J. D. REED.

DEVICES FOR CLOSING GATES.

No. 178,559. Patented June 13, 1876.

Fig: 1.

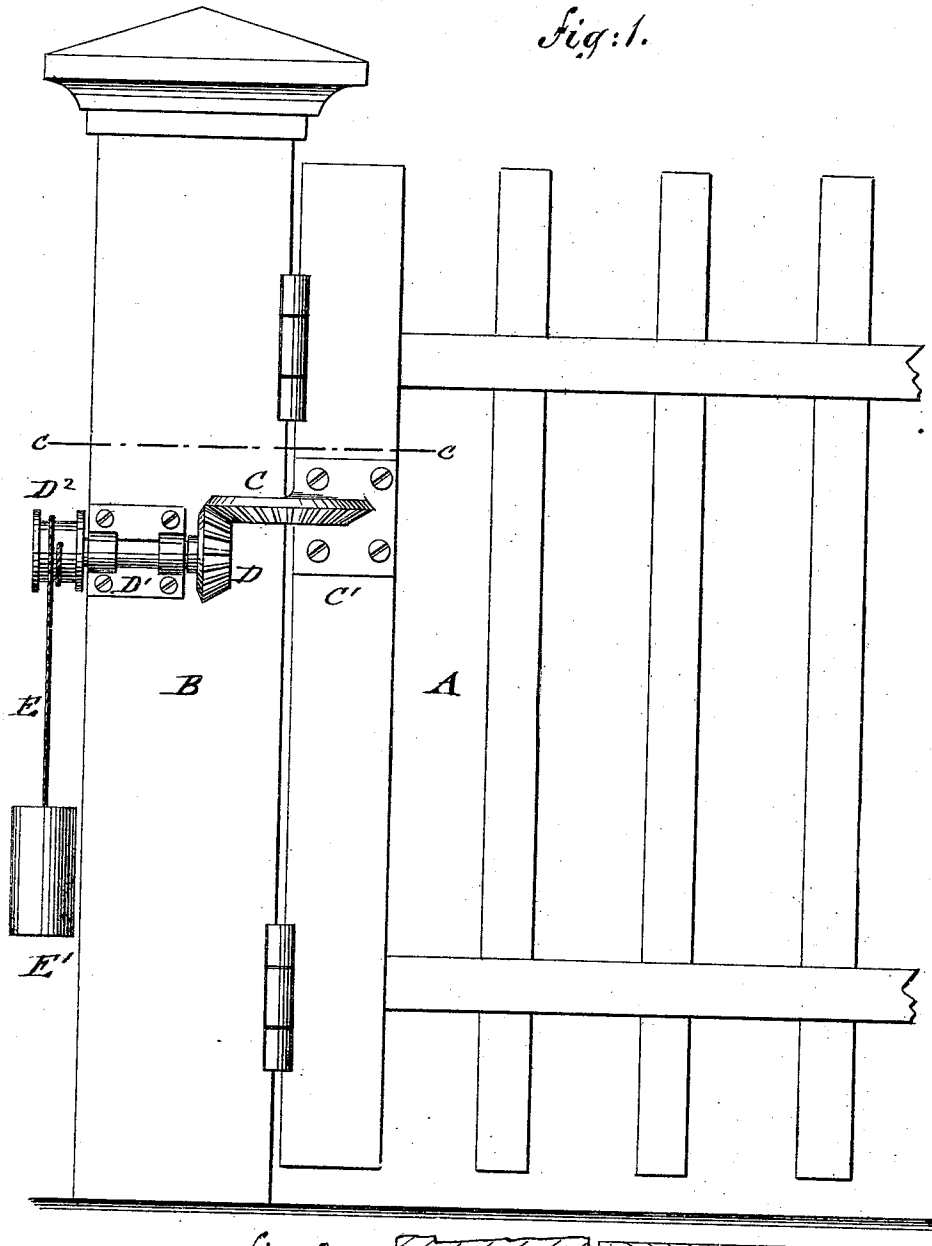
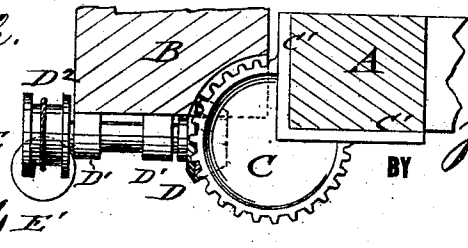


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE

JOHN D. REED, OF GREENCASTLE, INDIANA.

IMPROVEMENT IN DEVICES FOR CLOSING GATES.

Specification forming part of Letters Patent No. **178,559**, dated June 13, 1876; application filed May 9, 1876.

To all whom it may concern:

Be it known that I, JOHN D. REED, of Greencastle, in the county of Putnam and State of Indiana, have invented a new and Improved Gate, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation of my improved gate, and Fig. 2 a horizontal section of the same on line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved attachment to gates, so that they may be closed automatically, in similar manner as with springs, while being more durable, and less liable to get out of order.

The invention consists of a bevel-gear, cord, and weight attached to gate and gate-post, to close the same.

In the drawing, A represents a farm-gate; B, the gate-post; C, a horizontal bevel-wheel that is cast in one piece with a rectangular band, C′, for being attached to the end part of the gate, as shown in Fig. 2. The bevel-wheel C gears with a second conical gear-wheel, D, whose shaft turns in suitable bearings D^1 of a plate screwed to the gate post B. To a small pulley or drum, D^2, at the outer end of the shaft, is attached a cord, E, with a weight, E′, which cord is wound up when the gate is opened. The horizontal bevel-wheel C moves in a recess of the post, and is engaged by the gear-wheel D of the drum-shaft, to close the door automatically by the action of the descending weight as soon as released.

The gear may be placed at any angle, and at any part of the gate when placed near the bottom. The weighted cord has to be carried up over pulley at the upper part of the post.

The attachment is cheap, strong, and not liable to get out of order.

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

The combination of the bevel-gear wheels C D, shaft D^1, drum D^2, cord E, and weight E′, with the gate A and post B, as and for the purpose set forth.

JOHN D. REED.

Witnesses:

GEORGE OWEN,

WILLIAM H. CROW.