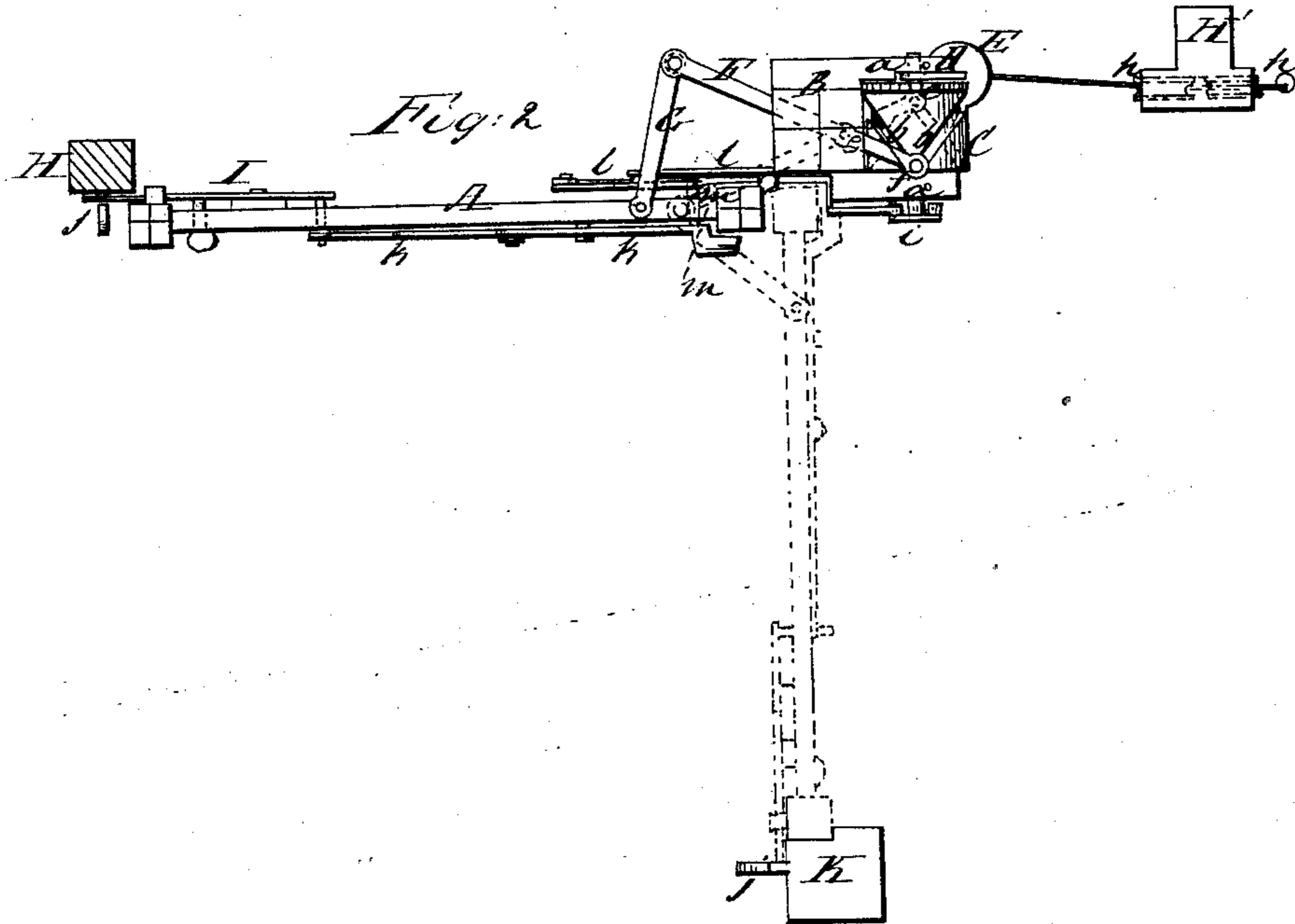
