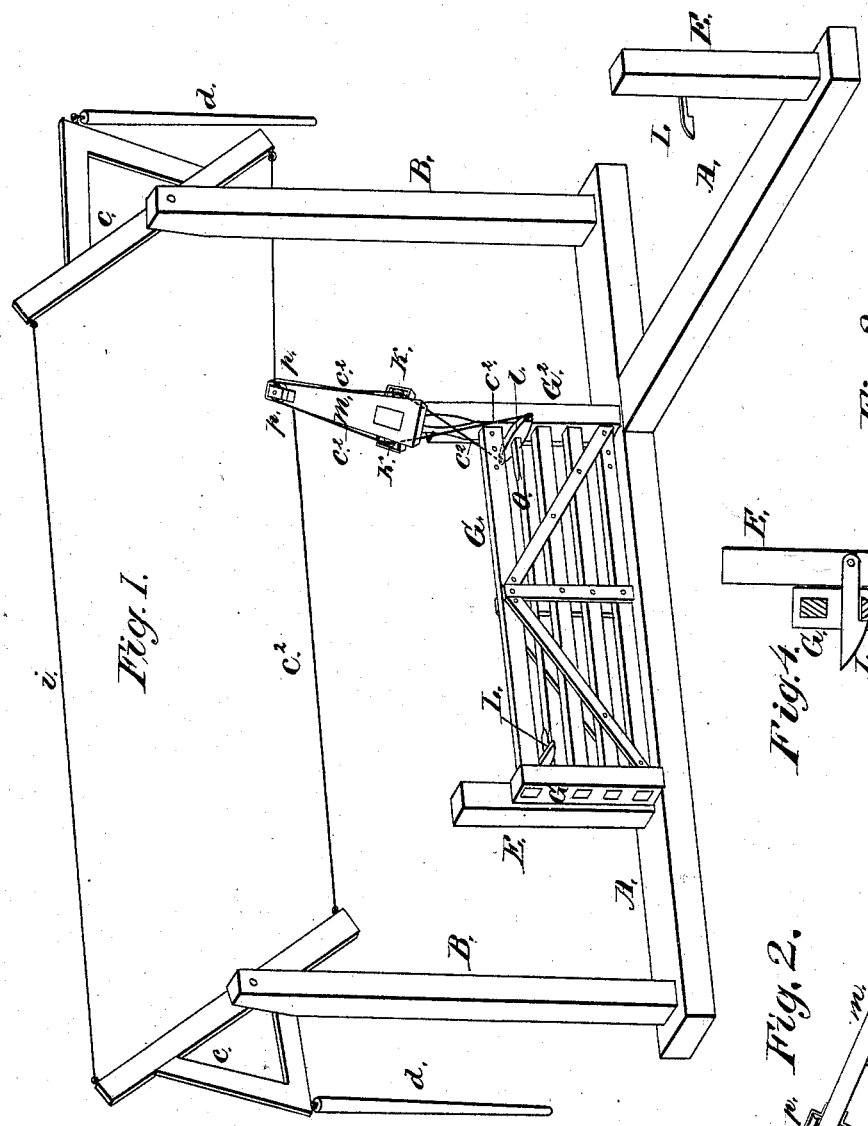
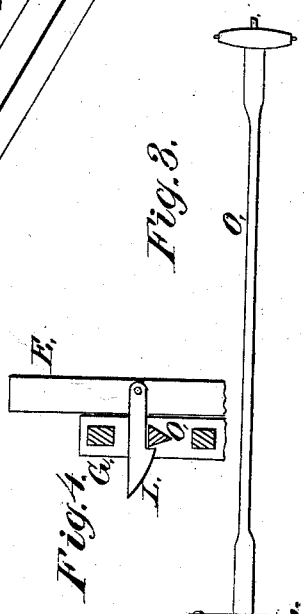
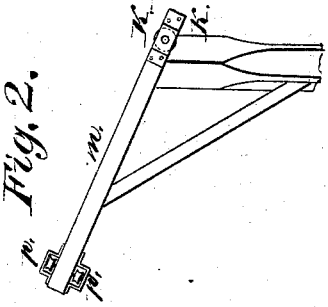
K. G. KNUTESON.

Automatic-Gates.

No. 165,449. Patented July 13, 1875.







Witnesses.
John Lewers
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Inventor.
Knute G. Knuteson

UNITED STATES PATENT OFFICE.

KNUTE G. KNUTESON, OF CLINTON, WISCONSIN.

IMPROVEMENT IN AUTOMATIC GATES.

Specification forming part of Letters Patent No. **165,449**, dated July 13, 1875; application filed May 14, 1875.

To all whom it may concern:

Be it known that I, KNUTE G. KNUTESON, of Clinton, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in Farm-Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to certain new and useful improvements in automatic farm-gates, hereinafter fully described as shown in the accompanying drawings, in which—

Figure 1 is a plan view of my improved gate. Fig. 2 is a similar view of the inclined lever M, and section of heel-post G^2 of the gate G, with parts pertinent thereto detached. Fig. 3 is a view of the oscillating latching-bar O and tilting-lever *l*, detached; and Fig. 4 represents the latch L, post E, and section of gate G, detached.

In the drawings, letter A represents the bed-piece supporting the working parts of the gate. G is the gate, and G^2 the heel-post thereof, hinged to a suitable post. (Not clearly shown in the drawings.) E are latch-posts, to which are pivoted automatic or drop latches L, as shown. O is an oscillating bar for unlatching the gate, loosely pivoted at each end to the end post of the gate G and G^2, and is actuated by means of the cord C^2, attached to each end of the tilting lever *l*, to and through which the bar O is rigidly tenoned. These cords C^2, ascending, cross each other in about the form of the letter X, as shown, thence passing upon and over the pulleys K K at the lower end of the inclined arm M, and thence, also, over the pulleys *p p* upon the upper and lower sides of the upper or outer end of the said arm M, thence passing to the right and left to the lower ends of the pull bars C, to which the ends of said cords C^2 are secured. Said bars C are connected at their upper ends by the cord *i*, each also having a V-shaped attachment, to which are hinged the hand-pulls *d;* and B are posts supporting the device employed for operating the gate.

The manner of operating my improved gate is substantially as follows: The gate may be opened or closed from either approach by pulling down or lifting upward by the handles *d*, as shown. In either case the cords C^2, traversing the pulleys *p* and K, first act upon the tilting lever *l*, causing the latch-bar O to oscillate, whereby the gate is unlatched. The arm M is then carried by the cord C^2 to the left in opening, as the drawing represents in a front view in a line with the figures 1 to 4; the action of the arm M, in opening or closing, depending upon the position in which the gate may be at the time.

Having explained the construction, arrangement, and manner of operating my improved gate, what I claim as my invention, and desire to secure by Letters Patent, is—

In a gate, the combination of the oscillating bar O, tilting lever *l*, arm M, and cords C^2, substantially as and for the purpose specified.

In testimony that I claim the foregoing, I have hereunto set my hand this 10th day of May, 1875.

KNUTE G. KNUTESON.

Witnesses:
JOHN SEAVERS,
H. V. DEARBORN.