

J. MILLER.

Gate-Hinges.

No. 133,715.

Patented Dec. 10, 1872.

Fig. 1.

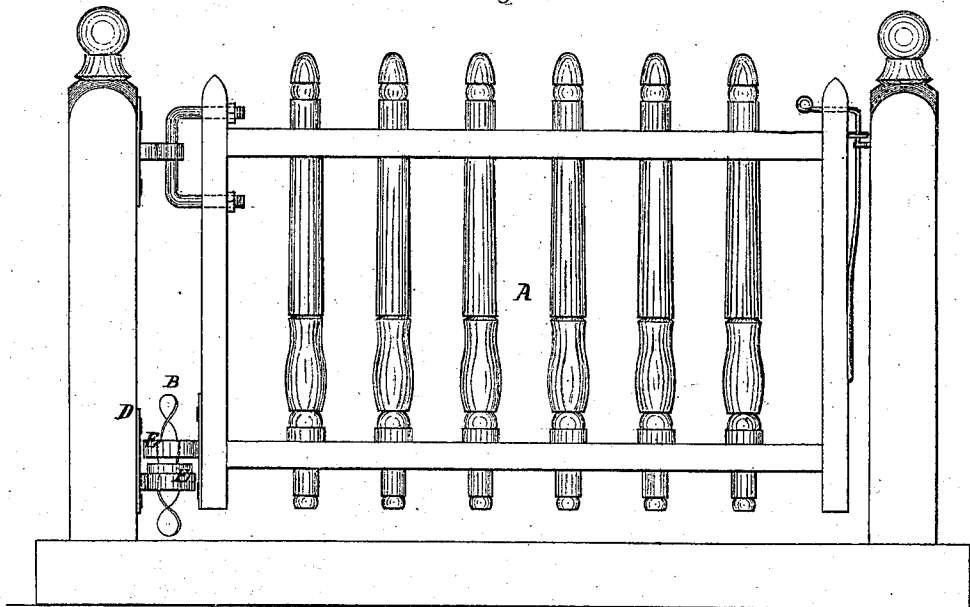


Fig. 2.

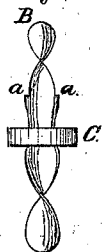


Fig. 3.



Witnesses.

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JONATHAN MILLER, OF PENN YAN, NEW YORK.

IMPROVEMENT IN GATE-HINGES.

Specification forming part of Letters Patent No. **133,715**, dated December 10, 1872.

To all whom it may concern:

Be it known that I, JONATHAN MILLER, of Penn Yan, in the county of Yates and State of New York, have invented certain Improvements in Gate-Hinges, of which the following is a specification:

The nature and object of my invention consists in making a hinge that will allow the gate to be opened either way and at pleasure, having the hinge hold the gate open, and the gravity of the gate will shut it.

Figure 1 is a side elevation of the gate. Fig. 2 is a view of the hinge. Fig. 3 shows the slots *b b* on the knuckles.

A is the gate. It may be made after any pattern or form, with a stile, that the plate of the hinge may be fastened to it, or the plates of the hinges may be varied in shape to suit any shaped stile that may be made. The upper hinge may be constructed in any ordinary manner that will allow the gate to be raised a few inches when being opened. B is the hinge-pintle. It may be made by twisting a rectangular-shaped piece of iron as a screw-auger. About equidistant from the ends is a circular plate, C, about the same diameter as the knuckles E E of the hinge, and any thickness to give it sufficient strength, and when in place it is between the knuckles, as shown in Fig. 1. Above this plate the hinge is twisted in one direction, and below in the opposite direction. Straight or slightly-curved slots *b b* are formed in each knuckle, through which the spirals of the pintle pass, which will allow the gate to be opened either way and have the gravity of the gate shut it. When opened one way the gate is caused to remain open by means of notches or projections *a a*, on opposite sides of the hinge, that will allow the gate to open or swing a short distance without being raised while the knuckle is being seated

upon the notches or projections. The size and shape of the notches may be varied to suit the size, weight or condition of the gate, and when a gate is required to stand open in either direction similar notches or projections may be made at both ends of the hinge, and the knuckles must be made so that they will stay on the notches as securely as desired, which may be done by making a seat in the knuckles for the notches upon the hinge. When the hinge is made of cast-iron it may be made the required shape with proper patterns. The knuckle that is fastened to the gate-post must be made in a true circle at the periphery so that the plate of the other knuckle may rest against it and thus prevent friction between the hinge and knuckles when opening the gate. The other knuckle, that is fastened to the gate, must have a plate fitted to rest against the periphery of the other knuckle and be long enough to remain against it continually.

The knuckles may be provided with plates that may be held to the gate-post and gate, as represented in Fig. 1; or any other mode of holding them may be used to suit the various kinds of gates to which the hinge may be applied.

I claim—

1. The spiral hinge-pintle B, united in opposite directions above and below the circular plate C, in combination with the slots in the knuckles.

2. In combination with the above, the notches or projections *a a* upon the hinge-pintle, for holding the gate in a certain fixed position, all as and for the purpose set forth.

JONATHAN MILLER.

Witnesses:

JOHN L. LEWIS,
CHARLES KETCHUM.