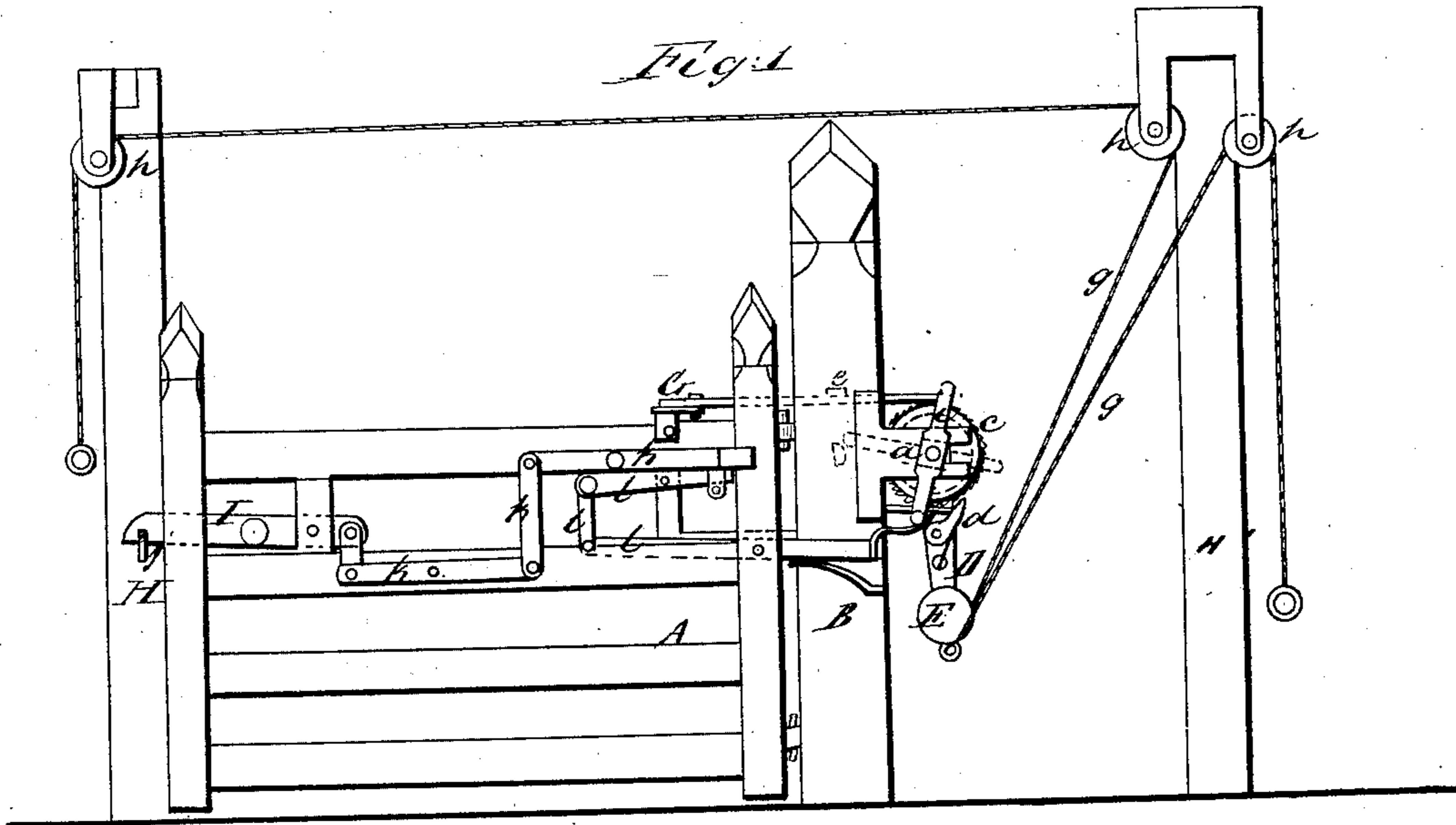


