

T. Ellison,

Gate.

No. 100,739.

Patented Mar. 15, 1870.

Fig. 1.

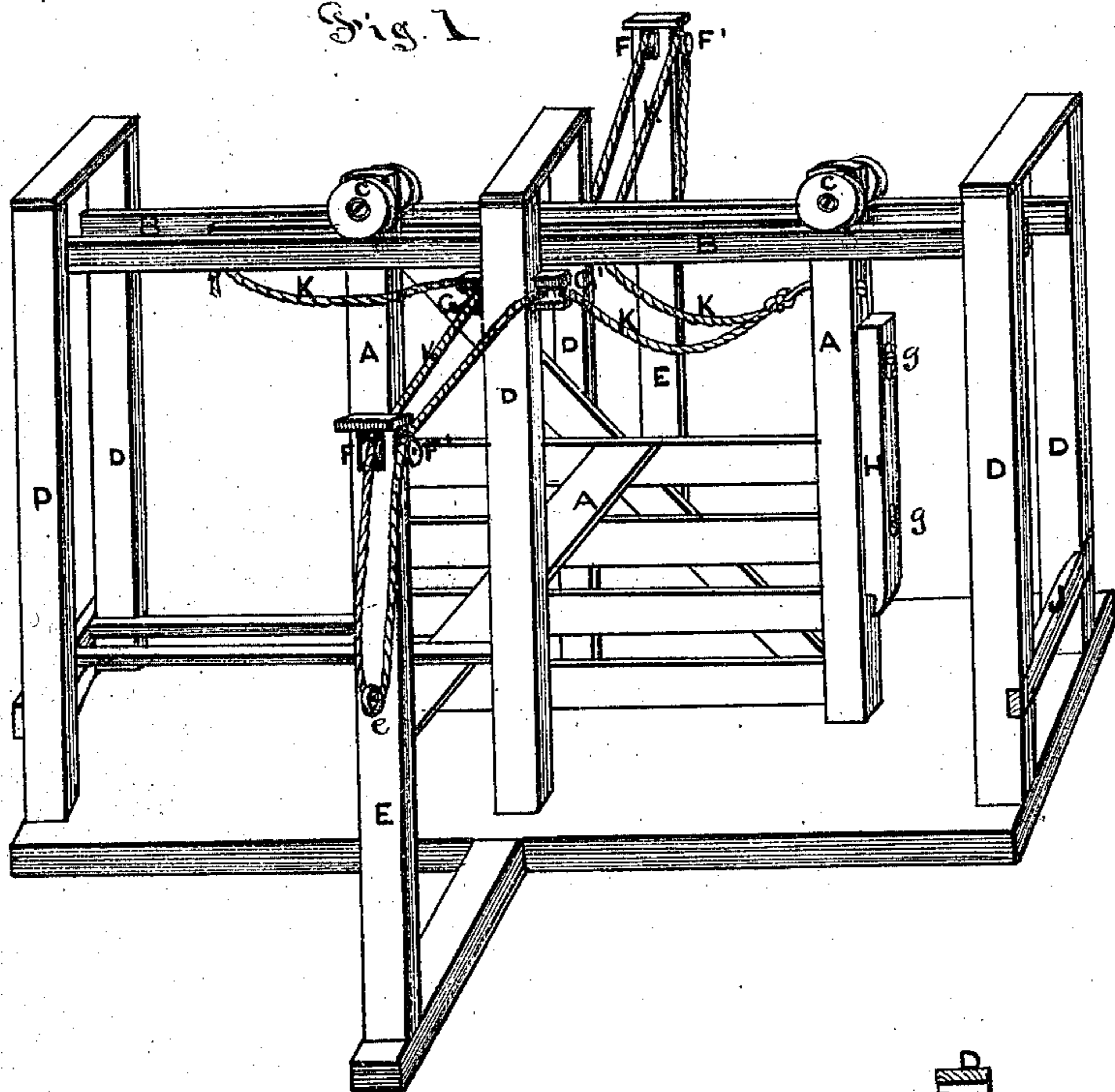
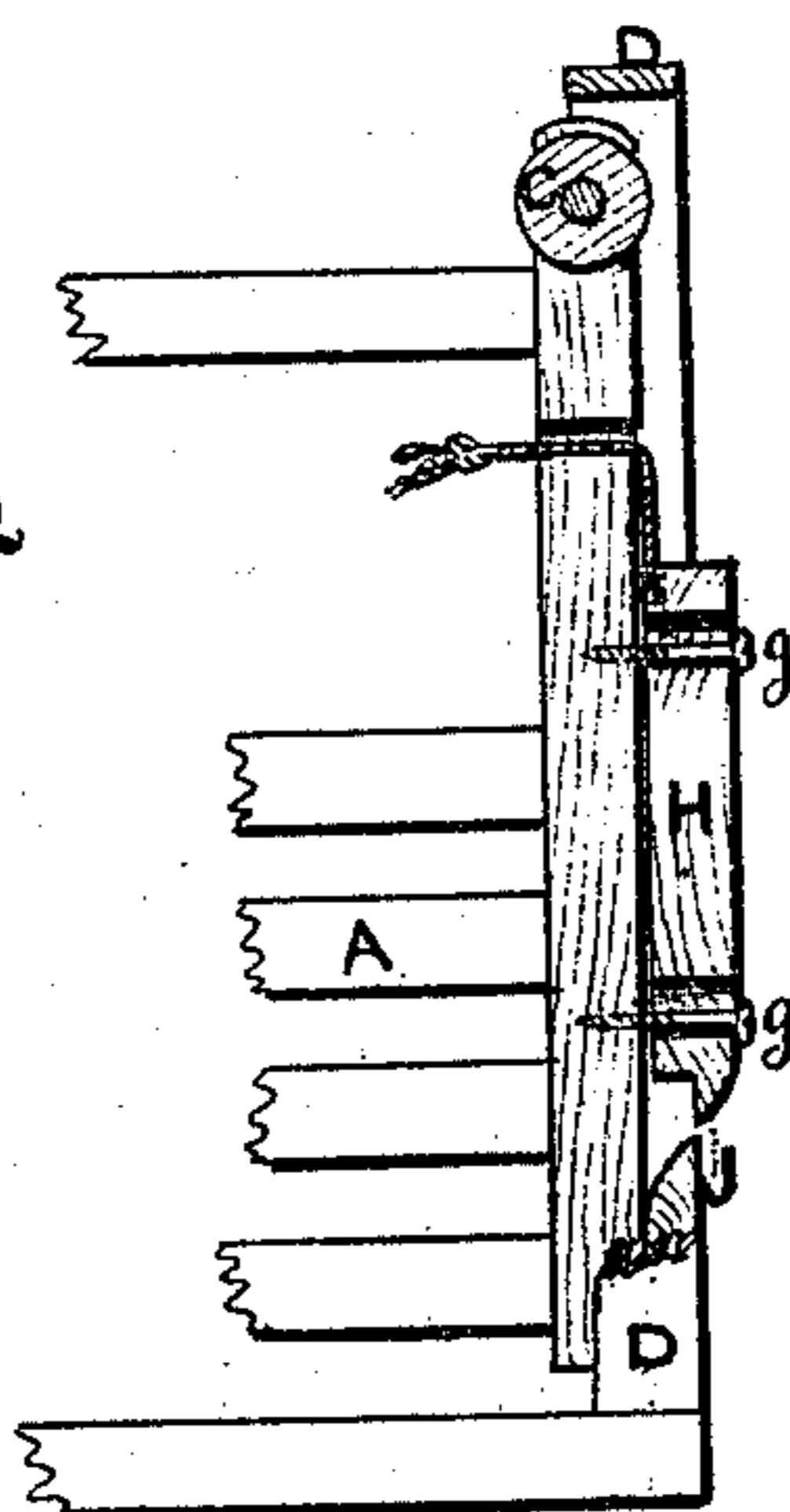


