

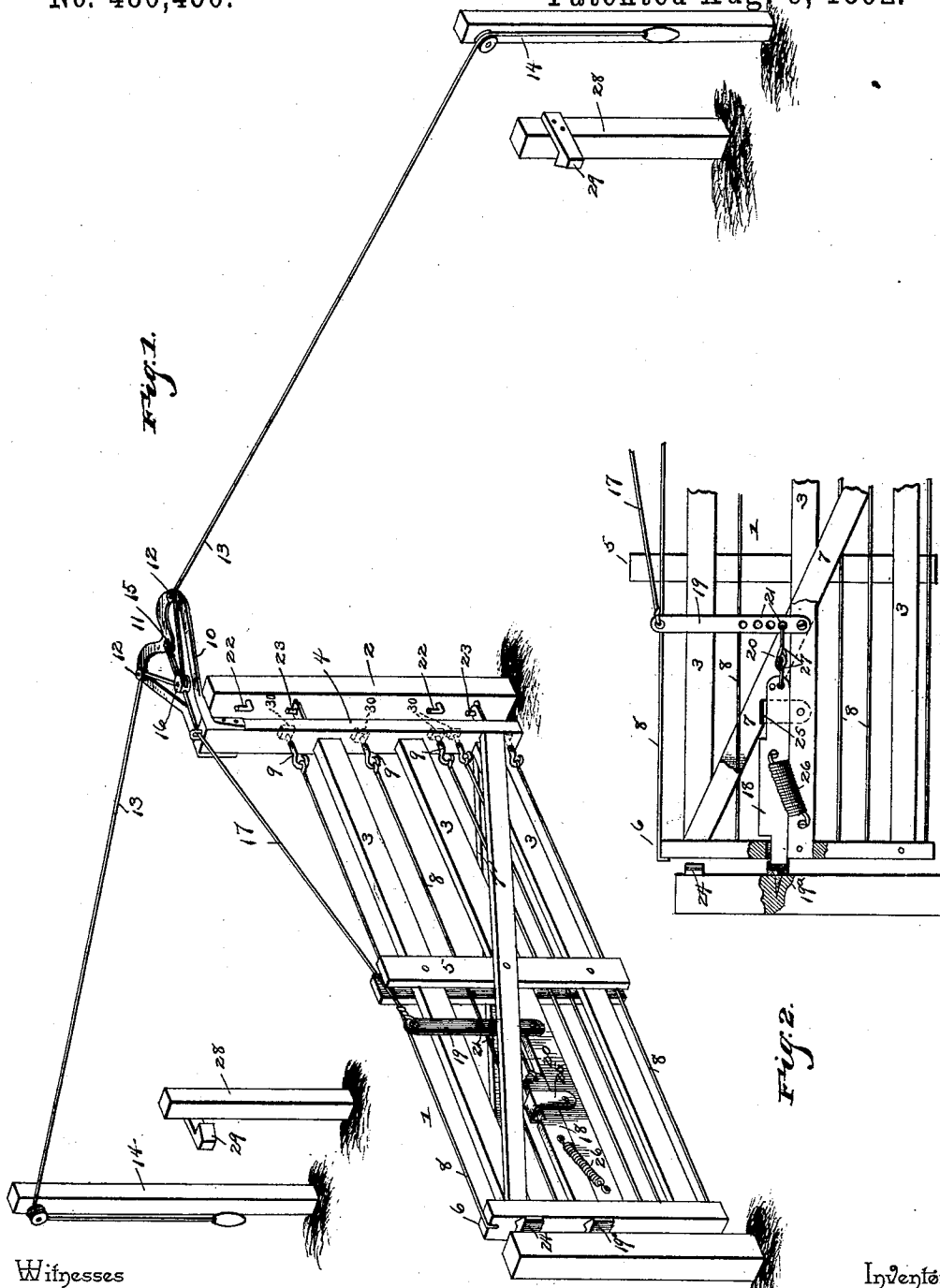
(No Model.)

J. M. FROSS.

GATE.

No. 480,460.

Patented Aug. 9, 1892.



Witnesses

B. S. Oakes
N. H. Riley

By *his* Attorneys,

Chas. Snow & Co.

Inventor

Jasper M. Fross

UNITED STATES PATENT OFFICE.

