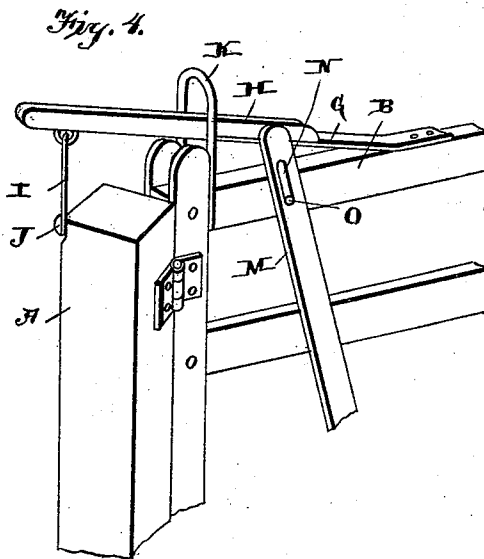
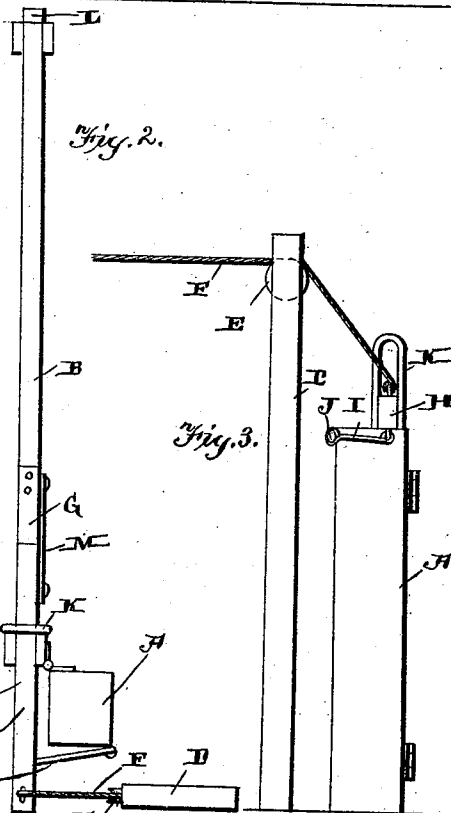
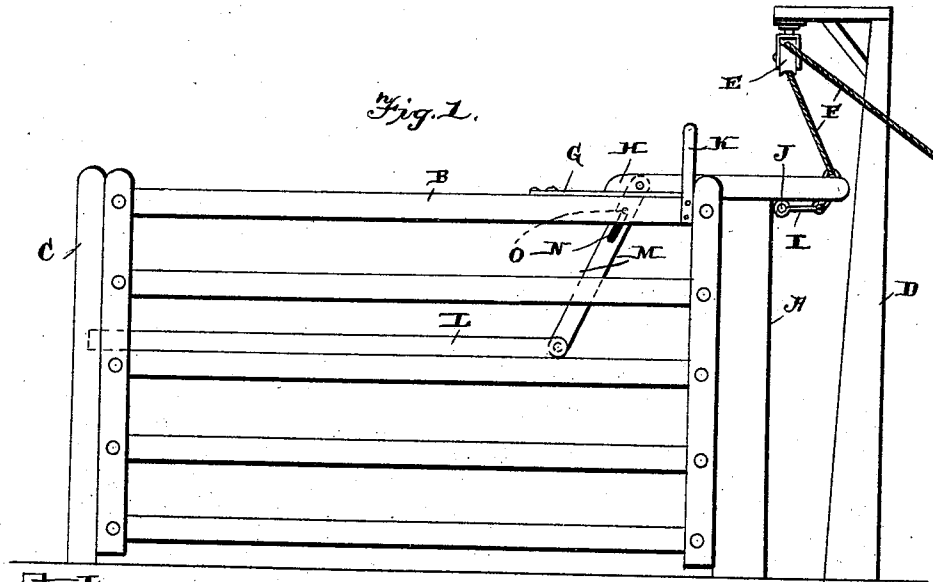


(No Model.)

C. A. TAYLOR.
SWINGING GATE.

No. 494,449.

Patented Mar. 28, 1893.



WITNESSES.

Geo. E. French,
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UNITED STATES PATENT OFFICE.

CHARLES A. TAYLOR, OF JACKSONVILLE, ILLINOIS.

SWINGING GATE.

SPECIFICATION forming part of Letters Patent No. 494,449, dated March 28, 1893.

Application filed November 22, 1892. Serial No. 452,801. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. TAYLOR, of Jacksonville, in the county of Morgan and State of Illinois, have invented certain new and useful Improvements in Swinging Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in swinging gates; and it consists in the novel combination and arrangement of parts which will be fully described hereinafter, and more particularly referred to in the claims hereto annexed.

