

No. 680,896.

Patented Aug. 20, 1901.

J. G. SUTTON.
GATE AND HINGE THEREFOR.
(Application filed Aug. 9, 1900.)

(No Model.)

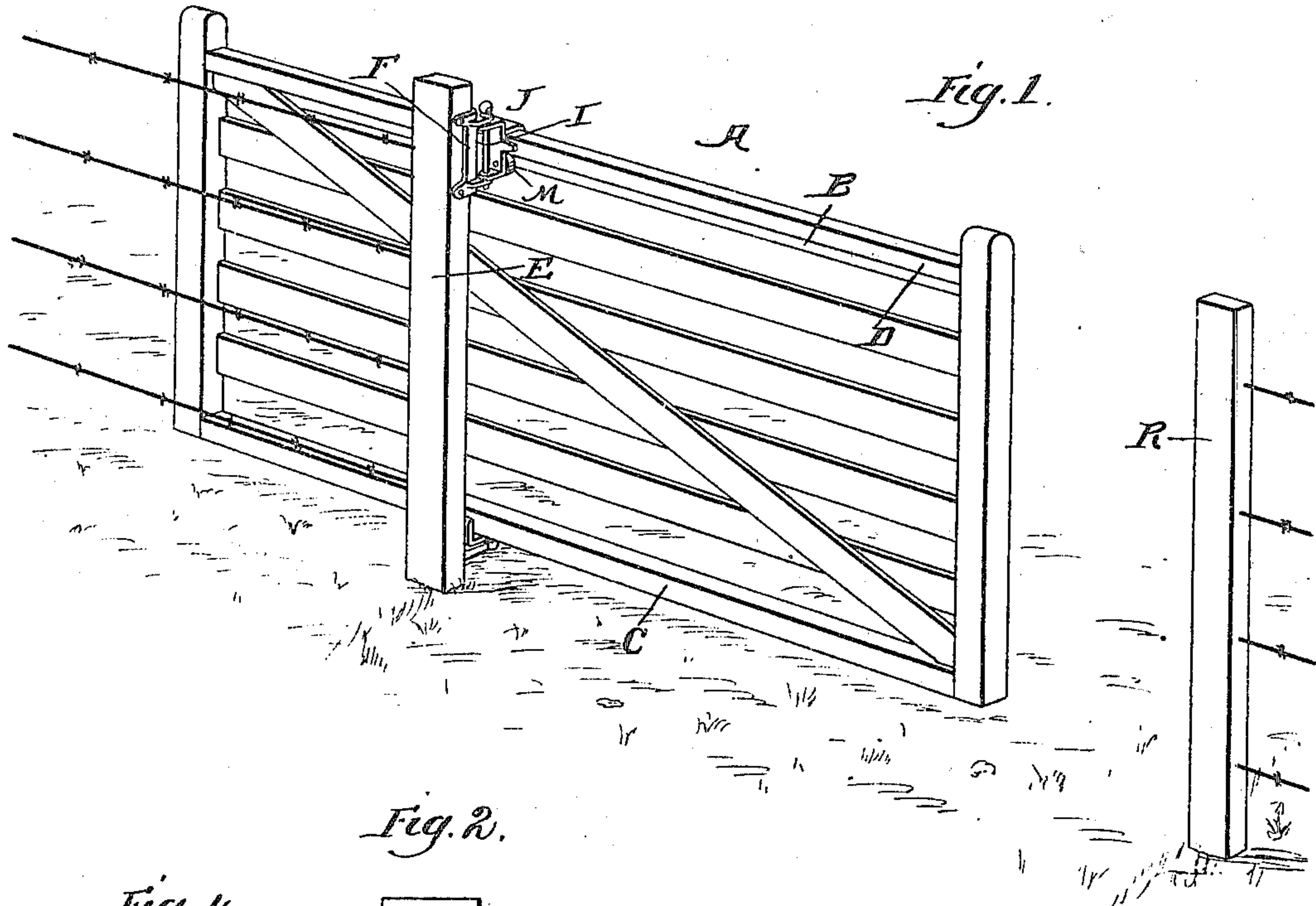


Fig. 2.

