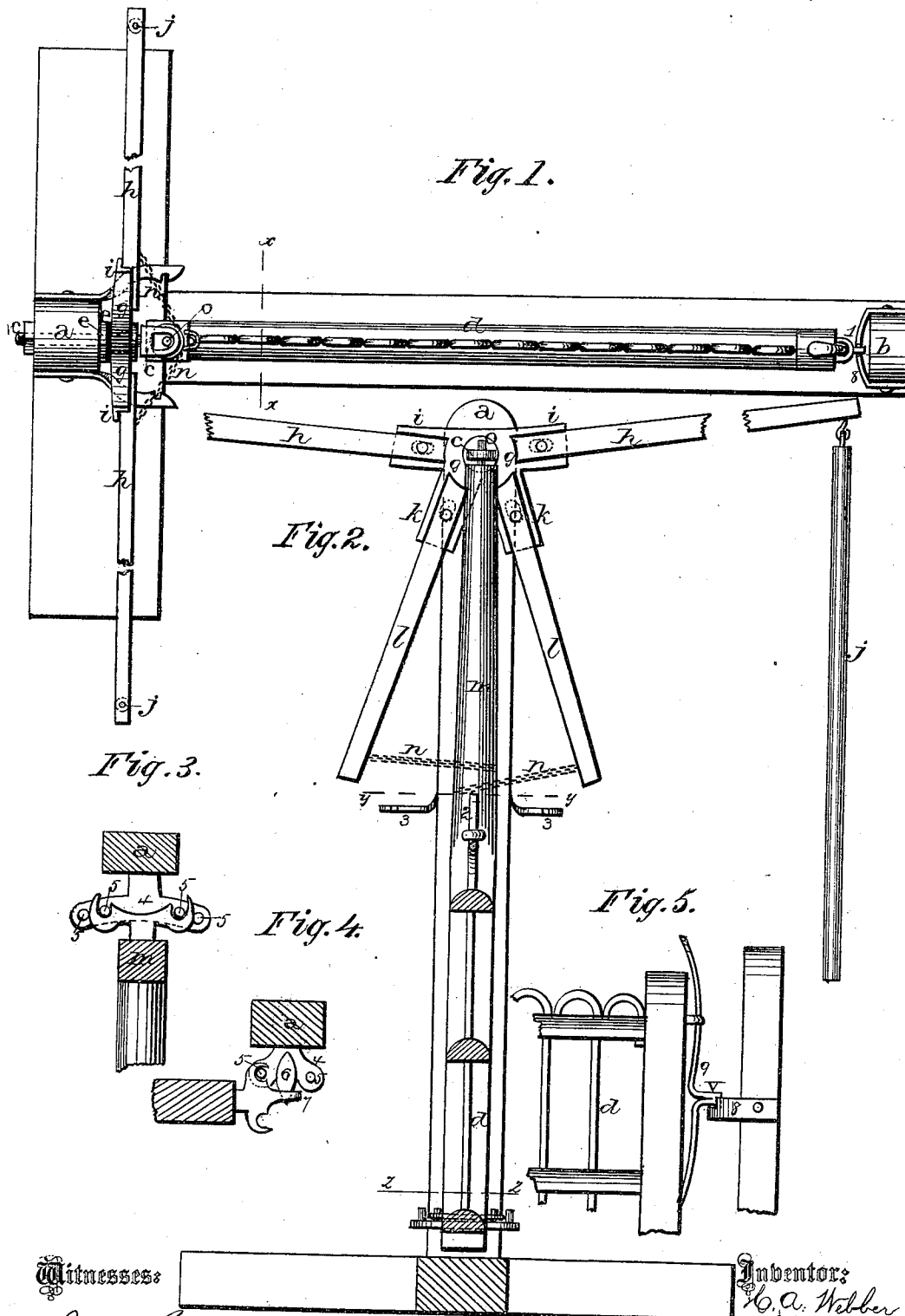


H. A. WEBBER.

GATE.

No. 174,598.

Patented March 7, 1876.



Witnesses:

J. W. Garner
F. M. Burnham.

Per:

Inventor:

H. A. Webber
for
F. A. Lehmann
Attorney.

UNITED STATES PATENT OFFICE.

HENRY A. WEBBER, OF ROCKTON, ILLINOIS.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **174,598**, dated March 7, 1876; application filed February 8, 1876.

