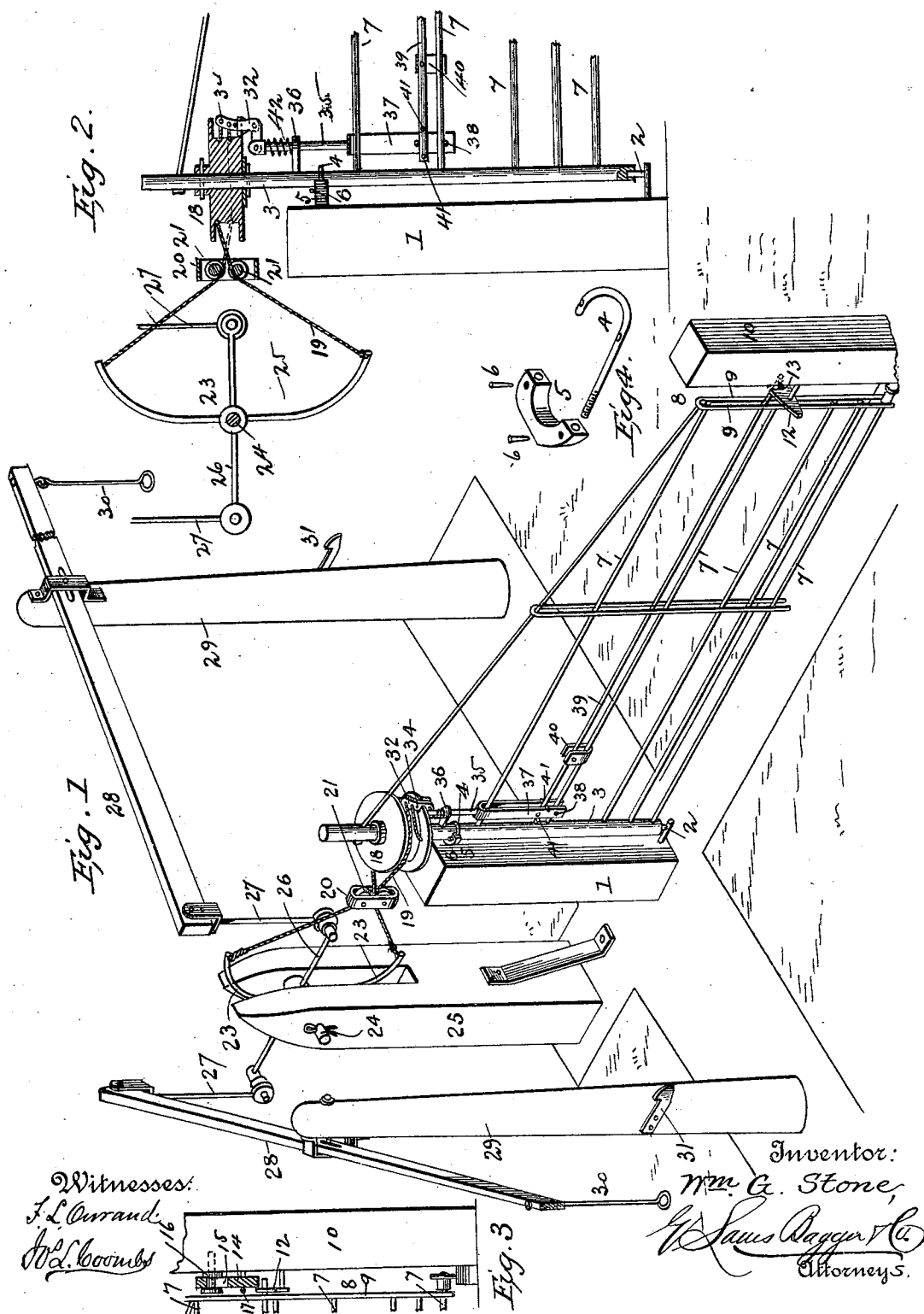


(No Model.)

W. G. STONE.
GATE.

No. 554,800.

Patented Feb. 18, 1896.



Witnesses:
J. L. Curran,
W. L. Coombs

Inventor:
W. G. Stone,
Lawson Rogers & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM GEORGE STONE, OF KNOXVILLE, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 554,800, dated February 18, 1896.

