

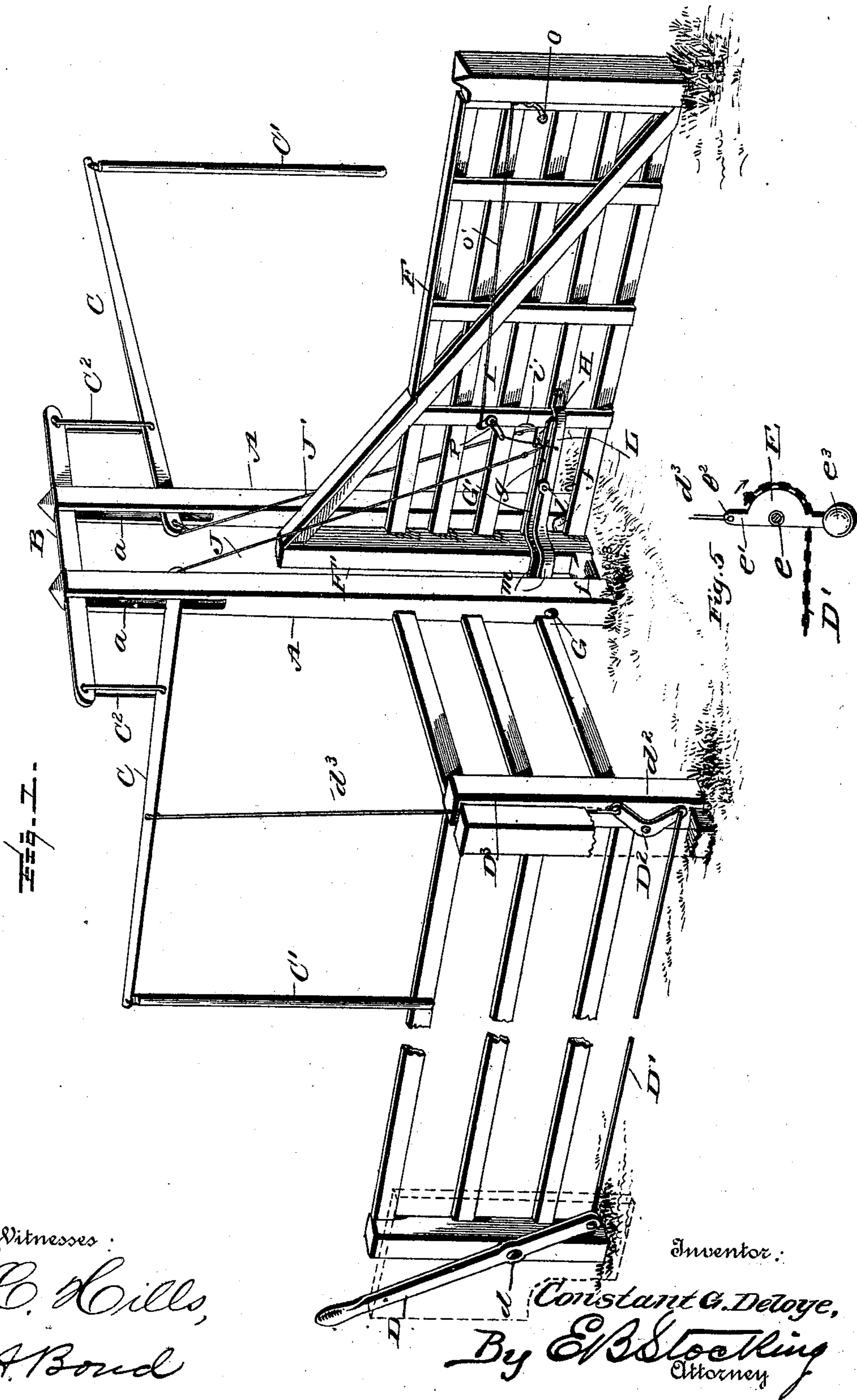
(No Model.)

C. G. DELOYE.  
GATE.

2 Sheets—Sheet 1.

No. 516,348.

Patented Mar. 13, 1894.