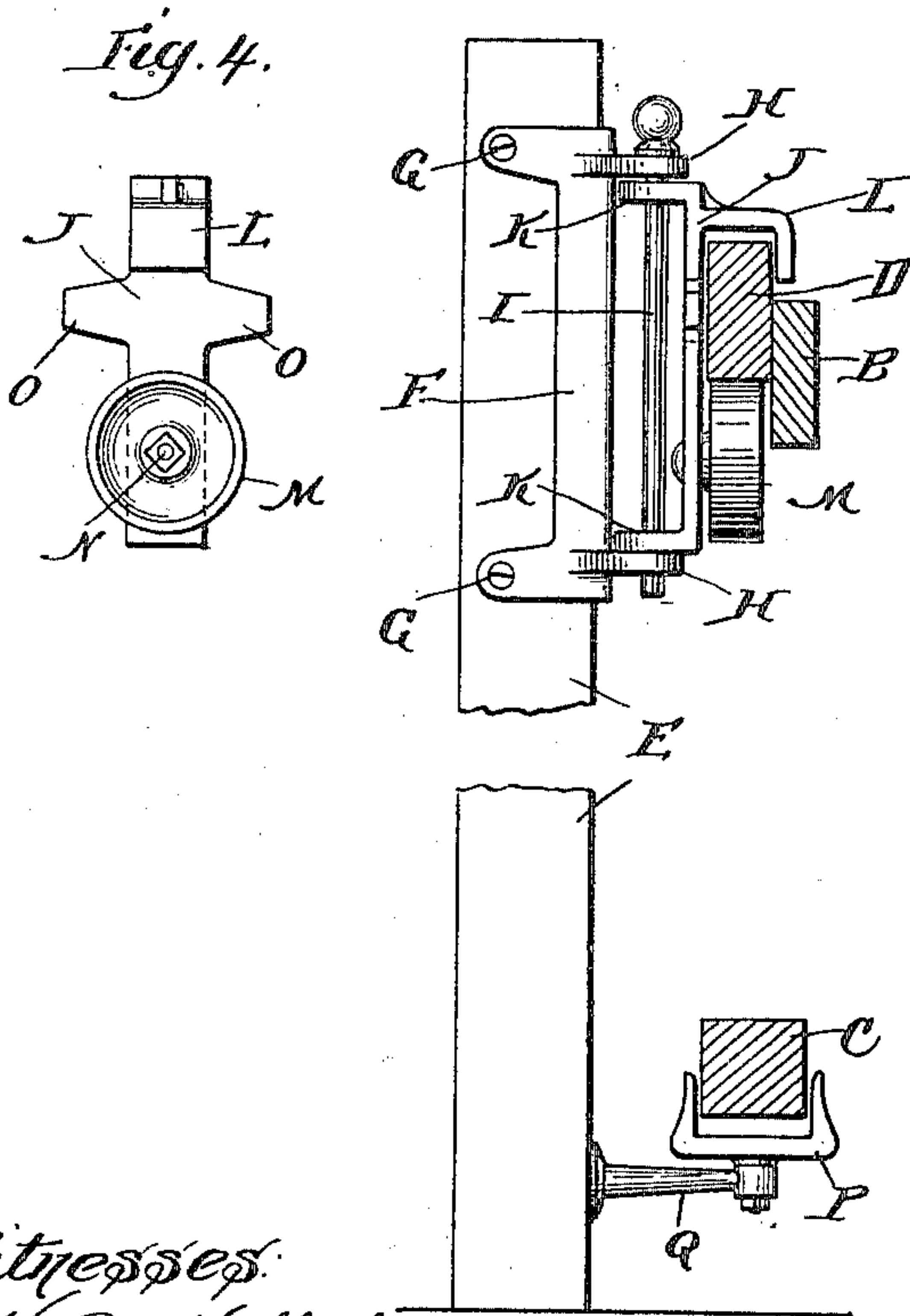
