

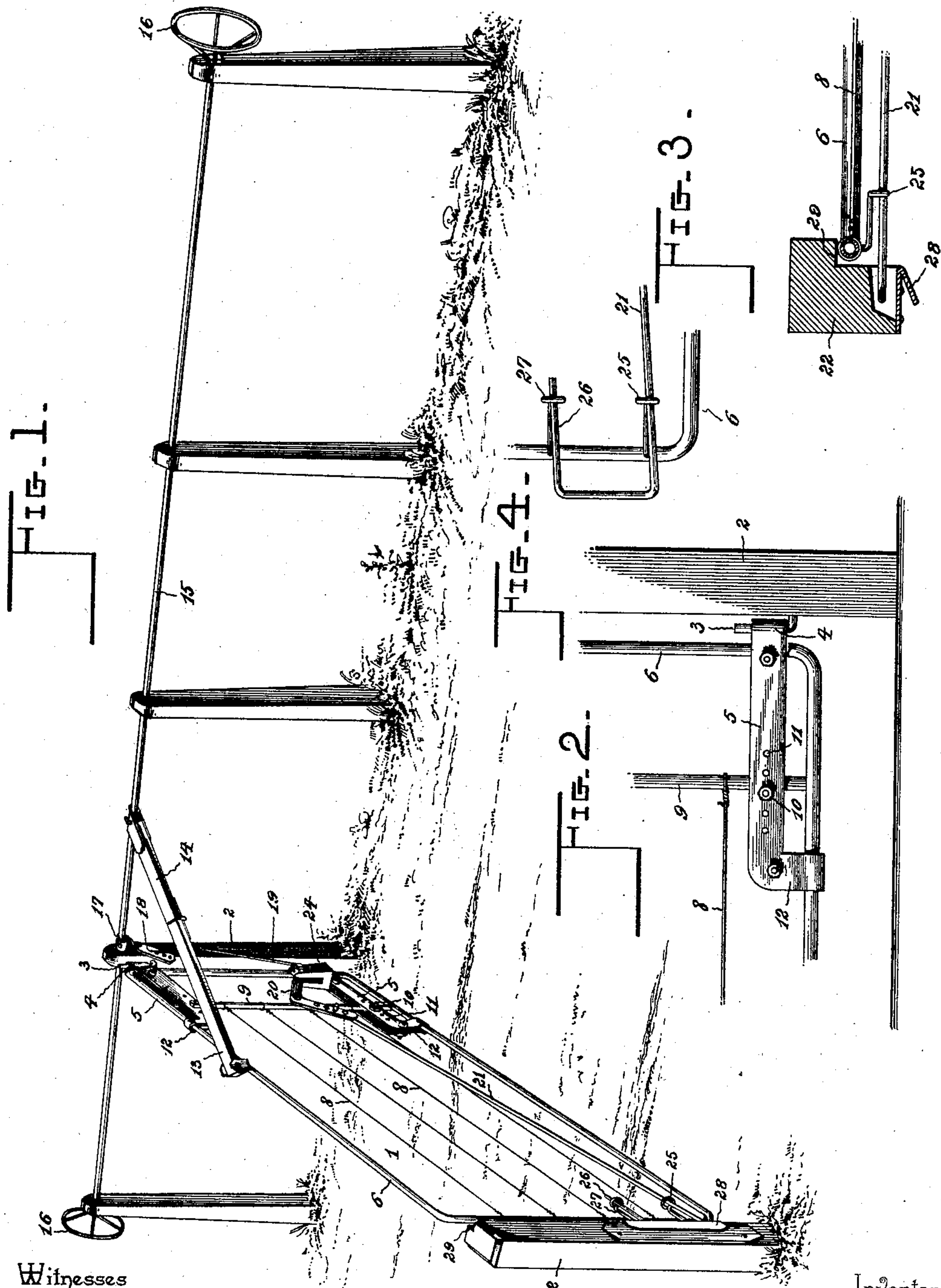
No. 608,367.

Patented Aug. 2, 1898.

B. J. HUCKEY.
FARM GATE.

(Application filed Mar. 7, 1898.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

BENJAMIN J. HUCKEY, OF GORIN, MISSOURI.

FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 608,367, dated August 2, 1898.

Application filed March 7, 1898. Serial No. 672,995. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN J. HUCKEY, a citizen of the United States, residing at Gorin, in the county of Scotland and State of Missouri, have invented a new and useful Gate, of which the following is a specification.

The invention relates to improvements in gates.

The object of the present invention is to improve the construction of operating mechanism for swinging gates and to provide a simple, strong, and durable one which may be readily operated at a distance from either side of the gate to avoid dismounting or leaving a vehicle.

A further object of the invention is to improve the construction of gates having frames filled with fence-wire by providing novel means for tightening the wires when necessary.

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. Fig. 2 is a detail view illustrating the manner of mounting the adjustable bar of the gate on the hinges thereof to tighten the wires. Fig. 3 is a detail sectional view illustrating the construction of the keeper of the latch-post. Fig. 4 is a detail view of the front portion of the latch-bar.

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

1 designates a swinging gate hinged to a post 2, which is provided with pintles 3, receiving eyes 4 of the gate, and each eye 4 is formed by a strip of metal doubled between its ends and having L-shaped sides 5, which embrace the metal frame 6 of the gate. The L-shaped sides 5 are connected adjacent to the frame of the gate by transverse fastening devices which cause the sides to engage the gate. The longer arms of the L-shaped side pieces 5 are disposed horizontally and extend longitudinally of the gate, and the shorter arms extend from the inner terminals of the longer arms and embrace the top and bottom of the gate.