JASPER M. FROSS, OF SLEETH, INDIANA.

GATE.

SPECIFICATION forming part of Letters Patent No. 480,460, dated August 9, 1892.

Application filed April 5, 1892. Serial No. 427,862. (No model.)

To all whom it may concern:

Be it known that I, JASPER M. FROSS, a citizen of the United States, residing at Sleeth, in the county of Carroll and State of Indiana, have invented a new and useful Gate, of which the following is a specification.

The invention relates to improvements in swinging gates.

The object of the present invention is to simplify and improve the construction of swinging gates and to provide positive and reliable means for operating them at a distance from them, so that a gate may be readily opened from a vehicle or on horseback without the necessity of dismounting.

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 embodying the invention. Fig. 2 is a detail view of a portion of a gate, the inclined brace being broken away to show the latch mechanism more clearly.

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

1 designates a gate hinged to a post 2 and composed of horizontal rails 3, vertical bars 4, 5, and 6, and inclined braces 7, and the gate is strengthened by horizontal wires 8. The inner end bar 4 is extended above the gate and has secured to it an approximately triangular frame 10, which is constructed of a single piece of metal and which has a base 11, forming a re-entering angle. The ends of the metal forming the triangular frame are bent downward and are secured to the extension of the end bar 4 at opposite sides thereof, and the frame 10 extends horizontally from the top of the inner end bar 4 and is provided at opposite ends of the base with pulleys 12, around which pass operating-ropes 13, extending from opposite sides of the gate to supporting-posts 14. The adjacent ends of the operating-ropes 13 are secured in an opening 15 of the base 11 of the frame, and they pass therefrom through a block 16, which is connected with the latch-wire 17, whereby when the ropes are pulled to open the gate the latch-wire will retract a latch-bar 18 from a keeper

19^a to release the gate. The block 16 is connected by the wire 17 with the upper end of a lever 19, which has its lower end fulcrumed on one of the horizontal rails of the gate and is connected by a wire 20 with the latch-bar 18, a series of perforations 21 being provided in the lever, whereby the amount of retraction is determined.

The hinge-post 2 is provided with supplemental pintles 22, which are arranged above the pintles 23, whereby the gate may be elevated in winter, so that it will readily swing clear of snow-drifts, and the latch-post is provided with a supplemental keeper 24.

The latch-bar 18, which is mounted in the guide 25, is normally held extended by a spiral spring 26. The connecting-wire 20 is composed of two sections 27. These have their adjacent ends provided with eyes, which are linked together to allow the latch-bar to play independently of the lever 19, so that the latch-bar may move quickly without carrying the lever with it.

The gate is operated by pulling on one of the operating-ropes. This first withdraws the latch-bar from engagement with the keeper, and then a continued pulling causes the gate to swing open. Supplemental latch-posts 28 are provided and are arranged to be engaged by the gate when open, and these posts have keepers 29. After passing through the gate the same is closed by pulling on the other operating-rope.

The horizontal wires 8 are adjusted to regulate their tension by means of the hooks 9, which have threaded shanks passing through openings of the inner end bar 4 and engaged by nuts 30, arranged on the end bar and adapted to be turned to tighten the wires.

What I claim is—

1. The combination, with a gate provided with a latch, of an approximately triangular frame constructed of metal and secured to the gate and having an inwardly-extending angular base 11, pulleys mounted on the frame at the ends of the base, a latch-wire connected with the latch and provided at its rear end with a block arranged within the frame, and the operating-ropes having their inner adjacent ends secured to the frame at the angle of the base and passing through the block and around the pulleys and extending from the

gate in opposite directions, substantially as described.

2. The combination of a gate, a sliding latch-bar mounted on the gate, a vertically-disposed lever provided with a series of perforations and fulcrumed on the gate, a wire connecting the latch-bar with the lever and composed of two sections having their outer ends connected to the latch-bar and to the lever and having their adjacent ends provided with enlarged eyes linked into each other and having a limited movement on each other to permit

the latch-bar to move independently of the lever, a spring holding the latch-bar normally extended, and operating-ropes connected with the lever, substantially as described. 15

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

JASPER M. FROSS.

Witnesses:

JOSEPH C. LANE,
G. V. SHEETS.