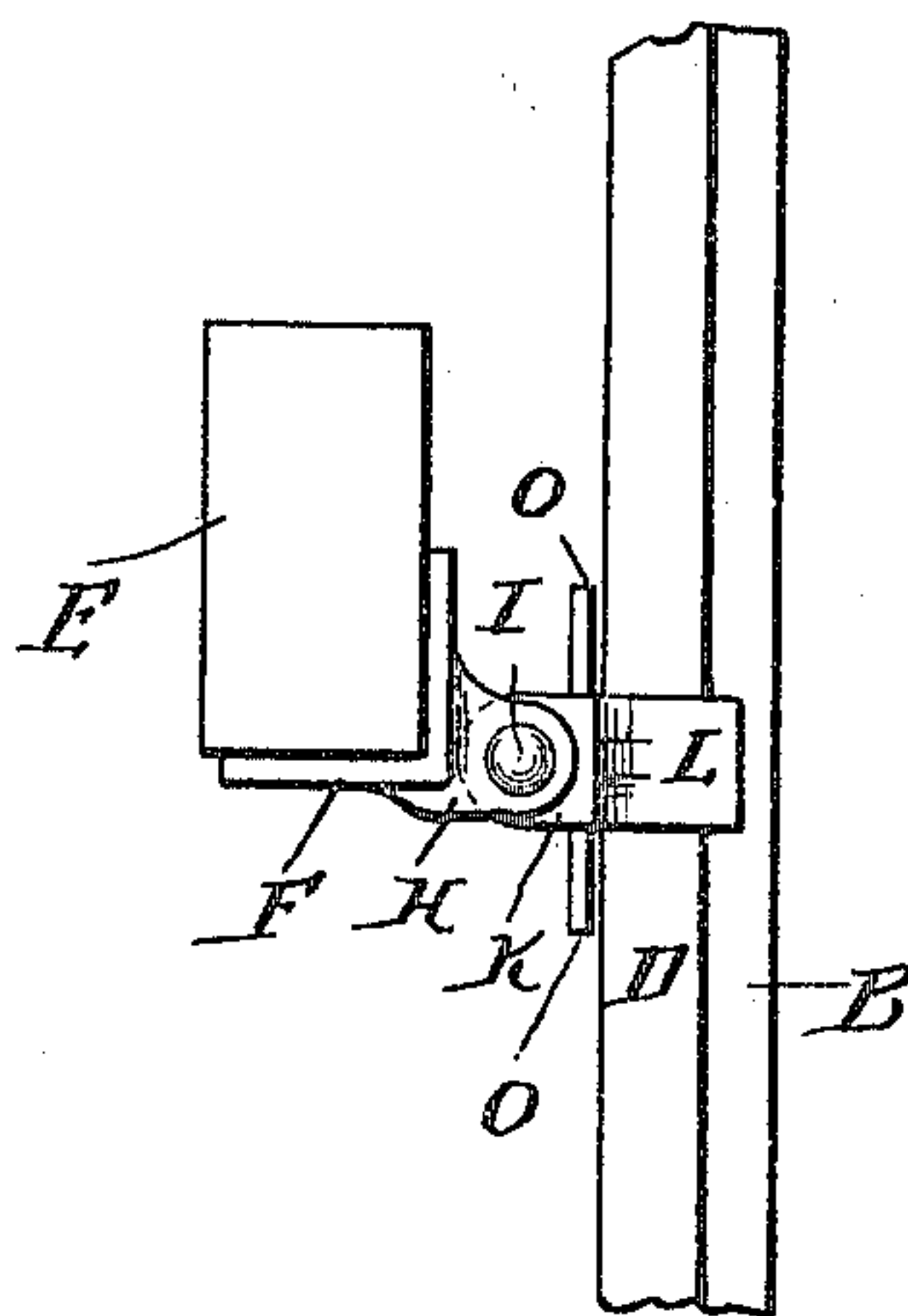


