

No. 608,465.

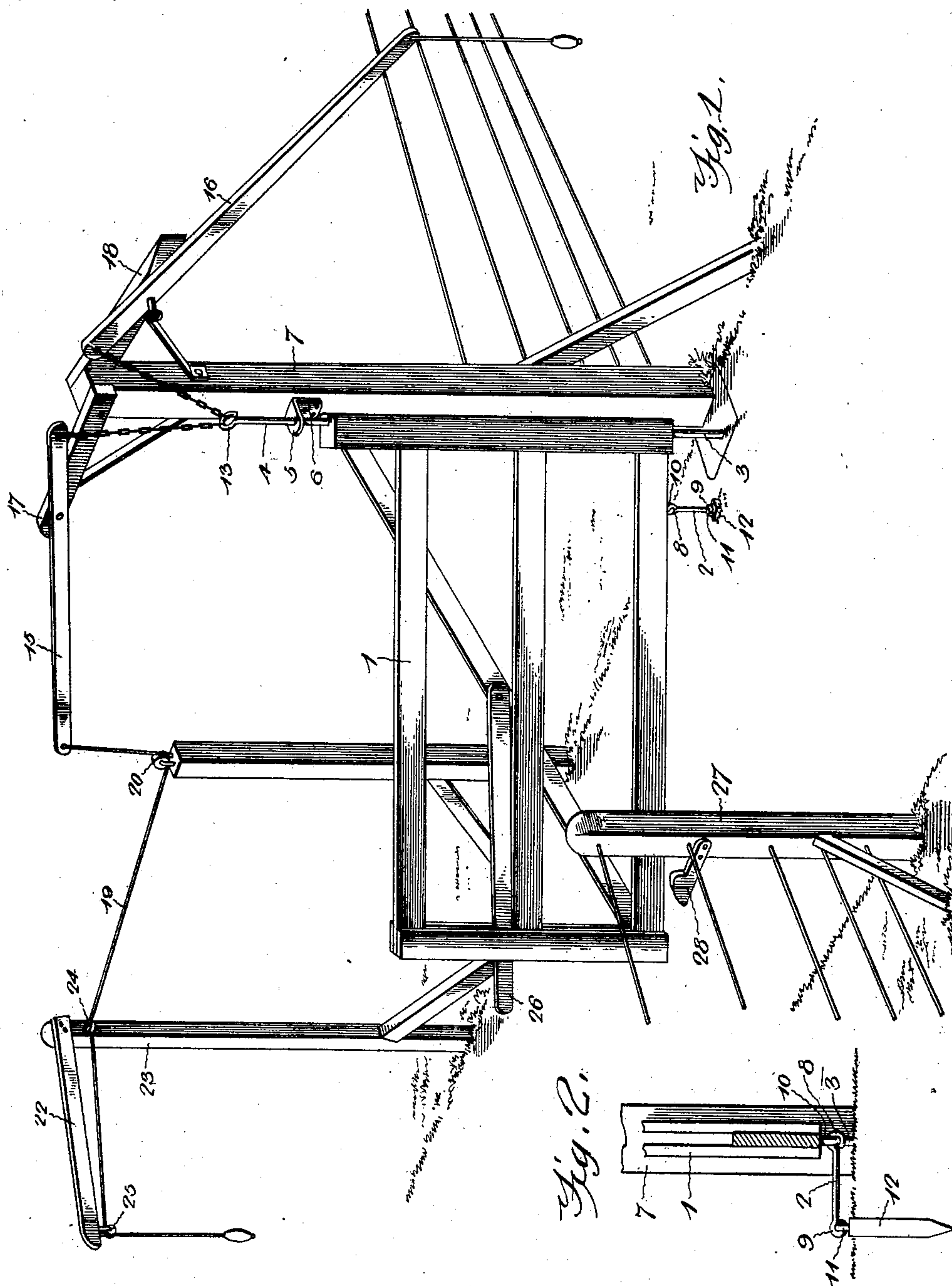
Patented Aug. 2, 1898.

M. K. LEWIS.

GATE.

(Application filed Mar. 30, 1898.)

(No Model.)



Witnesses

Krauslewerell, By His Attorneys.

J. F. Riley

Miles K. Lewis, Inventor.

Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

MILES K. LEWIS, OF ALBANY, OREGON.

GATE.

SPECIFICATION forming part of Letters Patent No. 608,465, dated August 2, 1898.

Application filed March 30, 1898. Serial No. 675,732. (No model.)

To all whom it may concern:

Be it known that I, MILES K. LEWIS, a citizen of the United States, residing at Albany, in the county of Linn and State of Oregon, have invented a new and useful Gate, of which the following is a specification.

The invention relates to improvements in gates.

The objects of the present invention are to improve the construction of swinging gates and to provide a simple and comparatively inexpensive one adapted to be readily opened and closed a distance from either side of it without dismounting from a horse or leaving a vehicle.

The invention consists in the construction and novel combination and arrangement of parts, as 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 and shown partly open. Fig. 2 is a detail sectional view illustrating the position of the oscillating link when the gate is closed.

