S. W. Chamberlain,

Automatic Gate,

No. 26,477. Patented Dec. 20, 1859.

Fig: 1.

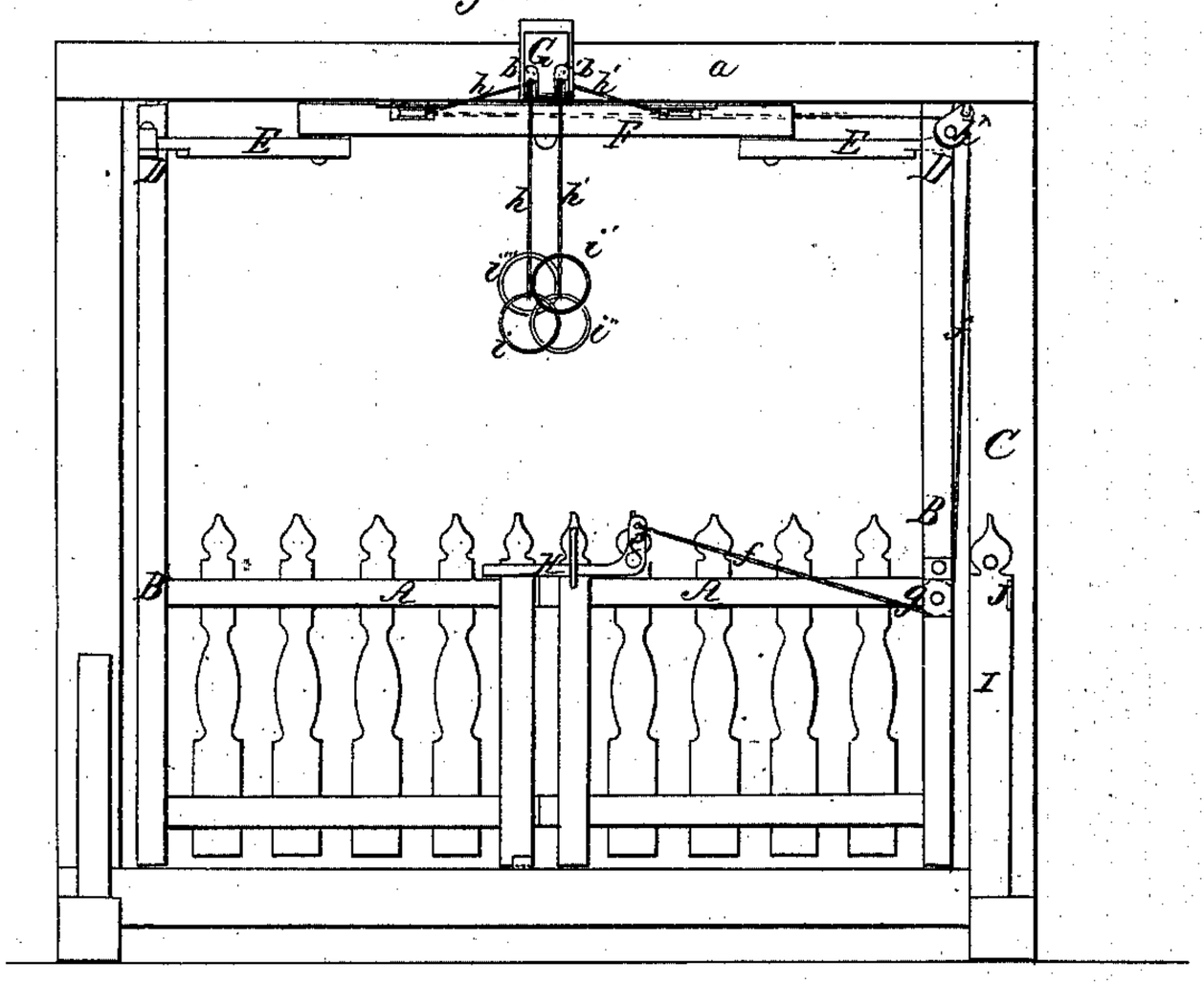
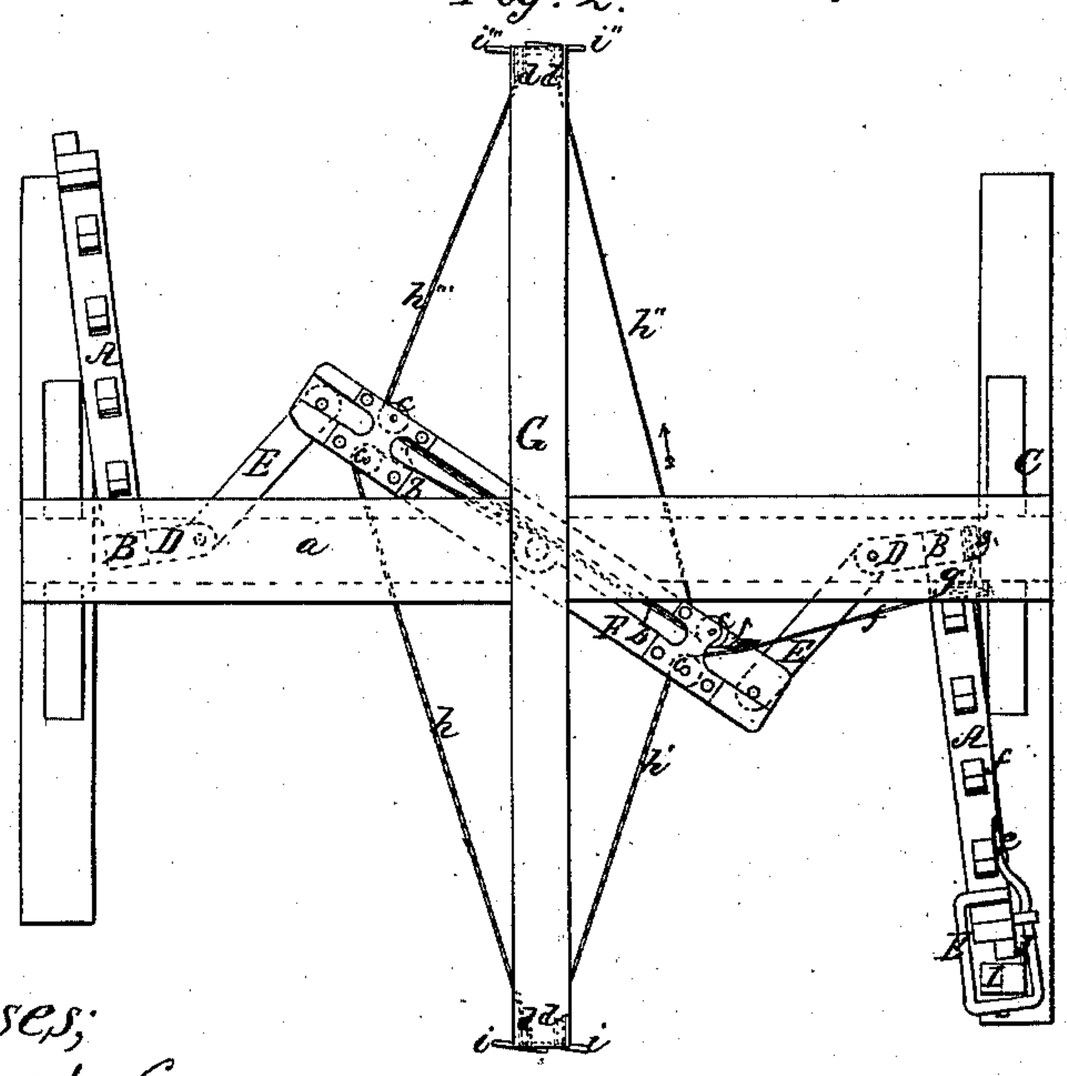