Fig. 4.



Witnesses:
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JOHN G. SUTTON, OF PONTIAC, MICHIGAN.

GATE AND HINGE THEREFOR.

SPECIFICATION forming part of Letters Patent No. 680,896, dated August 20, 1901.

Application filed August 9, 1900. Serial No. 26,354. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. SUTTON, a citizen of the United States, residing at Pontiac, in the county of Oakland and State of Michigan, have invented a certain new and useful Improvement in Gates and Hinges Therefor, of which the following is a specification.

My invention relates to a new and useful improvement in gates and hinges therefor, and has for its object to provide an exceedingly simple and durable gate and so hinge the same that it may be slid to and fro in opening and closing, or it may be swung after the manner of an ordinary gate, or it may be both slid and swung, as best suits the requirements.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective of a gate made in accordance with my improvement, it being shown partly open by having been slid back; Fig. 2, an enlarged section of a portion of a gate, showing the hinges and part of the post in elevation; Fig. 3, a plan view of the upper hinge, showing the post and part of the gate; and Fig. 4, an elevation of the swinging member of the upper hinge.

In carrying out my invention as here embodied, A represents the gate, which is composed of end pieces and panels properly stayed and having a top rail B and a bottom rail C. The top rail has secured thereto upon the one side thereof the guide-rail D for the purpose hereinafter explained.

E represents the hinge-post of the gate, and has secured to the upper portion thereof the stationary member F of the upper hinge by means of suitable screws G. The stationary member has formed therewith the lugs H, through which the pintle I passes for pivoting thereto the swinging member J, which has the corresponding lugs K formed therewith for that purpose.

An overhanging bracket L is formed with the swinging member of the upper hinge and is adapted to embrace the guide-rail D, so as to hold it against sidewise movement, and this guide-rail is supported upon the roll M, which is journaled upon a short stud N, projecting from the swinging member J, thereby permitting the guide-rail to travel lengthwise to and fro upon said roll and at the same time have a tilting movement thereon for the purpose hereinafter set forth.

In order that the guide-rail may not be cramped in sliding to and fro, the member J has formed therewith the wings O, which act to increase the width of the side of the bearing for said rail.

The lower rail C of the gate is fitted to slide in the clutch P, the latter being swiveled to the bracket Q, and this bracket in turn is secured to the hinge-post E in any suitable manner. These two members constitute the lower hinge of the gate, and it is obvious that as both the upper and the lower hinge are connected with the gate by swinging members the gate will be permitted to swing when it is desired to open the same in this manner, or when it is desired to open the gate by sliding this is accomplished with equal facility, as the entire weight of the gate is supported upon the rail M.

A suitable latch may be provided for the gate which will support the swinging end thereof when in contact with the post R, and in practice the gate may be first slid to a position in which it will be balanced and thereafter swung open, which will prevent its sagging.

Among the advantages of my improvement is that in windy weather the gate, being opened by sliding, will not have a tendency to close from the wind-pressure, and another advantage of my improvement is that when it is desired to permit small animals to pass through the gate, while at the same time barring the passage of larger animals, the gate may be tilted upon its hinges so as to hold the end next the post R up to a considerable distance, permitting small animals to pass under the gate, while the gate is effectually barred against the passage of larger animals.

Still another advantage of my improvement is that there being no rigid hinges the post E is not staggered by the operations of the gate,

and the gate itself is rendered more durable in that no great strain is brought to bear upon any portion thereof.

Having thus fully described my invention,
5 what I claim as new and useful is—

1. A hinge having a stationary member embracing the corner of a post and having lugs, a hinged member comprising a plate having projections O, and lugs, a pivotal pin run
10 through apertures of the lugs of the stationary and hinged members, a bracket formed with the hinged member having a depending end, a roller mounted on a stud of the hinged member, and in combination therewith, a gate
15 having a top rail, a guide-rail secured to the top rail with its edge projecting above the edge of the top rail, the said guide-rail being of such width as to extend above the plane of the depending end of the bracket when its
20 lower edge rests on the periphery of the roller, and said top rail having its lower edge depending at the side of the roller, as and for the purpose described.

2. A hinge having a stationary member embracing the corner of a post and having lugs, a

hinged member comprising a plate having projections O, and lugs, a pivotal pin run through apertures of the lugs of the stationary and hinged members, a bracket formed with the hinged member having a depending
30 end, a roller mounted on a stud of the hinged member, and in combination therewith, a gate having a top rail, a guide-rail secured to the top rail, with its edges projecting above the edge of the top rail, the said guide-rail being
35 of such width as to extend above the plane of the end of the depending end of the bracket when its lower edge rests on the periphery of the roller and said top rail having its lower edge depending at the side of the roller and
40 a pivotally-mounted clutch for embracing the bottom rail of the gate, substantially as described.

In testimony whereof I have hereunto affixed my signature in the presence of two
45 subscribing witnesses.

JOHN G. SUTTON.

Witnesses:

J. H. PATTERSON,
S. J. PATTERSON.