Witnesses:  
L. C. Mills,  
E. A. Bond

Inventor:  
Constant G. Deloye,  
By E. B. Stocking  
Attorney

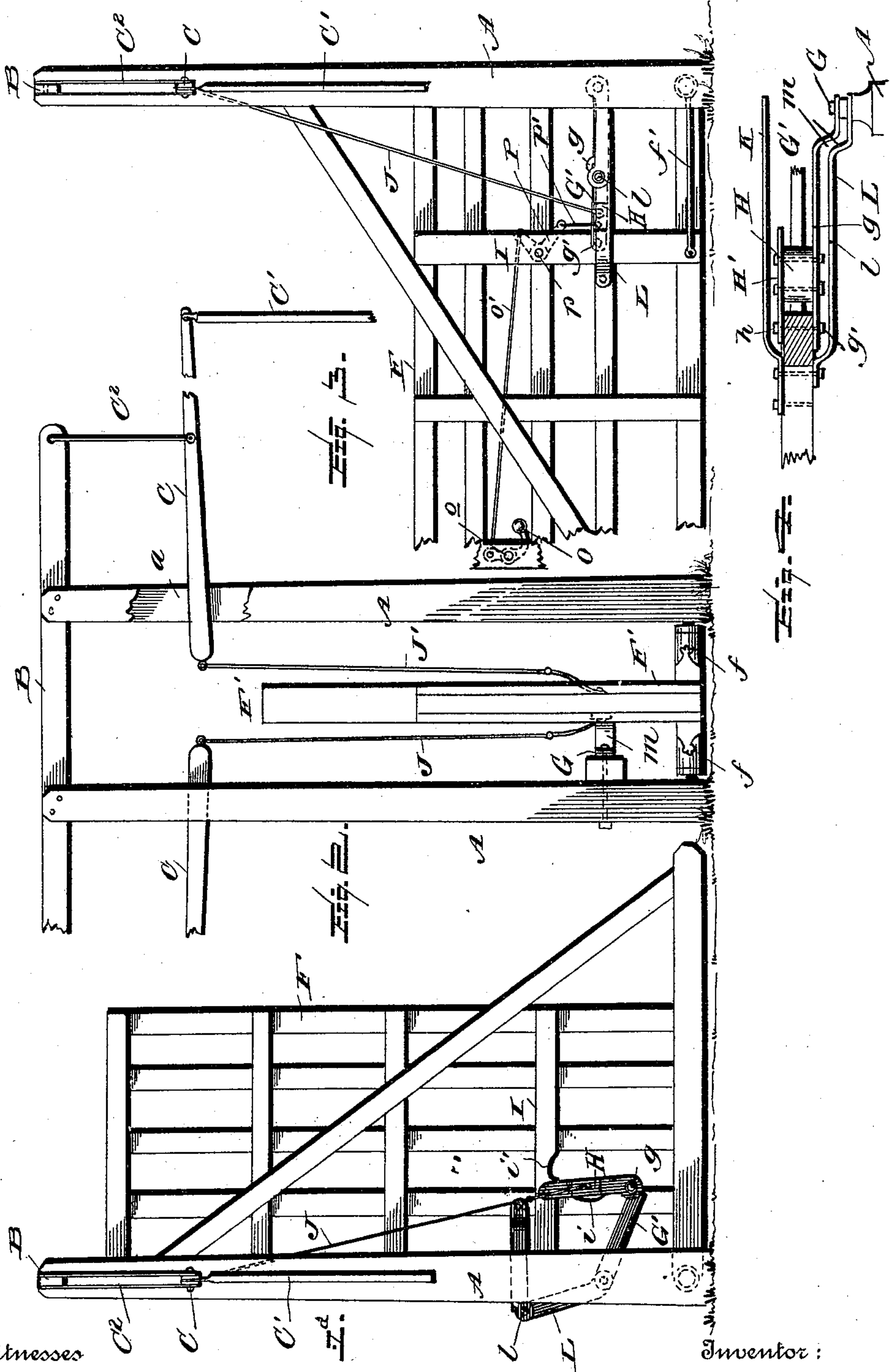
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# UNITED STATES PATENT OFFICE.

CONSTANT G. DELOYE, OF LENOX, MASSACHUSETTS.

## GATE.

SPECIFICATION forming part of Letters Patent No. 516,348, dated March 13, 1894.

Application filed September 28, 1893. Serial No. 486,749. (No model.)

