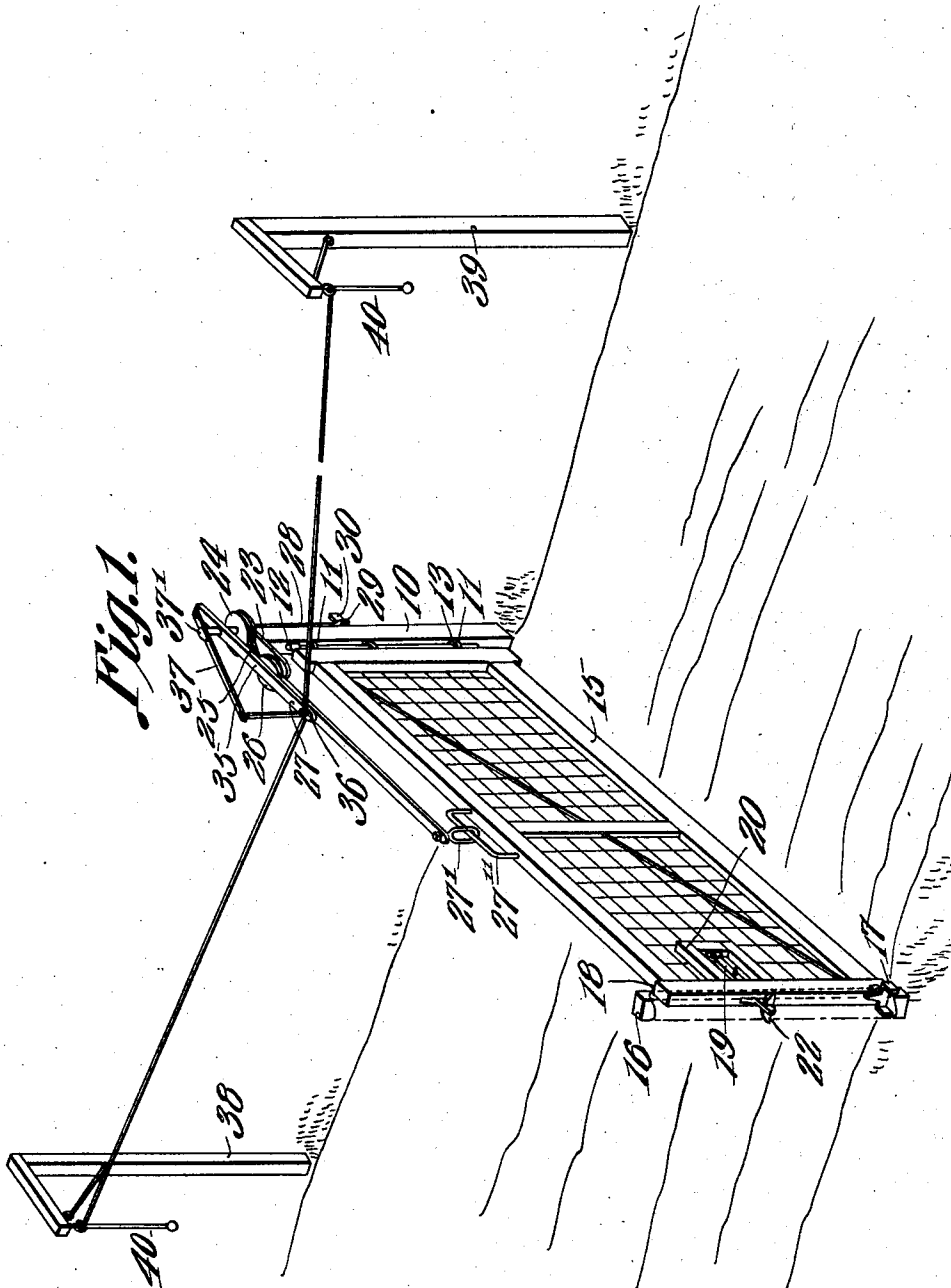


J. S. HENDRICKS.
FARM GATE.
APPLICATION FILED APR. 28, 1911.

1,024,686.

