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W. H. HENDRICKS.

GATE.

(Application filed Aug. 3, 1899.)

(No Model.)

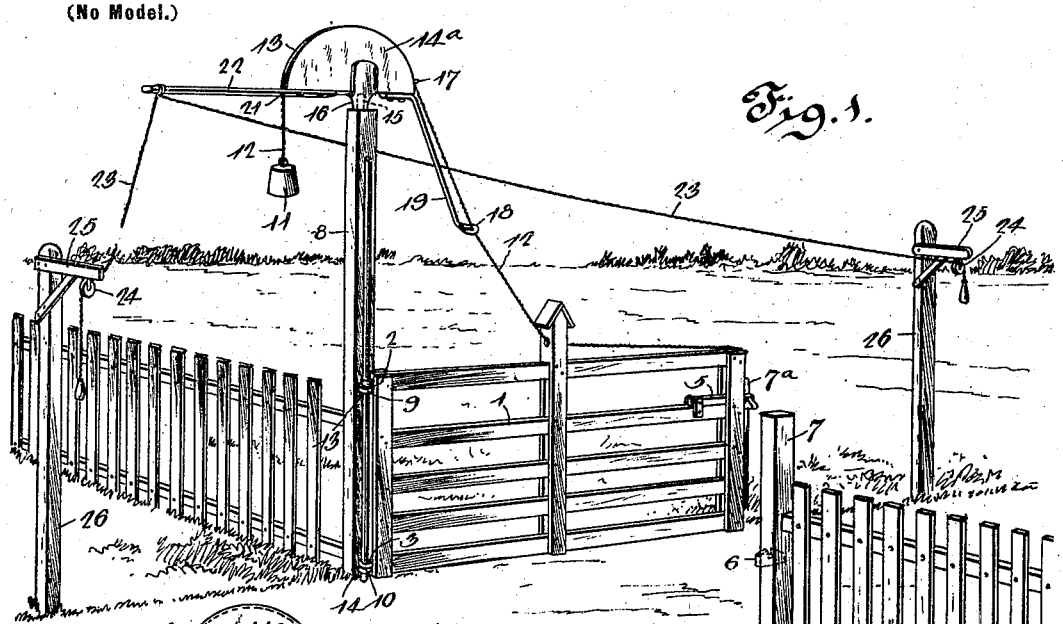

Fig. 1.

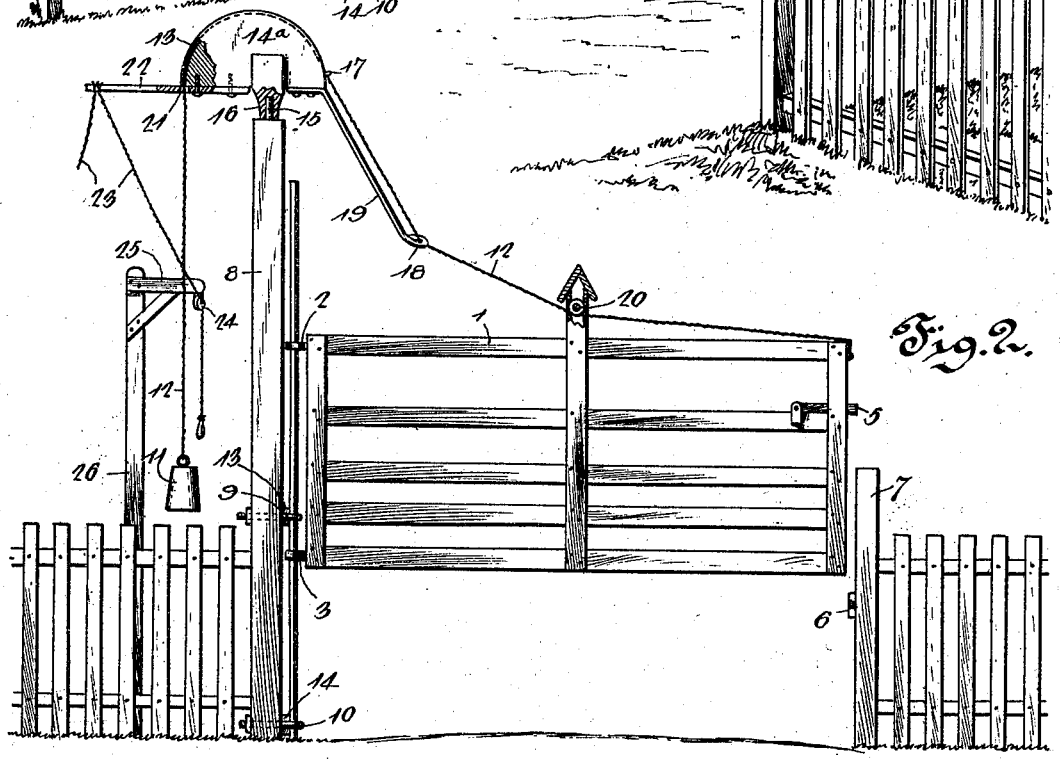

Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM HENRY HENDRICKS, OF MECHANICSBURG, INDIANA.

GATE.

SPECIFICATION forming part of Letters Patent No. 647,228, dated April 10, 1900.

Application filed August 3, 1899. Serial No. 726,029. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY HENDRICKS, a citizen of the United States, residing at Mechanicsburg, in the county of Henry and State of Indiana, have invented a new and useful Gate, of which the following is a specification.

