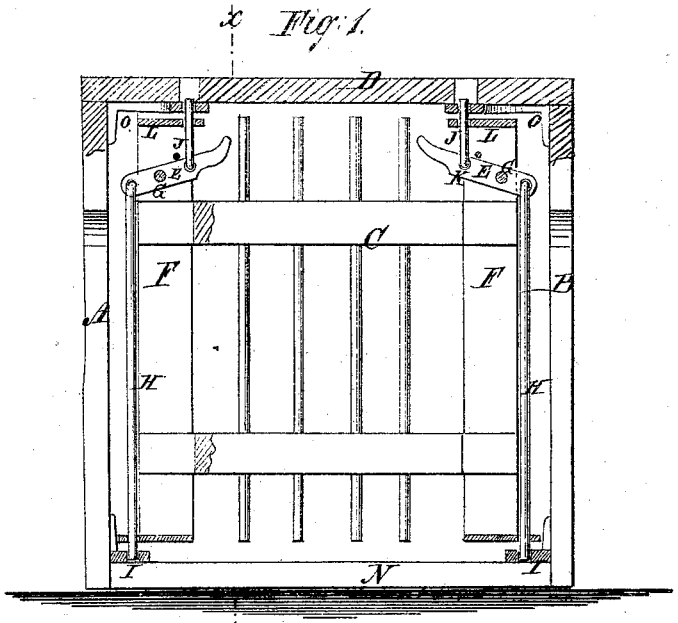
B. F. Palmer,

Gate

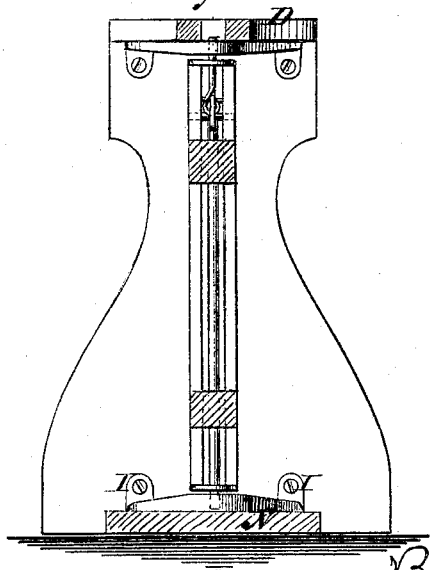
No. 113,334. Patented Apr. 4. 1871.

Fig: 1.



x

Fig: 2



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UNITED STATES PATENT OFFICE.

BENONI F. PALMER, OF BARABOO, WISCONSIN.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **113,334**, dated April 4, 1871.

To all whom it may concern:

Be it known that I, BENONI F. PALMER, of Baraboo, in the county of Sauk and State of Wisconsin, have invented a new and useful Improvement in Automatic-Closing Gate; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to a new and useful improvement in mode of hanging and operating gates, whereby the gate is made self-closing, and may be operated from either side or in four different directions; and it consists in a combined hinge and fastening at each side of the gate, constructed and operating as hereinafter more fully described.

In the accompanying drawing, Figure 1 represents a front view, partly in section, of a gate arranged and operated according to my invention. Fig. 2 is a vertical section of Fig. 1 on the line *x x*.

Similar letters of reference indicate corresponding parts.

A and B represent the two gate-posts. C is the gate, which may be made in any manner suitable to the purpose, and of any materials or combination of materials. D is the cap-piece which connects the tops of the two posts together; but this cap or cross-piece is not indispensable. E E are horizontal levers, which pass through the uprights F F of the gate, whose fulcrums are at the points G G. H H are rods, which are attached to the ends of the levers and drop down through the plates I I on the bottom of the gate. J J are short pivot-rods, which are attached to the levers at the points K K, which pass up through the plates L L on the top of the gate. M M are double-inclined planes of metal, attached to either the gate-posts by means of flanges, as seen in the drawing, or to the bed-piece N, as may be desired. O O are brackets attached to the posts above the gate, which project inward to receive the ends of the pivot-rods J J, holes being made in them for that purpose. There are also holes in the middle of plates M M at the bottom of the gate, to receive the ends of the rods H H.

It will be seen that when the levers E E are raised, as seen in Fig. 1, the rods H H are thrown down and into the plates M M, and the short rods J J are thrown up and into the brackets O O. In this condition the gate is closed and fastened.

Now, if either of the levers be brought down, the rods attached to it will be withdrawn, while the other rods will be pivots or hinges for supporting the gate. The gate may now be swung or opened in either direction.

The two pivots being on different vertical lines, it will be seen that the gate-uprights will, when the gate is opened, be thrown into an inclined position, so that the gate will naturally swing back automatically and close.

In closing the lower rod will strike the inclined plate M on either side, which will raise that rod and draw the other one down until they reach the holes designed for them, which they enter, and the gate is fastened.

It is immaterial which side of the gate is made the hinge side, as the operation is the same when either lever is operated.

By drawing down both levers the gate may be taken entirely away.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The pivot-bars H H J J, placed at both sides of a gate, and operated by means of the levers E E, or their equivalents, so as to serve the double function of hinges and latches, substantially in the manner specified.

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