The object of my invention is to construct an improved swinging gate which may be conveniently operated at a distance therefrom by a depending pull cord, and which is so constructed that by the action of a spring arm carried by the gate and loosely connected to the post, the gate will be automatically thrown open when swung to a certain point and when swung in the opposite direction it will be automatically closed after passing the said point by the action of the said spring arm.

Referring to the accompanying drawings,—Figure 1 is a side elevation of my improved gate. Fig. 2 is a plan view. Fig. 3 is an end view. Fig. 4 is a perspective view of the top rear portion of the gate showing its position when half open.

A, designates a post upon which a gate B, of ordinary construction is swung to open in one direction only. The said gate may be of any preferred construction.

C, represents the gate post against which the free end of the gate swings when closed. Situated to the rear of the post A, but to one side thereof, is the post D from the upper end of which depends a pulley E, around which passes an operating line F, which may extend to any convenient position along the road which the gate closes.

Secured to the top edge of the upper rail of the gate and toward its rear end is the flat spring G, its free end extending toward the post A, and secured to this free end is the arm H, which extends outward over the said post

and in line with the gate, as shown. The inner end of the operating line is connected to the outer end of this spring arm which latter in its normal position extends outward horizontally.

I, designates a link which is loosely connected to the outer end of the arm and which at its opposite end is loosely secured to a staple J, on the post A, the said staple being on one side of and below the arm H. This link extends in a direct line from the said arm to the point where it is connected to the post A, so that when the outer end of the arm H, is raised by a pull upon the line F, the link I, in order to accommodate itself to the said rise will pull the said arm H, to one side and over the staple J, the latter in this described operation acting as a fulcrum point for the said link. Now the normal position of the spring arm H, is horizontal so that when raised it is constantly exerting itself to regain that position. This being the case after it has swung around in its opening movement over the point J it will in automatically depressing itself be pushed farther away from the said point by the link I, thus opening wide the gate as shown in Fig. 2. When the gate is to be closed the end of the arm H, is again drawn upward by the cord F, until brought over the point J, by the link I, as above described when its downward pressure will cause the said link to push it around into a position which closes the gate. In order that all the strain of turning the gate shall not be on the end of the spring secured thereto, guides K, are projected vertically from the rear end of the gate against which the arm H, pulls in turning the same.

For locking the gate to the post C, a longitudinally movable latch L, is provided which at its outer end engages the said post when the former is projected outward and at its inner end is connected to the lower end of the depending bar M, which at its upper end is loosely secured to the arm H. This bar is inclined and provided with a longitudinal slot N, through which a pin O, projects from the top rail of the gate as shown in Fig. 1. When the arm H, is raised for swinging the gate, the bar M, is also pulled upward, and as its slot traverses the pin O, it is swung slightly backward withdrawing the latch from the post D, thus releasing the gate. When the arm H, re-

sumes its horizontal position the latch is again extended by the lowering of the bar M. Thus an automatically operated latch is provided. One pull upon the cord F, releases the latch and swings the gate either open or closed as desired.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

10 1. In a gate, the combination of a post, a gate hinged thereto, a rearwardly extending vertically movable spring arm secured to the gate, and a link loosely secured at one end to the post and at its opposite end to the said

15 arm, substantially as shown and described.

2. In a gate, the combination of a post, a gate hinged thereto, a flat spring secured at one end to the gate, a rearwardly extending arm secured to the free end of the spring, and

20 a link loosely secured at one end to the post and at its opposite end to the arm, substantially as shown and described.

3. In a gate, the combination of a post, a gate hinged to one side of the same, a rearwardly extending vertically movable spring arm secured to the top of the gate, a link

25 loosely secured to the side of the post opposite the hinges, and at its opposite end to the

arm, and an operating line, substantially as shown and described.

4. In a gate, the combination of a post, a gate hinged thereto, a rearwardly extending vertically movable spring arm secured thereto, guides projecting from the gate between which the said arm moves vertically, a link

35 secured at one end to the post and at its opposite end to the arm, and an operating line, substantially as shown and described.

5. In a gate, the combination of a post, a gate hinged thereto, post C, a longitudinally

movable latch which at its outer end engages the said post C, an upwardly extending bar

loosely secured to the latch having a longitudinal slot formed therein a pin projecting

from the gate through said slot of the bar, a

vertically movable arm carried by the gate which is loosely connected to the upper end

of the said bar, and an operating line for raising the said arm vertically, substantially as

shown and described.

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

CHARLES A. TAYLOR.

Witnesses:

JOHN F. CLARK,

WM. S. LURTIN.