

G. H. AYLWORTH.
Gate.

No. 226,695.

Patented April 20, 1880.

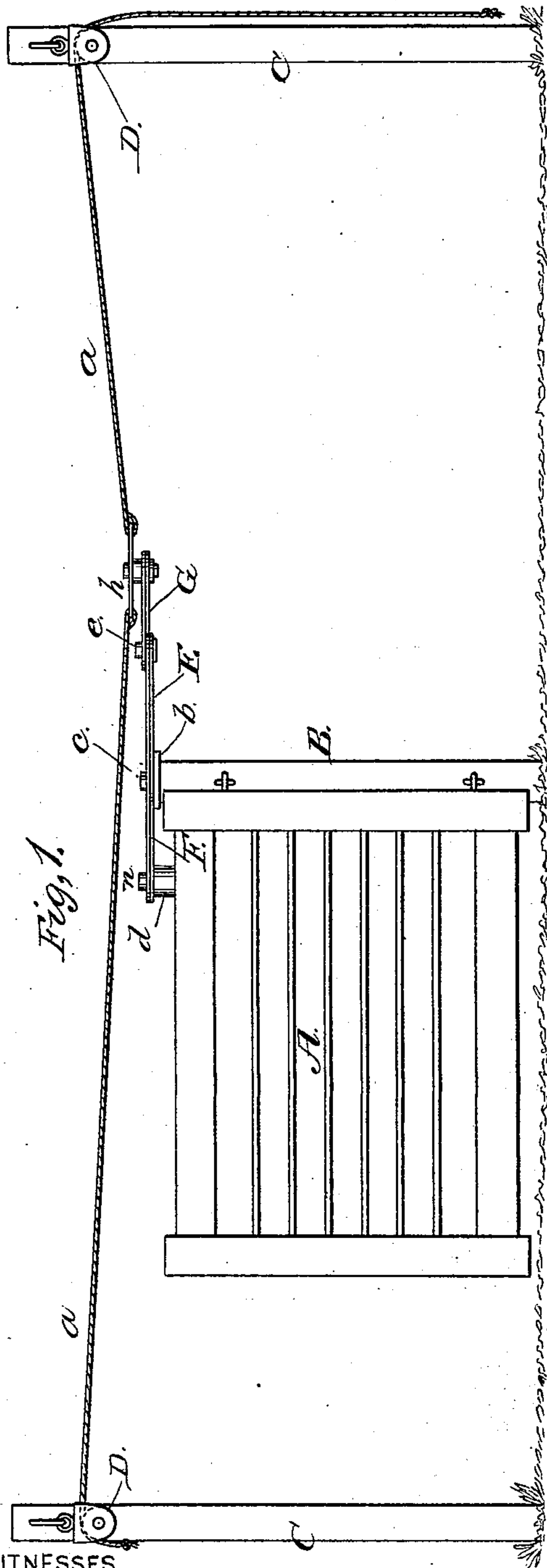


Fig. 1.

WITNESSES

Mary S. Utley.
F. J. Hasi.

