

(No Model.)

J. B. ERWIN.
GATE AND GATE HINGE.

No. 453,552.

Patented June 2, 1891.

Fig. 1.

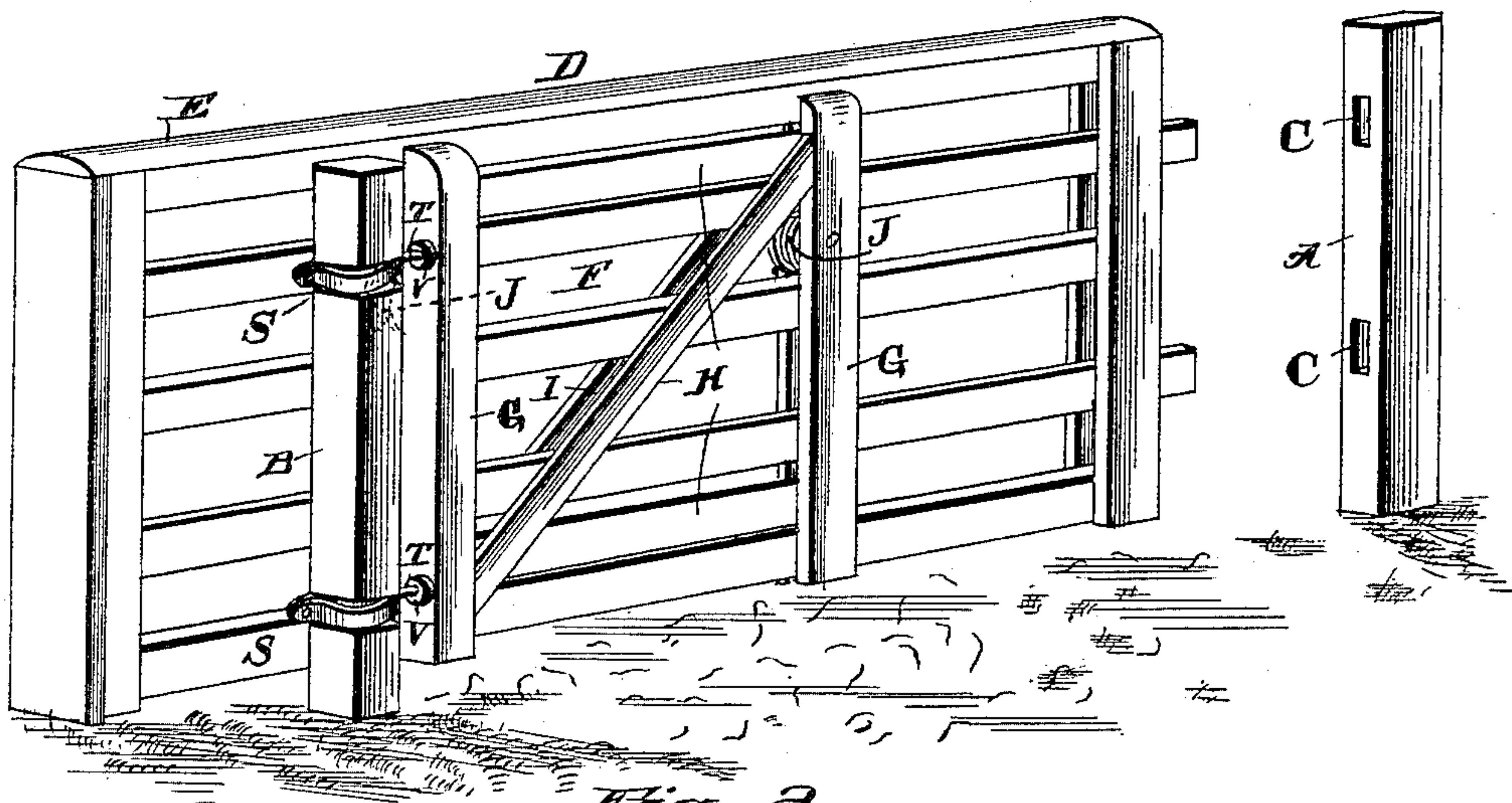


Fig. 2.