*To all whom it may concern:*

Be it known that I, CONSTANT G. DELOYE, a citizen of the United States, residing at Lenox, in the county of Berkshire and State of Massachusetts, have invented certain new and useful Improvements in Gates, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in gates of that class which are hinged to swing from a horizontal to a vertical position and capable of being opened or closed by a person on horseback or  
15 in a carriage, or from a distance.

It has for its objects among others to provide a simple and cheap construction, of few parts, and those readily applied to a gate and not liable to get out of order.

20 Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the  
25 accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of my improved gate in its closed position, showing  
30 the means for operating the same from a distance. Fig. 1<sup>a</sup> is a side elevation showing the gate open. Fig. 2 is a rear end view with the gate closed. Fig. 3 is a detail in side elevation with the gate closed. Fig. 4 is a detail in plan, showing the hinge plates of the  
35 gate. Fig. 5 is a detail of the combined hinge-plate, pulley and weight sometimes employed in connection with means for operating the gate from a distance.

40 Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates uprights held in position in any suitable manner and arranged  
45 the required distance apart, with their upper ends slotted as seen at *a* to form a guide for and permit of the required movements of the operating levers which will soon be described.

B is a bar or arm secured to the upper ends

of the uprights in any suitable manner, preferably in the slots thereof, as seen in Fig. 1, and while serving to brace the upper ends of the uprights forms means for the attachment of the links on which the operating levers are pivoted. This arm or bar is arranged at right  
50 angles to the length of the gate, that is, parallel with the pivot thereof as seen in Figs. 1 and 2.

C are the operating levers, one upon each side, and at their outer ends each provided  
55 with a depending rod or handle C' which is pivotally connected therewith, while between their ends the said levers are pivotally connected with the ends of the bar B by means of the links or analogous devices C<sup>2</sup> which are  
60 arranged about one third the length of the lever from its inner end as seen best in Fig. 1. The inner ends of the levers pass loosely through the slots *a* of the uprights in which they work freely.

If the gate is to be operated from a distance  
70 I provide some suitable means, such for instance as is seen in Fig. 1, in which D is a lever pivoted at *d* to a fence post or any other suitable support and at its lower end connected  
75 by rod, chain or cord, D' with a two-armed lever D<sup>2</sup> pivoted at *d*<sup>2</sup> on another post D<sup>3</sup> and connected as by rod, cord or chain *d*<sup>3</sup> with the adjacent operating lever C so that manipulation of the lever D will operate the gate. In lieu of  
80 the two-armed lever D<sup>2</sup> shown in Fig. 1 I may sometimes employ the device shown in Fig. 5, which is designed to be used in the same position as said lever D<sup>2</sup>, being pivoted at *e*, and comprising a substantially semi-circular  
85 portion E which may be grooved around its periphery to receive a chain or cord, and extended in one direction to form a lug or projection *e'* which is provided with a hole *e*<sup>2</sup> to receive one end of the chain or cord *d*<sup>3</sup>, and  
90 in the opposite direction and weighted as seen at *e*<sup>3</sup>, so as to return the parts to their normal position and to keep the chain or cord taut.

F is the gate which may be of any desired form of construction, the rear end post or upright F' of which is arranged between the uprights A as seen in Figs. 1 and 2 and is pivotally mounted therein for instance by hav-



ing the lateral portions  $f$  at its lower end provided with pintles which are supported in the uprights as seen best in Fig. 2. Suitable braces may be employed where desired or  
 5 necessary to give the required strength; I have shown one,  $f'$ , in Fig. 3.

Projecting inwardly from one of the uprights A is a pin G as seen best in Figs. 2 and 4, and upon this pin is loosely mounted one  
 10 end of the jointed arm G' which is provided with a rule joint  $g$  near its center and its other end pivotally connected with the gate as at  $g'$ . The forward portion of the arm G' has attached thereto a weight H which ex-  
 15 tends through to the opposite side of the gate and has attached thereto the short arm H' one end of which is pivotally connected to the gate as at  $h$ , on the same pivot on which the forward end of the arm G' is pivoted. The  
 20 rail of the gate below the weight is cut away as at  $i$  to provide for the working of the weight and the adjacent vertical bar I of the gate is cut away as at  $i'$  for the same purpose.