Fig: 2.



Witnesses;
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UNITED STATES PATENT OFFICE.

S. W. CHAMBERLAIN, OF THREE OAKS, MICHIGAN.

GATE.

Specification of Letters Patent No. 26,477, dated December 20, 1859.

To all whom it may concern:

Be it known that I, S. W. CHAMBERLAIN, of Three Oaks, in the county of Berrien and State of Michigan, have invented a new and Improved Gate; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, represents a front elevation of my invention when the gate is closed; and Fig. 2, is a plan or top view of the same when the gate is open.

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

Among the large number of different gates already in existence there is not one that gives entire satisfaction. As a general thing the slide gates if so arranged that they either open by a passing vehicle or by pulling a string from a distance require a complicated machinery which constantly becomes deranged; and the large single swinging gates do very well in fair weather, but when a strong wind blows it takes several men to open them, and to operate such a gate during a stiff breeze from a distance is entirely out of the question.

To overcome all these difficulties is the object of my invention which consists in connecting together by means of suitable levers two gates in such a manner that they swing open in opposite directions and that neither one will move independent from the other. By these means the effect of the wind on one of the gates is exactly counterbalanced by that on the other and my gate operates equally well on a windy day as in fair weather. Furthermore both gates are secured together by a clasp that is operated by the same cord which serves to open and close the gates, so that a spontaneous opening of the gate is precluded.

To enable those skilled in the art to make and use my invention I will proceed to describe it.

The two gates A, A′, are attached to upright posts B, B′, which turn on suitable pivots in the framing C. Secured to the upper part of these posts and on opposite sides of the same are the arms D, which connect by links E, with the double armed lever F. This lever is pivoted to the under side of the upper connecting beam *a*, of the framing C, and it is furnished on its upper side with a groove *b*, which extends from one end of the same to the other. Small pulleys *c*, are arranged on the sides of said groove, two on each end of the lever F, as clearly shown in Fig. 2, and secured to the top of the beam *a*, and at right angles to the same in the middle of its length is the cross beam G, which is also furnished with pulleys *d*, two in each end.

The two gates A, A′, are secured together by means of a clasp H, which is pivoted to one of the gates A′, in such a manner that when left to itself it catches over the end post of the other gate A, as clearly shown in Fig. 1, and so that when its upper end *e*, is pulled, the clasp is raised and the gates are allowed to separate. A cord *f*, is tied to the end *e*, of the clasp and this cord extends over a pulley *g*, on the side of the post B′, and over a block *h**, that is suspended from the top beam *a*, of the framing C. From thence the cord branches off into 4 parts *h*, *h*′, *h*″, *h*‴, which run over the pulleys *c*, on the top of the lever F, and from thence to the pulleys *d*, in the ends of the cross beam G, as clearly shown in Fig. 2. Their ends hang down to about six feet from the ground and wings *i*, *i*′, *i*″, *i*‴, are attached to the same.

If it is now desired to open the gate the right hand ring *i*″, is pulled whereby the clasp H, is raised and the strain is exerted on the lever F, turning the same to a position represented in Fig. 2. By this motion of the lever the posts B, B′, are turned on their pivots and the gates swing open in opposite directions. When fully open the gate A′, strikes a lip *j*, on a post I, and by relaxing the cord the clasp H, is allowed to catch over said post thereby retaining the gates until the right hand ring *i*‴, on the other end of the cross beam G, is pulled. By this operation the clasp H, is raised from the post I, and the strain exerted on the lever F, in the direction of the arrow marked near the cord *h*″, in Fig. 2, causes the same to turn back to its original position and the gates are closed. By relaxing the cord as soon as the gates are completely closed, the clasp H, is allowed to catch over the end post of the gate A, thereby fastening the two gates together so that the same can not be opened by cattle or by the force of the wind.

It is obvious that instead of using the cords *f*, *h*, *h*′, *h*″, *h*‴, any other convenient connection may be used and it will be no-

ticed that in whatever direction the wind blows, its force on one of the gates is exactly counterbalanced by the force on the other gate so that the gates can be operated in any weather with equal facility.

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

The arrangement and combination of the gates A, A′, posts B, B′, arms D, links E, and levers F, in connection with the cords *f*, *h*, *h′* *h″* and *h‴*, constructed and operated substantially as set forth.

S. W. CHAMBERLAIN.

Witnesses:

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