Fig. 2.



Witnesses

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# United States Patent Office.

THOMAS ELLISON, OF ABINGDON, ILLINOIS.

Letters Patent No. 100,739, dated March 15, 1870.

## IMPROVEMENT IN GATES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS ELLISON, of Abingdon, in the State of Illinois, have invented a new and useful Improvement in Gates, of which the following is a specification.

The nature and object of my improvement consists in providing gates hung on elevated ways by double sets of flanged rollers, with an endless cord running in pulleys and attached to an upright bar-latch at one end and to the top bar of the gate at the other, so that any one desiring to open the gate can do so without dismounting from horse or conveyance by merely pulling one side of the cord, and can as conveniently close the gate again by pulling the other side.

In the accompanying drawing—

Figure 1 is a perspective view of my improved gate.

Figure 2, a sectional view, showing the operation of the latch.

A represents the gate.

B the elevated way on which it is suspended, and on which it may be moved back and forth by means of flanged rollers C.

The elevated way is secured to three sets of posts, D.

Two other posts, E, are set, one on each side of the central posts D, a convenient distance therefrom and at right angles thereto.

Near the top of these posts E pulleys F F' are secured in proper bearings, one working in a slot cut in the top of the post, the other projecting beyond its side.

Corresponding pulleys G G' are secured in proper bearings near the top of the central parts D, horizontally.

H is the latch, secured to the upright bar of the gate by bolt g, passing through slots cut in the latch sufficiently large to permit the latch to work up and down far enough to catch on to the beveled cross-bar

J, or become disengaged therefrom as it is lowered or raised. The latch H is rabbeted and beveled at its lower end.

To the top of the latch is fastened a cord or other suitable connection, which passes through a hole in the upright bar of the gate to which the latch is attached. This cord is fastened to an endless cord, K, which is led on each side of the gate around pulleys G'; from thence over pulleys F' and down posts E through rings e; thence up over pulleys F and around pulley G to the extended end of the top bar of the gate, where it is securely fastened.

The operation of my "improved gate" is so simple and efficacious that further explanation is deemed unnecessary, but it is obvious that by this arrangement of pulleys and endless cord, the operator, by pulling one side of the cord at post E, will raise the latch and open the gate, while by pulling the other side of the cord passing over pulley F the gate will be closed, and when the hand is withdrawn the relaxed cord will allow the latch to descend and catch on the beveled cross-bar J.

The leverage resulting from the corresponding pulleys renders the operation easy as well as efficacious.

What I claim as my invention, is—

1. The latch H, connected and in combination with endless cord, and operated substantially as and for the purpose specified.

2. The arrangement and combination of gate A, elevated way B, rollers C, posts D and E, pulleys or rollers F F' and G G', endless cord K, latch H, and cross-bar J, the whole constructed to operate substantially as and for the purpose specified.

THOMAS ELLISON.

Witnesses:

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