J is a rod or link or cord connecting the inner end of one of the operating levers C with the arm G' forward of its joint, and J' is a link, rod or cord connecting the inner end of the other lever C with the short arm H' as shown.

30 Upon the side of the gate adjacent to the short arm H' there is provided a guard arm K one end of which is attached to the gate forward of the connection of the said short arm and extended to the rear a sufficient distance beyond the inner end of said arm to  
 35 guard and protect said arm and prevent the cattle from getting their horns under said arm and thereby raising the gate. Upon the opposite side of the gate there is arranged another guard arm L for the arm G'; this consists of an arm provided with a rule joint  $l$   
 40 which is constructed to break downward while that of the arm G' is arranged to break in the opposite direction. Both the arm G' and the guard arm L are provided with offsets or bends  $m$  as seen best in Fig. 4 to throw them into the proper plane.

With the parts constructed and arranged substantially as above set forth the operation  
 50 is as follows: When the gate is in its horizontal position as seen in Figs. 1 and 3 the same is locked by reason of the rule joints in the arms G' and L and the gate cannot be opened by direct upward pressure thereon, nor can the rule joint of the arm G' be broken by the cattle on  
 55 account of the guard arms which are so located with relation to the arm G' and the short arm H' as to prevent tampering therewith. To open the gate it is only necessary to give a sudden  
 60 pull upon either of the handles C' or press downward upon the lever D, as the case may be, when the arm G' will break upward and the gate will be thrown into the position in which it is shown in Fig. 1<sup>a</sup>, in which position  
 65 it will be firmly held until it is desired to close

the same when a like downward movement on either handle, will throw the gate into its horizontal position where it will be automatically locked in the manner above set forth.

Modifications in detail may be resorted to  
 70 without departing from the spirit of the invention or sacrificing any of its advantages; the lever D and bell-crank lever D<sup>2</sup> are preferably arranged within housings or between posts, or in a slot in the post in which the lever is pivoted, as seen in Fig. 1, so as to be  
 75 out of the way of the cattle so they cannot raise the gate by getting their horns under the levers.

It is sometimes desirable to be able to open  
 80 the gate without operating the levers or arms by the handles; for instance a person on foot may wish to open the gate; for this purpose I provide a hand latch or knob O pivoted at  
 85 o on the gate and having one end extended beyond the pivot and connected by wire or cord O' with one arm of a bell-crank lever P pivoted at  $p$  and its other end connected by short wire or rod P' with the arm G' as shown  
 90 in Fig. 3 so that manipulation of the latch or knob will break the jointed arm in the same manner as pulling upon the handles will do and thus the gate can be opened. The latch O and lever P are preferably confined within recesses in the gate so as to be out of the  
 95 way.

Other changes in the details of construction may be made and still be within the scope of the invention.

What I claim as new is—

- 100 1. The combination with an upright and a gate mounted thereon to turn from a horizontal to a vertical position, of a jointed arm pivotally connected with the gate and upright and an operating lever connected with  
 105 the jointed arm forward of its joint, as set forth.
2. The combination with an upright and a gate mounted thereon to turn from a horizontal to a vertical position, of a jointed arm  
 110 pivotally connected with the gate and upright and means for operating the gate and a guard arm on the gate for preventing lifting of the jointed arm, as set forth.
3. The combination with an upright and a  
 115 gate mounted thereon to turn from a horizontal to a vertical position, of a jointed arm pivotally connected with the gate and upright and a jointed guard arm, as set forth.
4. The combination with an upright and a  
 120 gate mounted thereon to turn from a horizontal to a vertical position, of a jointed arm pivotally connected with the gate and upright and a jointed guard arm with its joint arranged to open opposite to that of the piv-  
 125 oted arm, as set forth.
5. The combination with a gate mounted to turn from a horizontal to a vertical position, of a jointed arm pivotally connected therewith, a short arm pivoted on the gate  
 130



and a weight connected with and moving with said arm, as set forth.

having an offset parallel with the offset of the first mentioned arm, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CONSTANT G. DELOYE.

Witnesses:

THOMAS POST,  
LOUIS H. REGNIER.

6. The combination with a gate pivotally mounted at its lower rear corner to turn from  
5 a horizontal to a vertical position and vice versa, of a jointed arm pivoted at one end on the gate and having an offset near its other end and a jointed guard arm on the gate and