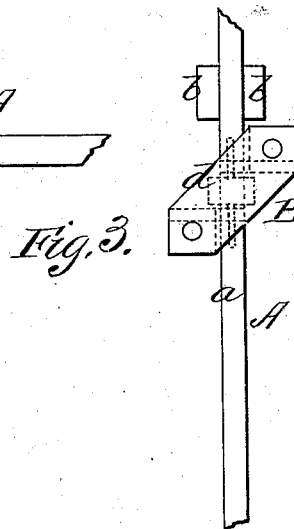
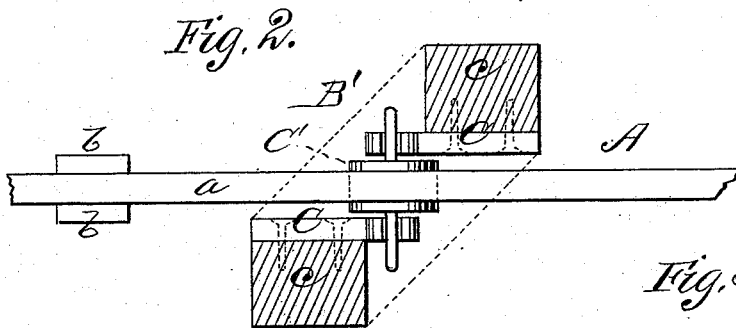
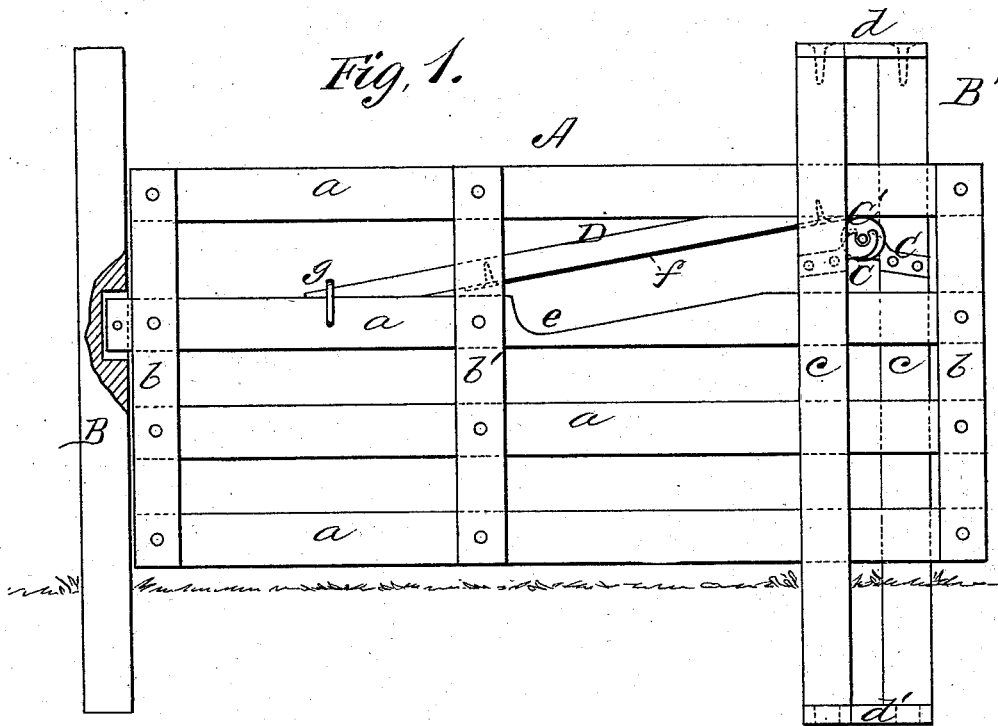


I. S. HASTINGS & W. S. COCK.
Gate.

No. 207,032.

Patented Aug. 13, 1878.



WITNESSES

Villette Anderson.
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ISAAC S. HASTINGS AND WILLIAM S. COCK, OF FLORIS, IOWA.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **207,032**, dated August 13, 1878; application filed January 26, 1878.

To all whom it may concern:

Be it known that we, ISAAC S. HASTINGS and WILLIAM S. COCK, of Floris, in the county of Davis and State of Iowa, have invented a new and valuable Improvement in Hinged Gates; 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 the gate, showing our invention applied. Fig. 2 is a horizontal section of the same, and Fig. 3 is a top view thereof.

This invention has relation to improvements in sliding and swinging gates.

The nature of the invention consists in the combination, with a gate having an anti-friction roller, of a pivoted diagonal raising-bar and a stirrup engaging said bar, as will be hereinafter more fully explained.

In the annexed drawings, the letter A designates a gate having spaced longitudinal rails *a*, secured together at their ends by means of the cross-bars *b* upon the inside and outside thereof. B B' represent the gate-posts, of which the former carries the latch attachment and the latter the sliding and swinging device. The post B' is composed of two uprights, *c c*, connected together at top and bottom by means of the tie-plates *d d'*. The uprights *c c* are parallel to each other and sufficiently spaced to receive the gate between them. They are also diagonally arranged with reference to each other, for a purpose hereinafter explained. C C represent metallic brackets, rigidly secured to the uprights *c* upon their inner faces, and projecting inward toward each other. These brackets are horizontal, and afford bearings for the journals of a roller, C', arranged between the uprights *c*, and having its axis of rotation at right angles to the gate

when closed. One of the rails *a* of the gate rests upon the perimeter of this roller when the said gate is closed. D indicates an inclined wooden bar, arranged between the bearing-rail of the gate and the rail next below it, and pivoted so as to vibrate vertically between the central cross-bars *b'* aforesaid. The bar D extends upward diagonally from the rail adjoining the bearing-rail *a* to the said bearing-rail, terminating in front of the roller C'.

When the gate is thrust back from the post B, the bar D passes over the roller, and, the impulse being continued, causes the gate to rise until its lower edge is free of the ground.

When the roller is of large size or the rails of the gate close together, the rail just below the roller is cut away, as shown at *e*, so as to allow the gate a sufficient rise, the upper edge of the said notch being parallel to the bar. The under side of bar D is shod with metal, as shown at *f*, Fig. 1, and its vibration is prevented by a metallic stirrup, *g*, that engages the end of the said bar. This stirrup is readily disengaged from the raising-bar, and when thus disengaged permits the said bar to assume a horizontal position underneath the said roller. The gate may then be thrust back without rising, which in summer time is not necessary, and saves considerable labor.

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

The combination, with a gate having the anti-friction roller C' and a pivoted diagonal raising-bar, D, of a stirrup, *g*, engaging the said bar, substantially as specified.

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

ISAAC S. HASTINGS.
WILLIAM S. COCK.

Witnesses:

JULIAN W. CORNER,
AUSTIN CART.