# W. T. Boggs, Automatic Gate,

No. 21,811.

Patented Oct. 19, 1858.



# UNITED STATES PATENT OFFICE.

W. T. BOGGS, OF CINCINNATI, OHIO.

## MODE OF OPENING AND CLOSING FARM-GATES.

Specification of Letters Patent No. 21,811, dated October 19, 1858.

*To all whom it may concern:*

Be it known that I, W. T. Boggs, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and Improved  
5 Attachment for Gates Whereby They May be Opened and Closed by Persons from a Vehicle or on Horseback; and I do hereby declare that the following is a full, clear, and exact description of the same, reference  
10 being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a face or side view of a gate with my improvement applied to it, the gate being represented in an open state. Fig. 2,  
15 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in having a zig-zag grooved cam or cylinder placed near the  
20 post to which the gate is hung, said cam being connected with a lever which is pivoted to an arm attached to the gate, the above parts being used in connection with an automatic gate catch or fastening and a loaded  
25 pawl arm actuating the cam or cylinder, whereby the gate may be opened and closed at either side, and from a vehicle or on horse back.

To enable those skilled in the art to fully  
30 understand and construct my invention I will proceed to describe it.

A represents a gate which may be constructed in the usual manner, and hinged to a post B.

35 C, is a horizontal cylinder the axis of which is fitted in bearings *a*, attached to the post B. The cylinder C, is grooved in a zig-zag manner as shown at *b*, Fig. 2, and to one end of the cylinder a ratchet *c*, is at-  
40 tached.

D, is an arm, one end of which is fitted loosely on the axis of the cylinder C, and the opposite end has a weight E, attached. To the arm D, a pawl *d*, is attached, said  
45 pawl catching into the ratchet *c*.

F, is a horizontal lever which is secured in the post B, by a fulcrum pin *e*. One end of this lever has a pin *f*, attached, which pin fits in the groove *b*, of the cylinder and the  
50 opposite end is pivoted to an arm G, which is attached to the gate A. To the lower end of the arm D, two cords or chains *g*, *g*, are attached, and these cords pass over pulleys *h*, which are attached to posts H, H', placed  
55 one at each side of the post B. To the end of the axis of the cylinder opposite to that

where the arm D, is placed a bar *i*, is attached at its center, and each end of the bar is bent at right angles to its main portion, as shown clearly in Fig. 2.

I, is an ordinary drop latch which is attached to the gate A, and which fits in beveled catches *j*, *j*, attached to posts H, K, to which the gate is secured, the gate being secured to one post H, when in an open state  
60 and to the other post K, when in a closed state. To the inner end of the latch I, a series of jointed levers *k*, are attached, the end of the terminal lever of the series *k*, being, when the gate is closed, below one end  
65 of the bar *i*, and in the path of its movement, see both figures, in which the position of the terminal lever *k*, when the gate is closed is indicated by dotted lines. The position of the several levers *k*, is shown clearly in  
70 Fig. 1.

To the post B, a system of levers *l*, are attached, the position and arrangement of which are plainly shown in Fig. 1. To the end of the terminal lever *k*, a pin *m*, is at-  
80 tached, which pin projects under the end of the uppermost lever *l*, when the gate A, is open, as shown clearly in Fig. 2.

The operation is as follows: By pulling a  
85 cord *g*, at either side of the gate the arm D, will rotate the cylinder C, in consequence of the pawl *d*, catching into the ratchet *c*, and the zig-zag groove *b*, will actuate the lever F, and arm G, and the gate will be thrown  
90 open and the latch I, made to catch into the catch *j*, of either post H, K, one part of the zig-zag groove *b*, throwing the gate in one direction or opening it, and the other closing it. The cylinder C, it will be seen is  
95 rotated in one direction only and the gate consequently can be both opened and closed at either side of it. When the cords *g*, are pulled the latch I, is raised previous to the actuating of the levers F, G, by the bar *i*, which actuate the levers *k*, when the gate A,  
100 is closed, and actuate the levers *l*, when the gate is open, said levers raising the drop latch so that the gate may be free to open and close when actuated by the levers F, and G. The weight E, brings the arm D,  
105 in a vertical position each time the cords *g* are released from the "pull."

I am aware that levers have been applied to gates connected with cords and arranged  
110 in various ways for the purpose of allowing the gate to be opened and closed by persons from a vehicle or on horse back. I there-

fore do not claim separately the levers herein described; but,

I claim as new and desire to secure by Letters Patent—

5 1. The grooved cylinder or cam C, actuated by the loaded pawl arm E, and used in connection with the lever F, and arm G, as and for the purpose set forth.

2. I also claim in combination with the

cylinder or cam C, pawl arm E, lever F, 10 and arm G, the drop latch I, arranged with the levers  $\frac{1}{2}$ ,  $\frac{1}{2}$ , so that the latch may be operated automatically as described.

W. T. BOGGS.

Witnesses:

O. D. WHITE,

GEO. W. ROCKEY.