The invention relates to improvements in gates.

One object of the present invention is to improve the construction of swinging gates and to provide a simple, inexpensive, and efficient one capable of being opened at a distance from either side of it and adapted to open away from the operator.

A further object of the invention is to counterbalance the gate, so that the same may be readily raised and lowered and arranged at the desired elevation and to arrange such counterbalancing-weight so that it will operate to prevent the gate from sagging.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a gate constructed in accordance with this invention. Fig. 2 is an elevation of the same.

Like numerals of reference designate corresponding parts in both figures of the drawings.

1 designates a swinging gate adapted to open in either direction and provided at its inner end with upper and lower eyes 2 and 3, receiving a vertical pintle-rod 4, and the said eyes 2 and 3 are enlarged sufficiently to permit the gate to be tilted slightly by the means hereinafter described to disengage a pivoted latch 5 from a keeper 6 of a main latch-post 7 and from a keeper of a supplemental latch-post 7^a, designed to be arranged at each side of the gate to receive the latter when the same is open. The pivoted latch is mounted between parallel end bars of the gate, and it is adapted to engage the keeper automatically when the said gate closes. The pintle-rod, which is disposed vertically, is offset from an upright or post 8 and is supported by suitable staples 9 and 10, forming eyes and receiving blocks 13 and 14, which offset the pintle-rod from the upright.

The gate is capable of vertical movement on the pintle-rod and is adapted to be arranged at the desired elevation to permit it to clear obstructions and to afford a passage-way for small animals. In order to enable the gate to be readily raised and lowered, it is partially counterbalanced by a weight 11, connected by a cable 12 or other suitable flexible connections with the gate, and the said cable 12 is arranged in a peripheral groove 13 of a segmental head 14^a, which is pivotally mounted on the upright or support and adapted to swing horizontally. The upright or support 8 extends above the pintle-rod, as clearly illustrated in Fig. 2 of the drawings, and it is provided at its upper end with a vertical pivot 15, which is received in a depending socket 16 of the oscillating head 14^a, whereby the latter is pivotally mounted on the upright or support. The front portion of the cable or flexible connection 12 passes through an eye 17 at the front of the head 14^a, and it extends downward therefrom through a guide-eye 18 of an arm 19 and passes under a pulley 20, which is mounted at the center of the gate, at the top thereof. The front end of the cable or connection 12 is attached to the front end of the gate, adjacent to the upper edge thereof, as clearly shown in Fig. 2 of the drawings. The rear portion of the cable or flexible connection 12 depends from the back of the head 14^a and passes through a guide-opening 21 of a horizontal rearwardly-extending arm 22. The cable or flexible connection is adapted to pass freely over the segmental head, and as it nearly counterbalances the gate it will be apparent that the latter may be readily raised and lowered. The weight also operates to prevent the gate from tilting the upright or post 8 forward, and the gate is thereby prevented from sagging.

The forwardly-extending arm 19 is inclined and it is adapted, when the head is oscillated by the means hereinafter described, to tilt the gate sufficiently to disengage the latch from the keeper, whereby the gate is permitted to open. The gate is operated at a distance from either side of it by means of operating ropes or cables 23, connected at

their inner ends to the outer end of the rearwardly-extending arm 22 and having their outer portions supported by pulleys 24 or other suitable guides from arms 25 of uprights or supports 26, located at points beyond the gate, as clearly illustrated in Fig. 1 of the accompanying drawings. When the gate is open, the latch engages a keeper of one of the supplemental latch-posts 7^a, and the latch 5 is automatically disengaged from the supplemental latch-post when one of the operating ropes or cables is pulled to close the gate. The outer ends of the operating ropes or cables are provided with handles of sufficient weight to hold them in position for operation.

The guide of the gate preferably consists of the pulley 20, housed within the casing, as illustrated in the accompanying drawings, but any other suitable form of guide may be employed.

It will be seen that the gate is exceedingly simple and inexpensive in construction, that it is positive and reliable in operation, and may be readily opened and closed at a distance from either side of it. It will also be apparent that the weight which counterbalances the gate to enable the same to be readily raised and lowered operates to prevent the gate from sagging and that the means for guiding the cable or flexible connection of the counterbalancing-weight operates as a lever to swing the gate.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. The combination of a post or support, a swinging gate capable of vertical movement, a segmental head pivotally mounted on the post or support and provided at its periphery with a groove, a flexible connection arranged in the groove of the segmental head and depending from the same at the front and rear thereof, the front end of the connection being attached to the gate, a weight attached to the rear end of the flexible connection, an arm extending rearward from the segmental head and projecting beyond the rear portion of the flexible connection, and operating mechanism connected with the outer end of the rearwardly-extending arm, substantially as described.

2. The combination of a post or support, a swinging gate capable of vertical movement, a pivot extending vertically from the top of the post or support, a segmental head having a depending socket to receive the said pivot, and extending in advance and in rear of the post or support, the inclined front arm mounted on the said head and having a guide at its lower end, the rearwardly-extending arm provided with a guide and carried by the head, a flexible connection arranged on the peripheral edge of the head and passing through the said guides, the front portion of the connection being attached to the gate, a weight connected with the rear portion of the flexible connection, and operating mechanism connected with the rearwardly-extending arm, substantially as described.

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

WILLIAM HENRY HENDRICKS.

Witnesses:

DANIEL RENT,

KINNICH LOWERY.