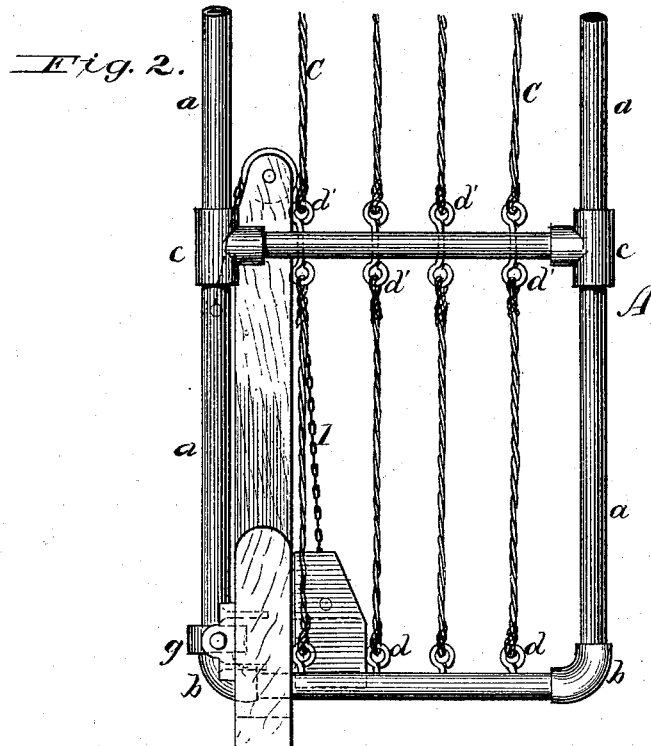
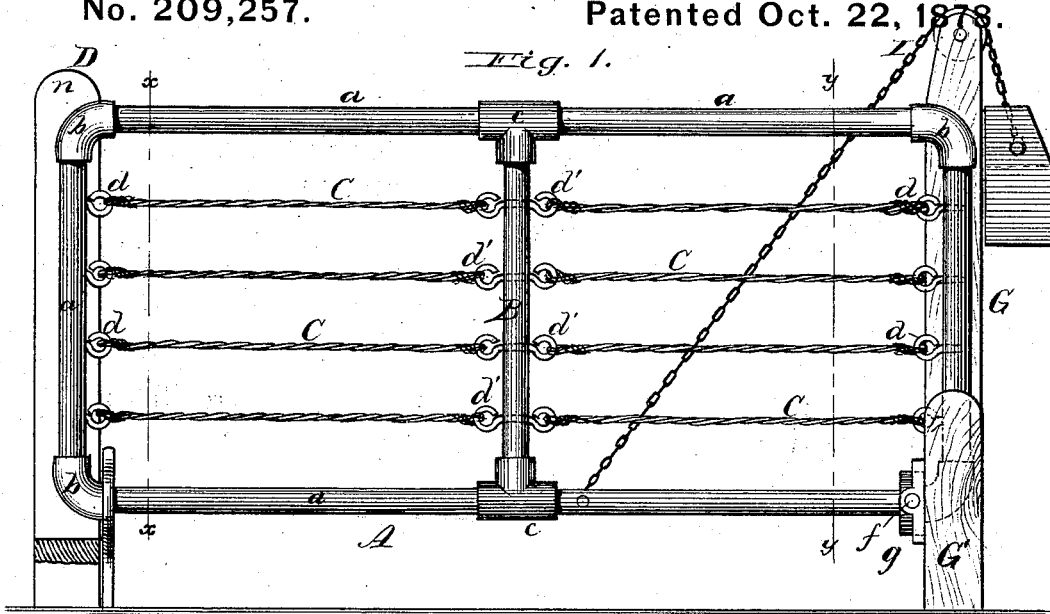


H. W. HADLEY & J. M. DEAN.
Gate.

No. 209,257.

Patented Oct. 22, 1878.