Patented Apr. 30, 1912.

2 SHEETS—SHEET 1.



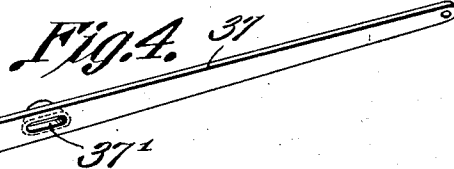
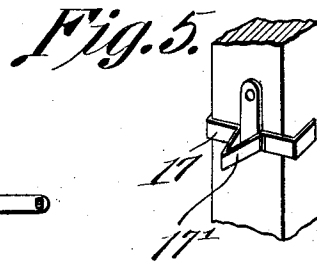
Witnesses

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2 SHEETS-SHEET 2..



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UNITED STATES PATENT OFFICE.

JAMES S. HENDRICKS, OF COLVILLE, WASHINGTON.

FARM-GATE.

1,024,686.

Specification of Letters Patent.

Patented Apr. 30, 1912.

Application filed April 28, 1911. Serial No. 623,867.

To all whom it may concern:

Be it known that I, JAMES S. HENDRICKS, a citizen of the United States, residing at Colville, in the county of Stevens and State of Washington, have invented a new and useful Farm-Gate, of which the following is a specification.

This invention relates to an improvement in gates.

10 The primary object of said invention is to provide a gate of the so called hand opener type with simple and efficient means for imparting vertical movement to the gate and simultaneously swinging the same.

15 With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

20 In the drawings,—Figure 1 is a perspective view of the gate and its operating mechanism. Fig. 2 is a side elevation. Fig. 3 is a detailed view of the lever by which the same is swung; and Fig. 4 is a detail view of the pivoted lever which co-acts with a vertically movable rod to raise the gate. Fig. 5 is a detail view of the swinging latch member.

25 In the drawings 10 designates the gate supporting post which is provided with loops 11 which support the rod 12, said loops being in contact with the loops 13 and 14 carried by the gate 15, the loops 13 and 14 resting on the upper surface of the loops 11 thus permitting the gate to move vertically.

30 The gate 15 may be of any suitable construction and is normally held against movement by means of the post 16, said post being provided at a point adjacent its base with a swinging stop 17 shown in detail in Fig. 5, said stop being substantially U-shaped and provided with the extension 17' which contacts with the end post 18 of the gate as the same is shut thus assuring the proper seating of a latch member 19 carried by the gate. The latch member 19 is pivotally supported within a frame 20 and extends through the slot 21 in the end post 18, said latch member contacting with a keeper 22. The post 10 has secured to its upper end a plate 23 which supports adjacent one end,

a pulley 24 around which passes a cable 25, said cable 25 being crossed and adapted to rotate a second pulley 26 which is likewise positioned on the plate 23, said pulley 26 being secured to a lever 27 which extends to a point beyond the center of the gate, its end portion being provided with a depending loop 27', said loop embracing the U-shaped bar 27". The pulley 24 is so positioned on the plate 23 that its center is beyond the edge portion of the post 10 and the rod 28 passes centrally through said pulley, said rod being connected at the point 29 to a link 30 which link extends within a slot 31 formed in the post 10 being pivoted off its center at the point 32 to the post, said link having the reduced extension 34 which terminates in the loop 34', the loop 14' which is carried by the gate normally resting on said reduced extension. It will be seen by this construction that as pressure is brought to bear on the rod 28, the link will be swung on its pivot its reduced end portion contacting with the loop 14' to impart a vertical movement to the gate.