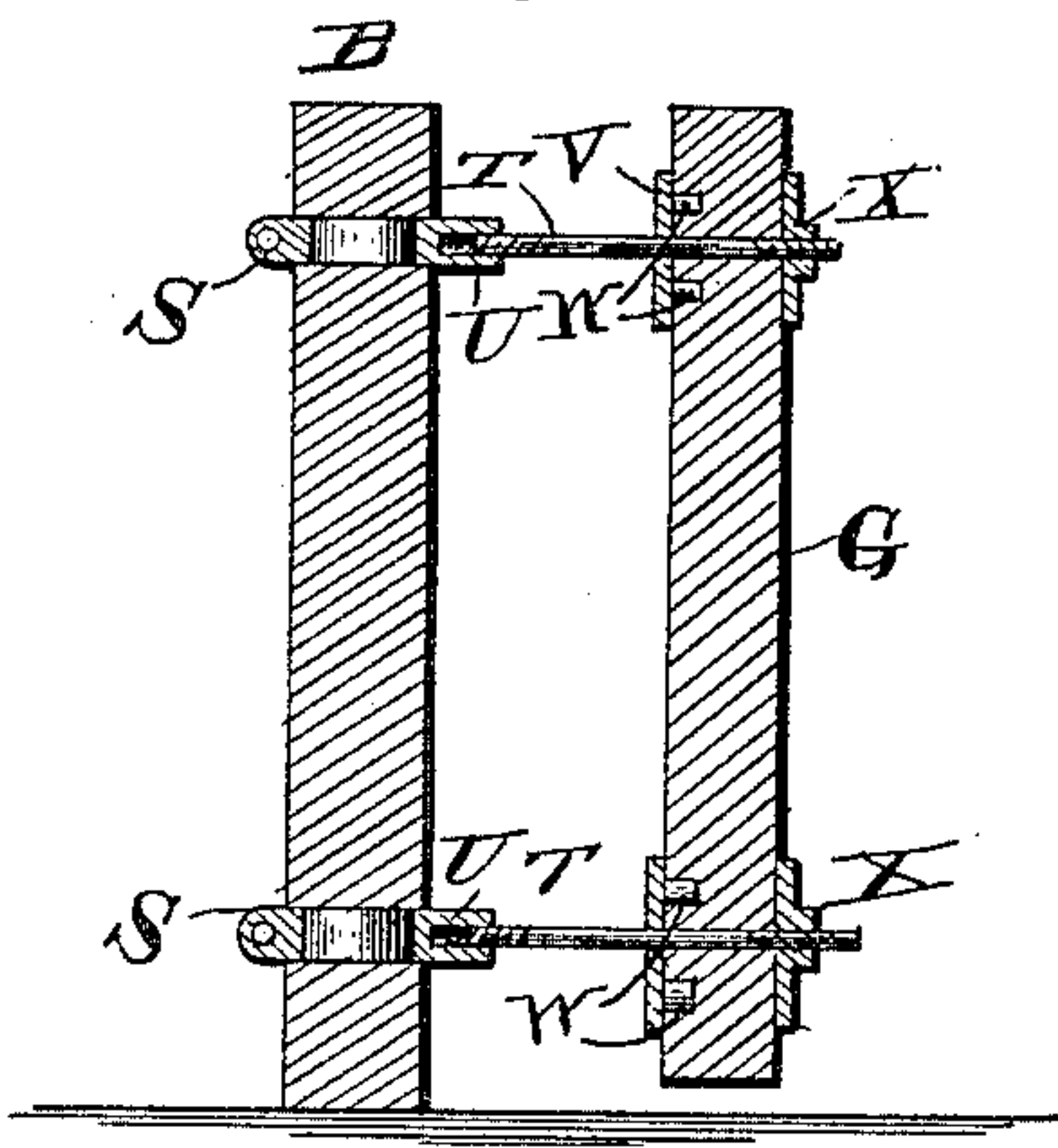
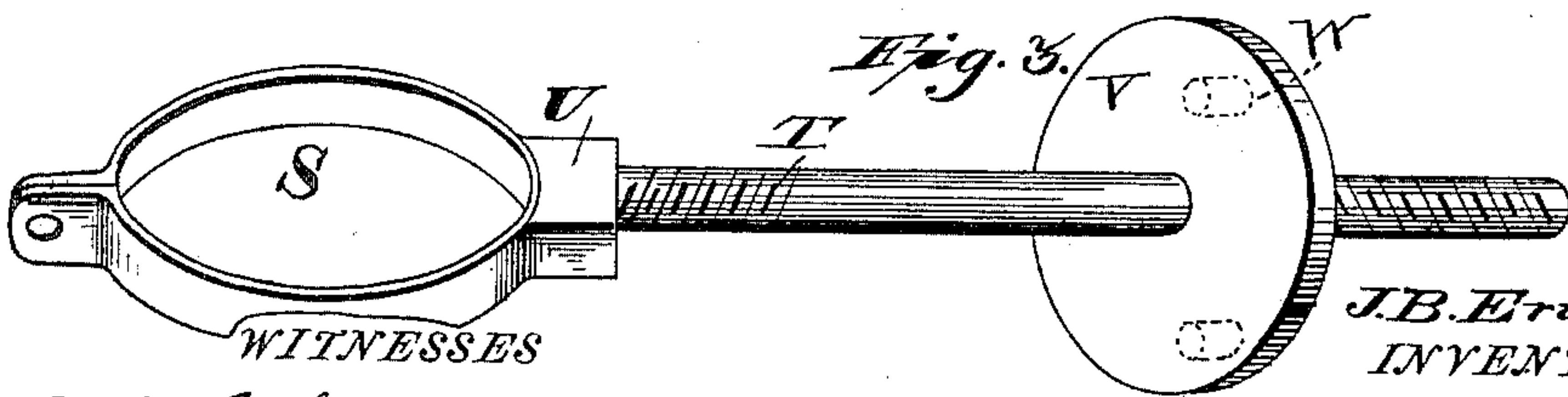


Fig. 3.



