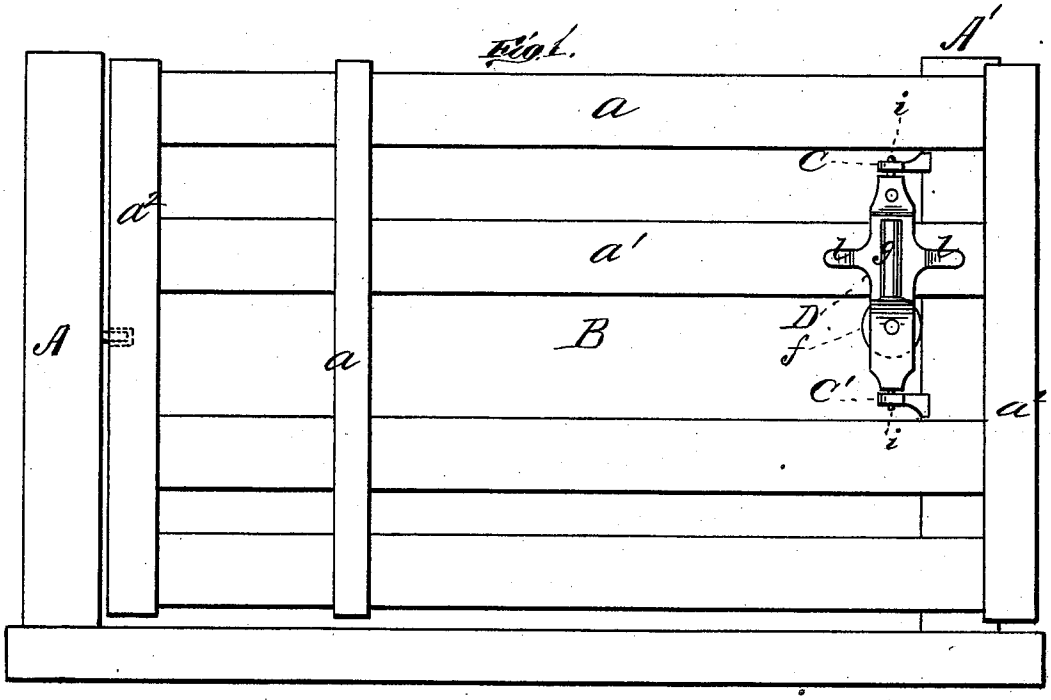
S. CRISTY & D. JAY.

Gate.

No. 200,514. Patented Feb. 19, 1878.

Fig. 1.



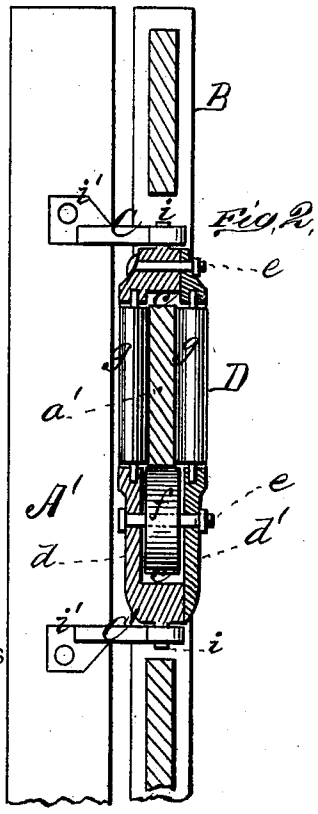


Fig. 2.

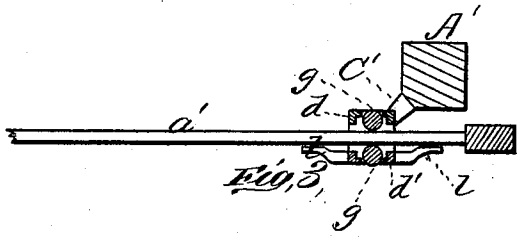


Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

SAMUEL CRISTY AND DAVID JAY, OF FLORIS, IOWA.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **200,514**, dated February 19, 1878; application filed January 12, 1878.

To all whom it may concern:

Be it known that we, SAMUEL CRISTY and DAVID JAY, of Floris, in the county of Davis and the State of Iowa, have invented a new and valuable Improvement in Gate-Hinges; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front view of our improved hinge applied to a gate. Fig. 2 is a vertical section thereof, and Fig. 3 is a horizontal section of the same.

This invention has relation to improvements in hinges for gates having a sliding and swinging movement.

The nature of our invention consists in a sliding and swinging gate, in combination with the spaced horizontal brackets, of the longitudinally-slotted block having a bearing-roller and a lateral anti-friction roller, as will be hereinafter more fully shown and described.

In the annexed drawings, the letters A A′ designate the posts, and B a gate, closing the gap between them. This gate is composed of the spaced longitudinal rails *a* and uprights a^2, at right angles thereto.

C C′ designate two spaced metallic brackets, extending out horizontally and obliquely beyond the face of the post A, and provided at their free ends with bearings, in which are seated the journals *i* of an upright supporting-block, D. The brackets C C′ are preferably recessed, as regards their bases *i′*, in the post A, and are secured thereto by means of suitable bolts and nuts, or other appropriate means.

The block D rotates axially in its bearings, and is longitudinally slotted, as shown at *c*, Fig. 2. It is also made in two sections, *d d′*, secured together by means of bolts *e*. At the bottom of the slot *c* is placed a pulley, *f*, rotating freely on the lower bolt *e*, which joins the sections *d d′* together. This pulley supports the gate, one of the rails, a^1, of which extends through the slot *c* of the block D above said pulley.

Each section of the supporting-block is provided with a vertical anti-friction roller, *g*, between which the rail a^1 of the gate is received, the object of which is to facilitate the sliding movement of the gate, and to protect its bearing-rail a^1 from abrasion during such movement.

The section of the block D has two projecting stay-arms, *l*, one at each side, which widen the bearing on the rail A, and give increased leverage and support to the gate when being opened.

In practice the anti-friction rollers *g* will be entirely shut in, so as to exclude dust, ice, and snow.

The sections of the block D being detachable from each other, the rollers aforesaid may be readily removed when broken or worn out, and the block may be readily applied to a gate without taking it apart.

What we claim as new, and desire to secure by Letters Patent, is—

In a sliding and swinging gate, the combination, with the spaced horizontal brackets C C′, of the longitudinally-slotted block D, having the bearing-roller *f* and the lateral anti-friction rollers *g*, substantially as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

SAMUEL CRISTY.
DAVID JAY.

Witnesses:
J. W. CORNER,
G. T. WILSON.