To all whom it may concern:

Be it known that I, HENRY ABEL WEBBER, of Rockton, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improved farm-gate; and it consists in the combination and arrangement of devices that will be more fully described hereinafter, whereby the gate can be made to open from or toward you by pulling down or raising upward upon the operating-bars.

Figure 1 is a plan view of my invention. Fig. 2 is a vertical cross-section taken through the gate. Figs. 3, 4, and 5 are detail views.

a b represent the two posts, which may be either sunk in the earth or secured to suitable ground-sills, as may be preferred. Through the upper end of the post *a* is made a hole through which passes the screw-threaded bolt *c*, the inner end of which bolt has a triangular hole through it, so as to form the top hinge for the gate *d*. Passed over the bolt *c*, inside of the hinge and bearing against the side of the post, is a collar, *e*, and on this collar is placed the spider *g*. This spider has two recessed arms, *i*, extending outward and slightly upward, into which tapering recesses are passed the inner ends of the long operating-levers *h*. Through the arms *i* are made slots, through which pass the fastening-bolts, the slots and tapering recesses serving to allow the ends of the levers to be tightened in position should they become loose by shrinkage. To the outer ends of the long levers *h* are loosely connected the hanging-rods *j* by which the operating-levers are moved. By raising upon these rods the gate opens toward you, and by pulling down the gate swings in the opposite direction. From the spider project two other arms, *k*, which are also slotted and recessed like the other two, so as to receive the short levers *l*. To the lower ends of these levers *l* are fastened chains *n*, which pass around the gate-post *m*, so as to be secured

on the side that is away from the lever to which the other end of the chain is attached. By these means the slightest pull on one of the levers imparts both a turning motion to the post, and at the same time pulls the gate backward, so that the spindle or pivot *o* in the upper end of the post *m* moves backward in the slot sufficiently far to cause the latch 1, by which the gate is held closed, to unfasten, when the pull or shove on one of the levers causes it to swing in either direction desired. To the inner side of the post *m* is secured a spring-catch, 2, which catches in one of the stops 3, secured to each of the outer sides of the post *a*, so as to hold the gate open. As soon as one of the levers *h* is moved the chain acting on the post *m* disengages the catch, when the slot in the hinge allows the spindle to fall forward, when the gate swings shut by its own weight. The lower hinge on the gate consists of a broad flat plate or casting, 4, upon which are formed the four projections 5, the two inner ones of which form the bearings and pivots of the gate, while the two outer ones form guides to make the hinge tight and prevent the gate from being pushed or pulled off while being opened. The other part of this hinge consists of a broad flat plate also, and has the two recesses cut in its outer edge so as to catch over the two inner projections 5. Instead of the guides being formed by the projection 5, the guide may consist of an ellipse, 6, and be placed between the two projections, as shown, and there be a catch, 7, formed on the outer end of the upper plate, which will catch behind the ellipse, and thus prevent the gate from being pulled or pushed off while being opened. The latch by which the gate is held closed consists of a circling catch, 8, having a notch in its upper edge, and a spring-rod, 9, having a lug, *v*, formed on its outer edge. When the gate is being opened the lug lifts out of the notch and swings over the top of the catch, but when the gate is closing the lug strikes against the side of the catch and moves inward until it comes opposite to the notch, when it springs into it. By means of the collar *e* a firm, solid seat is formed for the spider against the side of the post, which prevents it from being displaced.

What I claim is—

1. The socketed spider *g* for holding the levers *h l*, eyebolt *c*, and post *a*, in combination with the gate *d*, substantially as and for the purpose set forth.

2. The combination of the spider *g*, collar *e*, and bolt *c*, having a triangular-shaped slot at its inner end, substantially as set forth.

3. The combination of the gate *d*, having pivot *o*, bolt *c*, having triangular slot to receive said pivot, the spider *g* having arms to receive the levers *h l*, and suitable fastening to hold the gate both open and closed, substantially as described.

4. The combination of the post *a*, bolt *c*, hav-

ing a triangular slot in its inner end, spider *g*, operating levers *h l*, chains *n*, gate *d*, having the hinge 4 5, whereby the gate is made to close by its own weight, and is prevented from being pulled off the lower hinge while the gate is open, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of February, 1876.

HENRY A. WEBBER.

Witnesses:

ROBT. M. BARR,

F. A. LEHMANN.