A bar or lever 35 is supported on the rod 28 and is secured to the pulley 24. This bar 35 extends beyond the plate 23 and is provided adjacent its end with eyes 36. A second bar 37 is hingedly connected to the bar 35, the bar 37 being provided with the concavity 37' which is positioned directly above the rod 28, said concavity normally housing said rod 28 and which, as movement is imparted to said bar contacts with the rod to move the link 30 on its pivot.

35 Arranged at points equi-distant from the post 10 are cable-supporting posts 38 and 39 and each of these posts are provided with pulleys supporting cables 40, said cables extending to a point adjacent the end portion of the bar 35, said cables passing through the eyes 36 carried by said bar and having their end portions secured to the end portion of the bar 37. It will be seen that as one of the cables is pulled the end portion of the bar 37 will be drawn toward the bar 35 thus imparting a downward thrust to the rod 28 which, through its contact with the link 30 will raise the gate. As the pull on the cable is continued the gate will be swung on the rod 12, the lever 27 being rotated by means of the pulley 26 rotary movement being imparted to said pulley through the cable 25 which is actuated by the pulley 24, said

pulley 24 being rotated through the medium of the rod 35 which is secured to the same. Thus it will be seen that a swinging movement as well as a vertical movement will be imparted to the gate, particular attention being called to the fact that the lifting of the gate is accomplished from a point at its center, the gate being forced upward, its end beams being at all times parallel with the posts 10 and 16, the gate being raised sufficiently to release the latch members 17 and 19 thus permitting the gate to swing freely, the peculiar construction releasing said latch members slightly in advance of the swinging movement imparted to the gate. It will be noted that the construction of the U shaped bar 27" allows the loop 27 to move on the same in order to take up the swinging movement of the gate, the loop 27' exerting pressure on the bar 27". said bar sliding within the loop as the lever 27 is operated.

The many advantages of an operating mechanism of this character will be clearly apparent as it will be seen that the same may be economically manufactured and readily positioned on gates now in use, the construction being adapted for the usual type of swinging gates.

Having thus described the invention, what is claimed is:—

1. In a gate operating mechanism, a support, a gate mounted on said support, said gate being capable of a swinging and a vertical movement, a link for imparting vertical movement to said gate, a lever for swinging said gate, bars arranged one above the other, means for drawing said bars together, a rod actuated by one of said bars, said rod having an operative connection with said link to cause a vertical movement of the gate, and an operative connection between the other of said bars and said lever, means for drawing said bars together and imparting a vertical and swinging movement to said gate.

2. In a gate operating mechanism, a support for said gate, a gate mounted for a swinging and a vertical movement, a plate

arranged on said support, a pulley arranged on said plate, a lever supported for swinging movement on said plate said lever having an operative connection with said gate, a cable transmitting the movement of said pulley to said lever, bars supported to rotate with said pulley, means actuated by one of said bars to impart vertical movement to said gate, and means for swinging said bars to impart a swinging movement to said gate.

3. In a gate operating mechanism, a support for said gate, said gate being mounted for a vertical and a swinging movement, a plate arranged on said support, a pulley mounted on said plate, a lever mounted for swinging movement on said plate, said lever having an operative connection with said gate and said pulley, a plurality of hingedly connected bars supported by said pulley and means for drawing said bars together and imparting a vertical and a swinging movement to said gate.

4. In a gate operating mechanism, a support for said gate, said gate being mounted for a vertical and a swinging movement, a plate arranged on said support, a pulley arranged on said plate, a lever mounted on said plate, said lever having an operative connection with said gate, a cable transmitting the movement of said pulley to said lever, a link arranged to impart vertical movement to said gate, a rod pivotally connected to said link, said rod extending through said plate and said pulley, hingedly connected bars arranged one above the other, one of said bars being rigidly secured, to said pulley, the other of said bars being arranged for contact with the end portion of said rod, and means for drawing said bars together to depress said rod and to rotate said pulley, the rotation of said pulley transmitting a swinging movement to said gate.

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

JAMES S. HENDRICKS.

Witnesses:

E. WINSLOW,
V. G. TURK.