Attest:
H. D. Penne.
W. H. Norris

Hiram W. Hadley.
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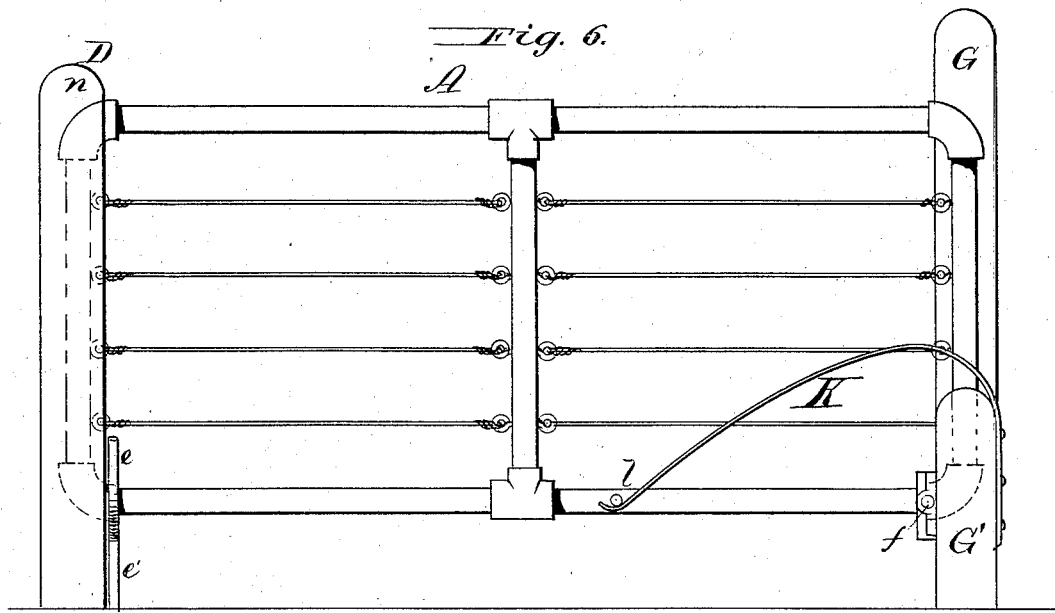
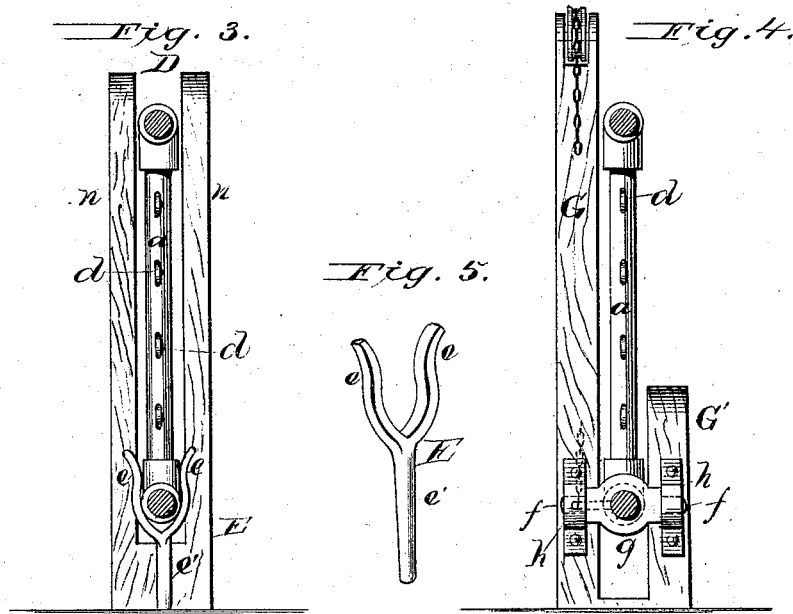
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By James L. Norris
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UNITED STATES PATENT OFFICE.

HIRAM W. HADLEY AND JEHIEL M. DEAN, OF LODI, NEW YORK.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **209,257**, dated October 22, 1878; application filed July 2, 1878.