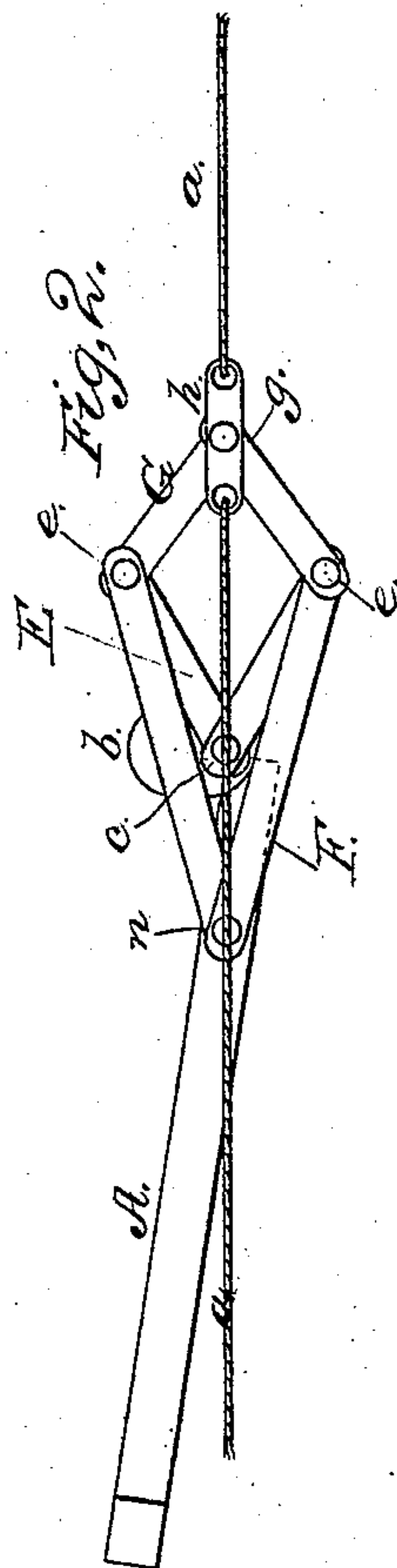


Fig. 2.

INVENTOR
Geo H. Aylworth,
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UNITED STATES PATENT OFFICE.

GEORGE H. AYLWORTH, OF BRIGHTON, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 226,695, dated April 20, 1880.

Application filed February 27, 1880.

To all whom it may concern:

Be it known that I, GEORGE H. AYLWORTH, of Brighton, in the county of Macoupin and State of Illinois, have invented a new and valuable Improvement in Gates; and I 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 side view of my improved gate, and Fig. 2 is a top view thereof.

This invention has relation to means for opening and closing gates; and it consists, mainly, in the construction and novel arrangement, in connection with the gate-post, gate, and the operating-cords in line with the roadway, of a compound lever consisting of three sets of pivoted bars forming three toggle-joints, which are pivoted together by the ends of their arms, and by their joint portions pivoted respectively to the gate, the gate-post, and the operating-cord, as hereinafter shown and described.

In the accompanying drawings, the letter A designates any ordinary gate, and B the gate-post to which it is hinged. C C are the road-posts, having pulleys or bearings D for the operating-cords *a*.

To the top of the gate-post is attached a plate, *b*, or bearing, having a pivot-pin, *c*, whereby the intermediate toggle-joint E is pivoted to the gate-post at its middle or joint portion, the ends of its bars extending outward and backward away from the gate, as shown in the drawings.

To a bearing, *d*, on the gate is pivoted, at *n*, the jointed portion of the longer toggle-joint F, the ends of which also extend outward and backward to the ends of the intermediate toggle-joint E, and are pivoted thereto and to the ends of the rear or outer toggle-joint, G, by the pivots *e*. The latter toggle-joint is bent reversely at its joint, its bars extending forward,

so that when it is spread by pressure upon its joint portion *g* it will tend to spread the other two toggle-joints. The operating-cords are pivoted to the joint portion of this outer toggle-joint, as indicated at *h*.

The gate being closed can be readily opened by pulling the cord on either side, which pulls the outer toggle-joint and elongates the compound lever, of which it forms a part, turning the gate in the opposite direction and throwing it well away from the roadway. After passing through the gate it can be closed by pulling upon the opposite cord, which spreads the outer toggle-joint, G, and thereby spreads the gate toggle-joint F and the fulcrum toggle-joint E at the same time, thereby forcing the pivots *c* and *n* from each other and turning the gate into the closed position.

It will be observed that in this compound toggle-joint lever there is such a relation to the pivots *c* and *n* of the gate-post and gate that a dead-lock cannot occur, even when the gate is thrown open to the fullest extent and beyond the line of the operating-cord.

The gate may be held in the closed position by an ordinary bevel-latch, which may be operated, if necessary, by the lever-cords and connections therefrom.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with the gate A, the post B, to which it is hinged, and the operating-cords *a a*, of the three toggle joints E F G, pivoted by their joint portions respectively to the post, the gate, and the operating-cords, and by the ends of their arms together at *e e*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE H. AYLWORTH.

Witnesses:

FRANKLIN A. CLEMENT,
GEORGE L. BEAN.