

(No Model.)

I. BURKHOLDER.

FARM GATE.

No. 377,479.

Patented Feb. 7, 1888.

Fig. 1.

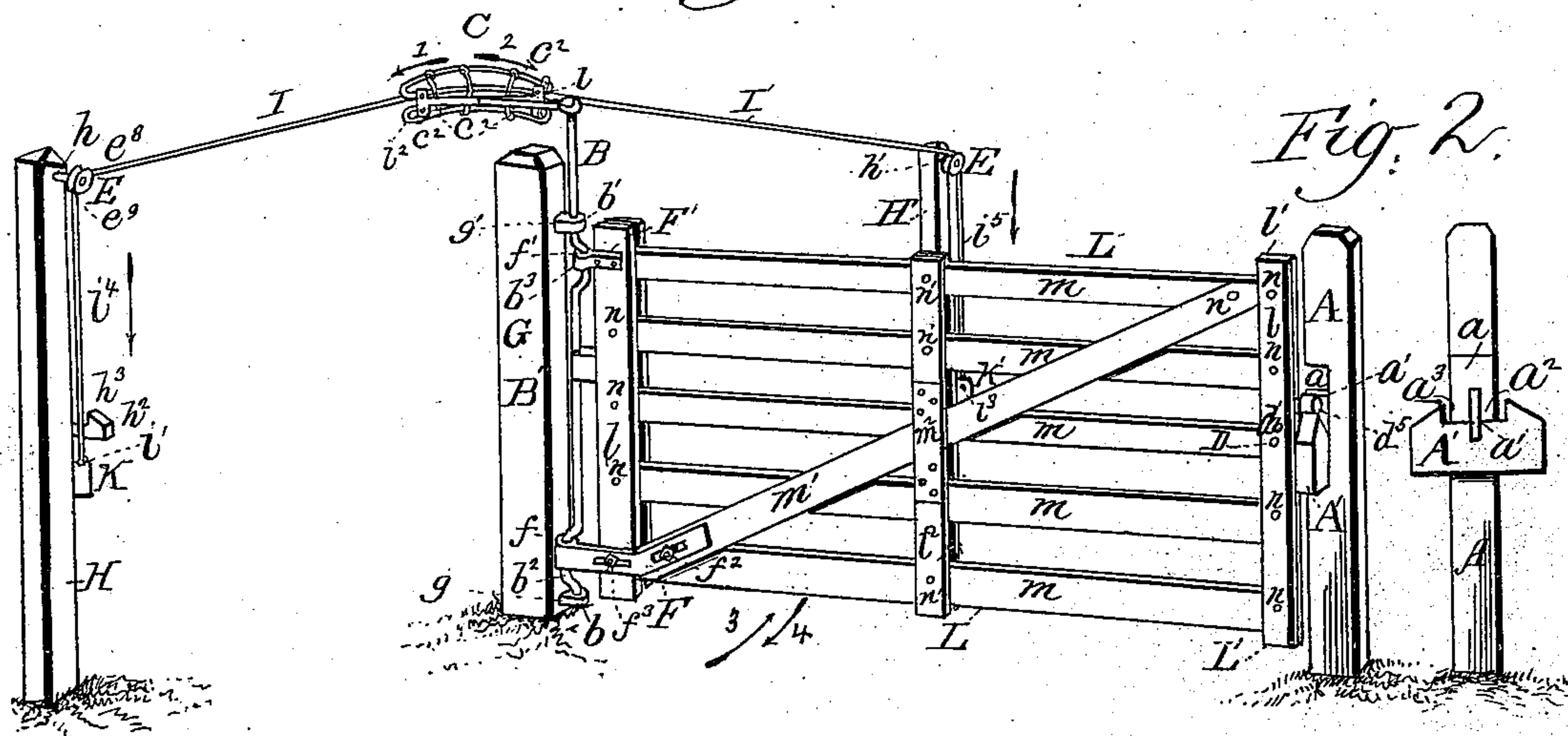


Fig. 2.

Fig. 5.