WITNESSES

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GATE AND GATE-HINGE.

SPECIFICATION forming part of Letters Patent No. 453,552, dated June 2, 1891.

Application filed October 23, 1890. Serial No. 369,077. (No model.)

To all whom it may concern:

Be it known that I, JOHN BLISS ERWIN, a citizen of the United States, residing at Malone, in the county of Franklin and State of New York, have invented certain new and useful Improvements in Gates and Gate-Hinges; 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 same.

My invention relates to improvements in gates, and has especial reference to that class of sliding gates which are mounted on swinging frames.

The invention consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a view in perspective of my improved gate partly open. Fig. 2 is a vertical section of the gate-post. Fig. 3 is a detail view of the hinge.

My improvements are applicable to barn-doors and other similar inclosures; but for convenience I have shown them as applied to a farm-gate, it being understood that the hinge-post may be the jamb or post of a door as well as the end post of a fence.

Referring to the accompanying drawings by letter, A designates the latch-post, and B the hinge-post, which are set in the ground at the proper distance apart, and may be of any desired size.

The latch-post is provided in its side with the recesses C C to receive the extended ends of the gate-rails, and thereby prevent the gate from swinging after it has been closed.

The gate D is composed of the usual horizontal rails and vertical end bars, and is provided at its top or upper edge with the horizontal longitudinal cap E, the edges of which project beyond the sides of the gate, and thus cover the rails of the gate as well as the supporting-frame thereof, consequently preventing snow and ice from accumulating thereon so as to interfere with the successful operation of the gate.

The gate is mounted on the frame F, which is composed of the pairs of posts or end bars G, connected by the rails H, and the pair of inclined braces I, as shown.

Rollers J J are mounted in each pair of

posts G, and one of the rails of the gate rests on the rollers, the gate being thereby supported so that it is free to slide.

From the foregoing description it will be seen that I have provided a very efficient gate which possesses great strength and durability. The gate is moved longitudinally backward upon the swinging frame, and the said frame then swung to one side. Its rails pass between the members of each pair of end bars or posts, lateral movement of the gate being thereby prevented.

The frame E is hung upon the hinge-post by means of the hinges K, which are composed of the collars S and the adjustable bolt T. Each collar practically consists of a flattened ring which has upon one of its sides the enlargement U, adapted for a seat for the screw-threaded adjustable bolt T. The bolt consists of a section of a cylindrical rod of iron or other suitable material, provided at each end with screw-threads. Near the middle of the bolt is placed the flange V, formed integral therewith. The outer side of said flange is provided with the lugs or teats W, which are intended to register with holes placed in the gate-frame and prevent a rotating movement of the bolt when the retaining-nut X thereon is turned home. The collar is placed around the post at the point where it is desired the hinge shall be located, and may be fitted in a groove formed in the post, or retained thereon in any preferred way. One end of the bolt is screwed into the seat U a proper distance to hold the gate clear of the ground, when the other end of the bolt is passed through the gate-frame and the retaining-nut properly secured. It will be seen that when the free end of the gate becomes swagged or depressed by use the upper bolt may be screwed more deeply into the seat U, which will lift the free end of the gate, and this adjustment may be repeated as often as may be necessary to keep the free end of the gate clear of the ground.

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

1. As an improvement in gates, the combination of the hinge-post, the swinging frame composed of pairs of vertical end bars and rails connecting said bars, the ring-shaped

loops secured to the hinge-post, the bolt secured to the swinging frame and having the collars and lugs, the latter adapted to engage holes formed in the gate-frame, the rollers 5 mounted in the pairs of end bars, and the gate moving on said rollers and provided at its top with a cap having its edges projecting beyond the sides of the gate, as set forth.

2. The adjustable hinge herein described 10 and shown, consisting of the collar S, having the bolt-seat U, said collar being adapted to encircle the gate-post and turn thereon, and the bolt T, having screw-threaded ends, one of

which is intended to enter the seat U, the other to pass through the gate-frame, said 15 bolt being further provided with the encircling flange V, the outer side of which carries two projecting lugs, all substantially as described, and for the purpose named.

In testimony whereof I affix my signature in 20 presence of two witnesses.

JOHN BLISS ERWIN.

Witnesses:

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