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

1 designates a swinging gate capable of limited vertical movement and connected at the bottom with one end of a link 2, which is fulcrumed at its other end on a short post or other suitable support, and the fulcrumed end of the link is located at a point midway between the positions occupied by the gate when it is opened and closed, whereby when the gate is lifted the link will cause the same to swing, and the momentum of the gate will carry the link beyond a vertical position and complete the opening or closing movement of the same.

The gate is provided at its bottom with a depending pintle 3 and at its top with an upwardly-extending pintle 4. The lower pintle is arranged in a suitable bearing or socket, and the upper pintle passes through a perforation of an arm 5 of a bracket 6, which extends from a post or upright 7 over the top of the rear end of the gate. Instead of hinging the gate in this particular manner any other suitable form of hinge which will permit a

limited vertical movement of the gate may be employed. The oscillating link 2 is provided at its ends with eyes 8 and 9, which are linked into corresponding eyes 10 and 11 of the gate and the short post or support 12, but any other suitable means may be employed for fulcruming the link and connecting the same with the gate. The upper end of the upper pintle-rod is provided above the bracket 6 with an eye 13, into which are linked chains 14 for connecting the gate with levers 15 and 16, and the latter are adapted to lift the gate.

The levers 15 and 16 are fulcrumed on arms 17 and 18 of the upright or post 7, and the lever 16 is arranged at an angle to the gate when the latter is closed and extends over the roadway, being provided with a suitable depending rope or handle adapted to be readily grasped by the operator without dismounting from a horse or leaving a vehicle.

The gate in opening swings toward the outer end of the lever 15, and in order to enable the same to be operated at a distance a wire, rope, or cord 19 is employed. This operating wire or cord 19 extends downward from the outer end of the lever 15 to a pulley 20 of a post 21, so that the operating wire or rope will have a direct downward pull on the lever for lifting the gate. The outer portion of the operating cord or wire 19 is supported by an arm 22 of an upright 23, the connection passing directly from the pulley 20 to a pulley 24, mounted on the post or upright 23 at the inner end of the arm 22. The arm 22 extends outward over the roadway and is provided at its outer end with a pulley 25, from which depends the outer end of the wire or rope 19, and the latter may be provided with a suitable handle or grip.

The gate is provided with a pivoted latch-bar 26, and a latch-post 27 is provided with a suitable keeper 28, adapted to be engaged by the pivoted latch. The latch is readily disengaged from the keeper by the opening movement of the gate, which lifts the latch out of the said keeper.

The posts and uprights are supported by inclined braces, and the arms 17 and 18 are also braced. The link operates to hold the gate in its open position and prevent the same from closing accidentally, and it will also secure the gate when closed.

The invention has the following advantages: The gate is simple and comparatively inexpensive in construction, and the oscillating link causes a positive operation of the gate when the same is lifted. The link also operates to hold a gate in its open and closed position, and the latch, which will prevent the gate from being forced open by hogs or other animals, is lifted out of the keeper by the opening of the gate, and no connection between the operating mechanism and the latch is employed.

Changes in the form, proportion, and minor details of construction, such as varying the construction of the operating mechanism for lifting the gate and the construction and arrangement of the link, may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention; also, changes may be made in the manner of hinging the gate, as the pintles may be arranged on the end of the gate, between the top and bottom thereof, instead of above and below the gate, as shown in the drawings, and when the pintles are arranged between the top and bottom of the gate the rear end bar will preferably be extended upward and the pintles will be in the form of elongated eyes.

What I claim is—

1. A device of the class described comprising a swinging gate capable of a limited vertical movement, and an oscillating link connected with the gate and fulcrumed at a point in line with the center of the swing of the gate, whereby when the gate is lifted, the link will cause it to swing, substantially as described.

2. A device of the class described comprising a swinging gate, capable of a limited vertical movement, and a link located beneath

the gate and hinged at one end to the same, said link being fulcrumed in line with the center of the swing of the gate, whereby it is adapted to cause the gate to swing when the same is lifted, substantially as described.

3. A device of the class described comprising a swinging gate, capable of a limited vertical movement, a link connected with the gate and adapted to cause the same to swing when lifted, and levers fulcrumed between their ends, above the gate and connected at their inner ends with the same, substantially as described.

4. In a device of the class described, a swinging gate capable of a limited vertical movement, means for causing the gate to swing when the same is lifted, levers located above the gate, fulcrumed between their ends and connected at their inner ends with the gate, a post 21 provided with a pulley 20 and located beneath one of the levers, a support 23 having an arm and provided at the inner and outer ends of the same with pulleys, and a flexible connection extending over the said pulleys and attached to the adjacent lever, substantially as described.

5. In a device of the class described, the combination of a swinging gate capable of a limited vertical movement, and an oscillating link connected with the gate and arranged to cause the gate to swing when the same is raised and lowered, 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.

MILES K. LEWIS.

Witnesses:

H. M. PALMER,

ELECTA LEWIS PALMER.