To all whom it may concern:

Be it known that we, HIRAM W. HADLEY and JEHIEL M. DEAN, of Lodi, in the county of Seneca and State of New York, have invented certain new and useful Improvements in Gates, of which the following is a specification:

The object of this invention is to furnish a light, strong, cheap, and convenient gate, easy of operation and neat in appearance; and in order that its construction and operation may be thoroughly understood, we will give a full and clear description and explanation thereof, with reference to the accompanying drawings, in which—

Figure 1 is a front view of my gate closed and latched. Fig. 2 is a view of the gate opened or raised. Fig. 3 is a section on line *x x*, Fig. 1. Fig. 4 is a section on line *y y*, Fig. 1, and Fig. 5 is a view of the catch detached. Fig. 6 illustrates a modification of the gate-lifting device.

The letter A indicates the frame of the gate. It is formed of sections *a* of gas-pipe or round iron, connected by elbows *b* and T-joints *c*, which are screw-threaded to engage with screw-threaded ends of the sections, as in the ordinary mode of connecting gas-pipe bends and branches. The two T-joints *c* are used for the purpose of holding the central cross-bar B of the gate-frame. C indicates the double and twisted wire-strands which form the filling of the gate, corresponding to the bars or rails of ordinary wooden gates. These strands are secured to eyes *d* and double eyes *d'* inserted in the end bars and center cross-bar of the gate-frame, respectively, and after being bent through said eyes are twisted and their ends joined. The single eyes *d* have their shanks inserted through diametric holes in the end bars, and are riveted or headed on the outside. The double eyes *d'* have but one eye formed before the shanks are passed through the holes in the cross-bar, the other being formed subsequently, and the two eyes then prevent the removal of the shanks. G designates the pivot or hinge-post of the gate, and by its side is a short post, G', which also supports one of the bearings of the gate-pivot. D is the double catch-post, between the two parts *n n* of which the front end of the gate

stands when it is down or closed, and when the gate is in this position its bottom bar or rail is held by a spring-clasp, E, formed by two curved spring-arms, *e e*, branching in opposite directions from a rigid stem, *e'*, and then curving toward each other, and having outward-flaring ends, which serve to catch and guide the bottom gate-bar so that it will press the two spring-arms apart when the gate is forced downward, said arms closing toward each other above said bottom bar and holding the gate down until purposely opened. Near the rear end of this bottom bar are arranged the pivots *f*, upon which the gate swings. These pivots project in opposite directions from a ring or band, *g*, fitted upon the bottom gate-bar just inside the elbow-joint, which forms the lower rear corner of the gate-frame, and said pivots fit into bearings *h* fastened to the tall post, G, and short post, G', between which the rear end of the gate stands.

In order to facilitate the raising of the gate, and to hold it in any position to which it is raised, a chain, I, is secured near the foot of the cross-bar B, and passing over a pulley at the top of the tall post, G, has attached to its end a weight which balances the gate.

It will be seen that by having the gate pivoted at its lower rear corner, and the chain I attached at the bottom of said gate, the same may be thrown entirely from the gateway.

The strength, simplicity of construction, and cheapness of our gate-frame will recommend it to farmers who desire a gate possessing these qualities. While it is not liable to be broken or get out of order, should any part become broken or bent it may be replaced by any farm hand, when the gate will be as good as new.

In Fig. 6 is illustrated a modification of the gate-lifting device adapted for yard and garden gates, in which K is a steel spring firmly fastened to the short post, G', and extending under a suitable pin, *l*, attached to the gate-frame. When the gate is raised this spring assumes its natural position; but when the gate is lowered it brings the spring under tension, which balances the weight of the gate in any position. For small gates this form of balance will be found preferable to the chain and weight, and the odd appearance of the

tall post near a house or on a street can be avoided.

Having now fully described and explained the operation and construction of our invention, we claim—

1. The gate consisting of the frame divided by the cross-bar B, provided with the double eyes *d'*, and having the end bars provided with the single eyes *d*, and the filling wire strands C attached to said double and single eyes, substantially as described.

2. The combination of the double post D, spring-clasp E, and the pivoted gate, substantially as described.

In testimony that we claim the foregoing we have hereunto set our hands in the presence of the subscribing witnesses.

HIRAM W. HADLEY.
JEHIEL M. DEAN.

Witnesses:

H. V. L. JONES,
JOHN H. STUTE.