The gate is provided with a series of horizontal wires 8, permanently secured to the front of the frame of the gate and connected at their rear ends to an adjustable rod 9, arranged vertically and having its terminals disposed between the sides 5 of the eyes 4 and secured by means of fastening devices 10, which pass through perforations 11 of the sides 5. Each side is provided with a series of perforations, and when it is desired to tighten the wires the vertical rod is drawn backward and the pins are arranged in perforations for holding the rod in such position. The shorter arms 12 of the sides 5 form eyes for embracing the top and bottom of the frame, which is composed of suitable metal, either tubular or solid.

The top of the gate is connected by a link-bar 13 with an arm 14 of a shaft 15, disposed longitudinally of the roadway and provided at its ends with hand-wheels 16, by means of which it is rotated, whereby the arm 14 is oscillated to open and close the gate. The arm 14 is arranged at an acute angle to that portion of the rod or shaft 15 which extends from it to the hinge-post, and the hinge connection between the link-bar 13 and the arm 14 is located at the lower faces of the parts, whereby the link and the arm are prevented from swinging downward below a horizontal position when the gate is closed, thereby locking the gate in that position. The arm 14 and the link-bar 13 are also adapted to hold the gate in its open position, so that the gate will be prevented from closing accidentally while a vehicle is passing through the gateway. The spokes of the hand-wheels are slightly inclined, the rims of the wheels being offset from the ends of the shaft, and the said handles may be readily operated from the top of a load of hay by engaging one of the tines of a pitchfork with a spoke of the wheel.

The longitudinal rock-shaft is journaled in suitable bearings of posts or supports, and it is provided adjacent to the hinge-post with an arm 17, connected by link-rods 18 and 19 with an arm of a bell-crank lever 20, fulcrumed at its angle on the gate and having one arm extending rearward substantially horizontally and its other arm depending vertically. The depending arm is connected with a reciprocating latch-rod 21, which is adapted to en-

gage a keeper of a latch-post 22 in order to prevent hogs or other animals forcing the gate open and straining the operating mechanism. The arms of the bell-crank lever 5 and the short arm 17 of the rock-shaft are provided with perforations in order to adjust the parts to obtain the necessary movement of the latch-rod, and a weight 24 is attached to the rearwardly-extending arm of the bell-crank lever to assist the operation of the latch. 10 The link-rods 18 and 19 provide a jointed connection between the bell-crank lever and the short arm of the rock-shaft, so that the latch can be readily reciprocated to enable 15 the gate to be opened partially to permit a person to pass through, and the weight will insure a proper operation of the latch under such conditions.

The latch-rod passes through a guide-eye 25 20 of the front of the gate and is angularly bent to form a loop and provide a guide-arm 26, which is arranged parallel with the body portion of the rod and is supported by a guide-eye 27.

25 The keeper of the latch-post consists of a plate secured to one side of the latch-post, over a recess thereof, and provided with a flange 28, arranged at an angle and forming a beveled face for directing the latch-rod into 30 engagement with the recess.

The gate opens in one direction only, and its free end when closed abuts against a vertical shoulder 29 of the latch-post.

35 The invention has the following advantages: The gate is simple, strong, and inexpensive. It is adapted to be opened and closed a distance from it without dismounting from a horse or leaving a vehicle, and the latch is operated simultaneously with the mechanism 40 for opening and closing the gate. The hinges of the gate serve to support the adjustable rod, which is operated to tighten the horizontal wires of the gate.

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

What I claim is—

50 1. The combination of a gate provided with horizontal wires permanently attached to its front end, hinges provided with parallel sides and arranged at the top and bottom of the gate, a rod connected with the rear ends of

the wires and arranged between the sides of the hinges, and means for securing the ends 55 of the rod to the hinges at the desired adjustment, substantially as described.

2. The combination with a hinge-post provided with pintles, of a gate provided with wires permanently secured at their front ends 60 to the gate, eyes receiving the pintles and consisting of strips of metal doubled between their ends to form sides and secured to the rear portion of the gate, said sides being provided with perforations, a rod connected with 65 the rear ends of the wires and having its ends arranged between the sides of said strips, and fastening devices passing through perforations of the strips and securing the rod at the desired adjustment, substantially as 70 described.

3. The combination of a hinge-post provided with pintles, a gate provided with fence-wires secured at their front ends to the gate, the eyes receiving the pintles and consisting 75 of strips of metal doubled to form sides, each side being L-shaped, said sides embracing the top and bottom of the gate and the rear end thereof, and a rod adjustably secured between the sides of the eyes and connected 80 with the wires, substantially as described.

4. The combination of a swinging gate provided with a reciprocating latch, a bell-crank lever fulcrumed at its angle on the gate and having one end connected with the latch, a 85 rock-shaft having a short arm 17, link-rods connecting the short arm 17 with the bell-crank lever, and connections between the rock-shaft and the gate, substantially as described. 90

5. The combination of a swinging gate provided with a latch, a bell-crank lever fulcrumed on the gate and having one arm connected with the latch, a rock-shaft having a short arm 17, connections between the arm 17 95 and the bell-crank lever, a weight suspended from one arm of the latter, and means for connecting the rock-shaft with the gate, substantially as described.

In testimony that I claim the foregoing as 100 my own I have hereto affixed my signature in the presence of two witnesses.

BENJAMIN J. HUCKEY.

Witnesses:

W. L. C. RATHERFORD,
B. H. EDELIN.