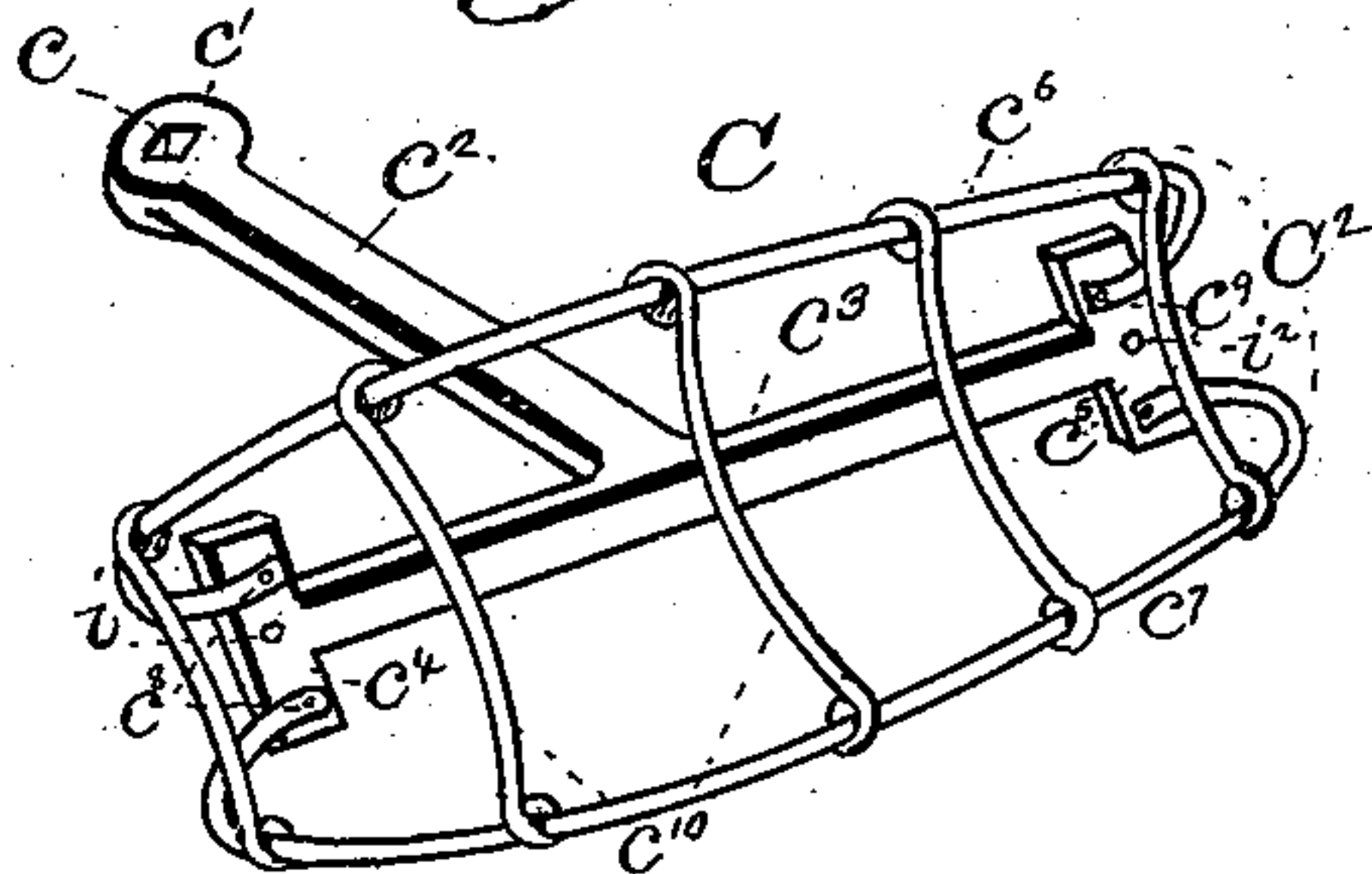


Fig. 3.