Application filed May 31, 1895. Serial No. 551,124. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GEORGE STONE, a citizen of the United States, and a resident of Knoxville, in the county of Knox and State of Illinois, have invented certain new and useful Improvements in Gates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to swinging gates of that class or description which can be opened and closed by persons in vehicles or on horseback, and without dismounting, and which can be opened by persons walking by moving the latch by hand, and is intended as an improvement upon the invention disclosed in Letters Patent granted to me September 15, 1885, No. 326,173.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a swinging gate constructed in accordance with my invention. Fig. 2 is a detail longitudinal sectional view. Fig. 3 is a detail view of the front end of the gate. Fig. 4 is a detail view of the lug and yoke.

In the said drawings, the reference-numeral 1 designates the gate-post provided near its lower end with a lug 2, in which is journaled the lower end of the rear upright, 3. This upright near its upper end is connected with the post 1 by means of a semicircular lug 4 secured thereto and a correspondingly-formed yoke 5 connected therewith by means of tapered pins 6, said lug and yoke when connected together forming a circular bearing.

The numeral 7 designates the horizontal rails of the gate secured to said upright 3 and to a front upright, 8, consisting of the two connected arms 9.

The numeral 10 designates a front post provided with a beveled catch 12, formed with a central notch 13, and above this catch is a vertically-movable weight 14, formed with a slot 15, connected with post 10 by a headed pin 16, and working in a guide 17 secured to said post.

Secured to the upper end of upright 3 is a grooved pulley or drum 18, around which passes a cord 19, which passes through a loose block 20 provided with two pulleys 21. The ends of these cords are connected with a curved lever 23, secured to a shaft 24, journaled to a post 25. Secured to this shaft are rearwardly and forwardly projecting horizontal arms 26. To each of these arms is pivoted a rod 27, connected respectively with levers 28, pivoted to posts 29 at opposite sides of the gate, and said levers are provided with depending operating-rods 30. Secured to the posts 29 are spring-catches 31.

Pivoted to the lower flange of the pulley or drum 18 is a bell-crank lever 32, having its upper arms formed with a series of holes 34, through which the cords 19 pass. To the lower end of this lever is pivoted a vertical rod 35, passing through a guide 36 on the upright 3, and provided at its lower end with forked or bifurcated arms 37, connected together by a pin 38. The lower ends of these forked arms embrace a latch-lever 39, pivoted to a lug 40. The rear end of this lever is provided with pins 41, which engage with the lower end of the forked arms, while its front end passes through the front upright and is adapted to engage with the notched catch.

The numeral 42 designates a coiled spring connected with the rod 35, and its tendency is to restore the rod to normal position after having been operated.

The operation is as follows: When the gate is closed the lever will engage with the notch in the catch and the weight resting thereon will hold it in the notch. To open the gate one of the levers 28 (according to the direction in which the operator approaches) is depressed and through the medium of the connections will actuate the curved lever. The cord connected with said lever will actuate the bell-crank lever, depressing the rod and forked arm connected therewith and raising the front end of the lever out of the notch in the catch. At the same time, the cord will rotate the drum and swing the gate in the direction from the operator and open the same, and the latch-lever engaging with the spring-catch on the post carrying the lever will hold the same open. After passing through the gate it can be closed by pulling upon the lever

on the opposite side. The gate can also be opened and closed by hand.

The yoke 5 is removable by simply removing the pins, thus allowing the gate to be lifted 5 and set aside in case of high snow-drifts.

Having thus fully described my invention, what I claim is—

1. The combination with the front and rear posts, the notched catch and the vertically- 10 movable weight secured to the front post and the swinging gate connected with the rear post, of the rear upright, the flanged drum secured thereto, the bell-crank lever having 15 holes, the spring-actuated rod and forked arm, the pivoted latch-lever, the ropes secured to said drum and passing through the holes in said lever, the block and pulleys, the curved

lever to which said ropes are connected, the horizontal arms, the pivoted levers and connections, the posts and spring-catches; sub- 20 stantially as described.

2. The combination with the fence-posts and the swinging gate and means for opening and closing the same; of the removable yoke, the semicircular lug and the pins connecting 25 the same together; substantially as described.

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

WILLIAM GEORGE STONE.

Witnesses:

JAMES WILLIAM MCINTIRE,
EDGAR CODDING.