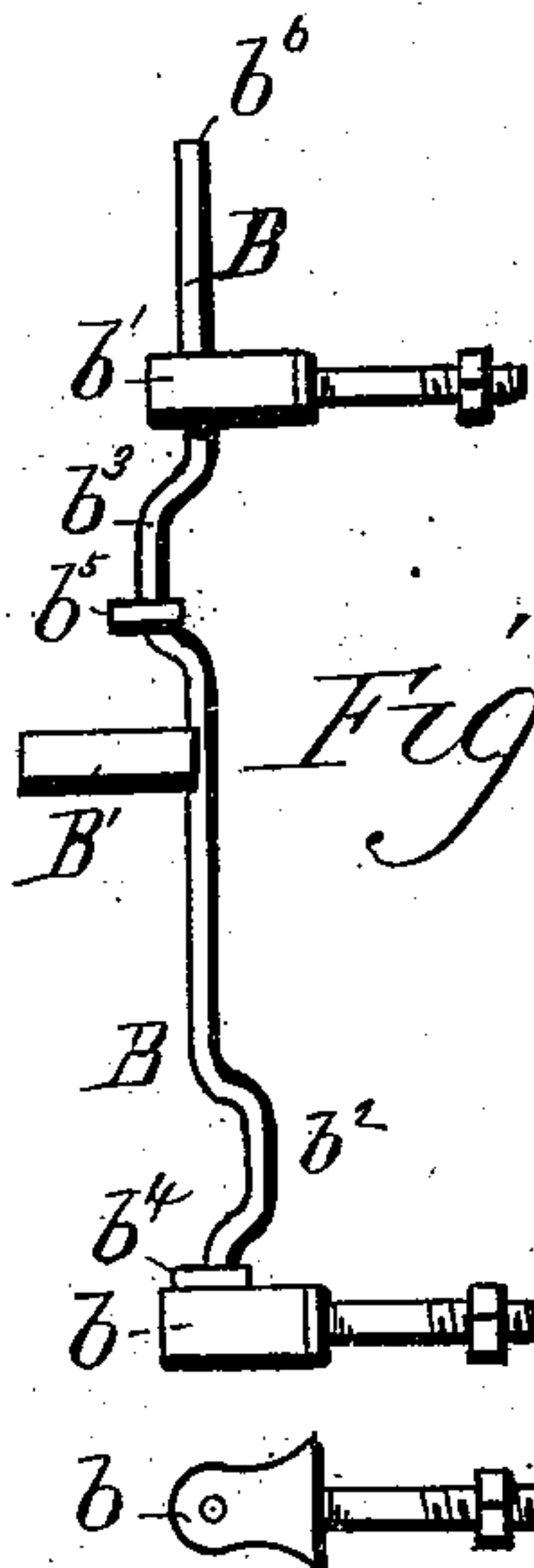


Fig 4.

Witnesses

Andrew Schwartz.
J. B. Nicholson.

Inventor,

Isaac Burkholder.

by
Wm. H. Babcock

Attorney

UNITED STATES PATENT OFFICE.

ISAAC BURKHOLDER, OF FARMERSVILLE, PENNSYLVANIA.

FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 377,479, dated February 7, 1888.

Application filed April 16, 1887. Serial No. 235,132. (No model.)

To all whom it may concern:

Be it known that I, ISAAC BURKHOLDER, of Farmersville, in the county of Lancaster and State of Pennsylvania, have invented certain
5 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 appertains to make and use the
10 same.

My invention relates to the improvement in farm-gates described in the following specification and illustrated in the accompanying drawings, similar letters referring to similar parts
15 throughout the several views.

Figure 1 is a perspective view of my gate with all its parts in position, as it will appear when erected. Fig. 2 is an upright front elevation of the catch-post A; Fig. 3, a side elevation of the double-crank hinge-rod B; Fig.
20 4, a top view of the eyebolt *b*; Fig. 5, a perspective view of the T-lever C, with lune-shaped cord-rack attached.

G is the main post, into which are firmly
25 fastened the eyebolts *b* and *b'* at *g* and *g'*, the eyes of which receive and allow to turn the double-crank hinge-rod B. This rod, which is a round piece of iron of sufficient length and thickness, is bent so as to form two opposing cranks, *b*² and *b*³, which turn in the eyes
30 *f* and *f'* of the hinge-straps F and F'. Just below the crank *b*² is the collar *b*⁴, which rests on the eyebolt *b* and serves as a bearing or support to the rod B.

To the lower end of crank-bearing *b*³ is attached the collar *b*⁵, which serves as bearing or support to the gate L, by means of the hinge-strap F', which rests thereon. At the proper distance between the two cranks and in the
40 direction of the crank *b*³, and immediately opposite to the direction of the crank *b*², is rigidly attached to the rod B the piece B', of sufficient length and strength to serve as a lever in opening or closing the gate L. The upper
45 end, *b*⁶, of the rod B is made square to fit into the square eye *c* in the head *c'* of the T-lever C, which is placed on top of the rod B, the lever-bar *c*² extending to the rear and in the direction of the crank *b*² over the top of the main
50 post G. This T-shaped lever C consists of a

main bar, *c*², having at one end the head *c'*, in which is made the square eye *c*, and at the other end, at its middle point and at right angles with the bar *c*², the bar *c*³, which completes the T shape. This cross-bar *c*³ has at its ends
55 the cross-lugs *c*⁴ and *c*⁵, standing vertical and at right angles to the bar *c*³, which is placed horizontally. The rack *c*² consists of two wires, *c*⁶ and *c*⁷, bent lunate in form and having their extremities firmly fastened to the cross-lugs *c*⁴
60 and *c*⁵ by the rivets or bolts *c*⁸ *c*⁹. These lunewires are joined by five or more cross-wires, *c*¹⁰, curved inwardly, so as to form a groove or channel to receive the cords I and I'.

The cord I, having one end fastened to the
65 cross bar *c*³ of the T-lever C at *i*, then passes along the groove of the wire cord-rack C² to the sheave E, attached to the upper end of the post H at *h*, entering the hole *e*⁸, passing over the sheave fully, and coming out of the hole
70 *e*⁹, and is held taut by the weight K, attached to the other end at *i'*. In a similar manner, but in an opposite direction, the cord I', fastened at *i*², passes along the cord-rack over the
75 other sheave E at *h'*, and is held taut by the weight K', attached to the end at *i*³. The holes *e*⁸ and *e*⁹ in the cap-rings serve as guides to keep the cords in the grooves of the sheave-pulleys.

The operation of my invention is as follows: Pulling downward on the cord I, as indicated
80 by the arrow at *i*⁴, will move the T-lever C in the direction indicated by the arrow 1. This will turn the hinge-rod B, so as to move the crank *b*³ to the left and rearward, the crank *b*² to the right and forward, and the result of the
85 combined movement of these cranks will be to elevate the front part, L', of the gate L, carrying with it the fixed latch D, until the latch-roll *d*⁵ will pass above the partition *a'* of the latch-catch A', when the action of the lever B',
90 exerted in the same direction, will be to swing open the gate L in the direction indicated by the arrow *s*, toward the catch-post H', to which is fastened a catch, *h*², which will receive the latch-roll *d*⁵ and hold the gate L opened. A
95 downward pull on the cord I', as indicated by arrow *i*⁵, will cause these same movements to be executed in an opposite direction, the latch-catch receiving the latch-roll *d*⁵ and holding
100 the gate L closed.

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

1. The combination, with a gate, of a hinge-rod, B, having two opposing cranks, b^2 and b^3 , the two collars b^4 and b^5 , the rigid swing-lever B' , and the square end b^6 , and working in the eyebolts b and b' , substantially as set forth.

2. The combination, with a gate and hinge-rod, as described, of a T-lever and cord-rack C, having the horizontal bar c^2 , the head c' , pierced by the square hole c , the cross-bar c^3 , having at its extremities the vertical cross-lugs c^4 and c^5 , having the holes i and i^2 , the two lune-

shaped wires c^6 and c^7 , fastened to ends of the cross-lugs c^4 and c^5 on their outer face by rivets c^8 and c^9 , and the five or more curved joining-wires c^{10} , attached to the lune-shaped wires, substantially as set forth, and for the purpose described. 15

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses. 20

ISAAC BURKHOLDER.

Witnesses:

E. BURKHOLDER,

J. M. BURKHOLDER.