

(No Model.)

W. R. WHITE.
GATE HINGE.

No. 496,926.

Patented May 9, 1893.

Fig. 1.

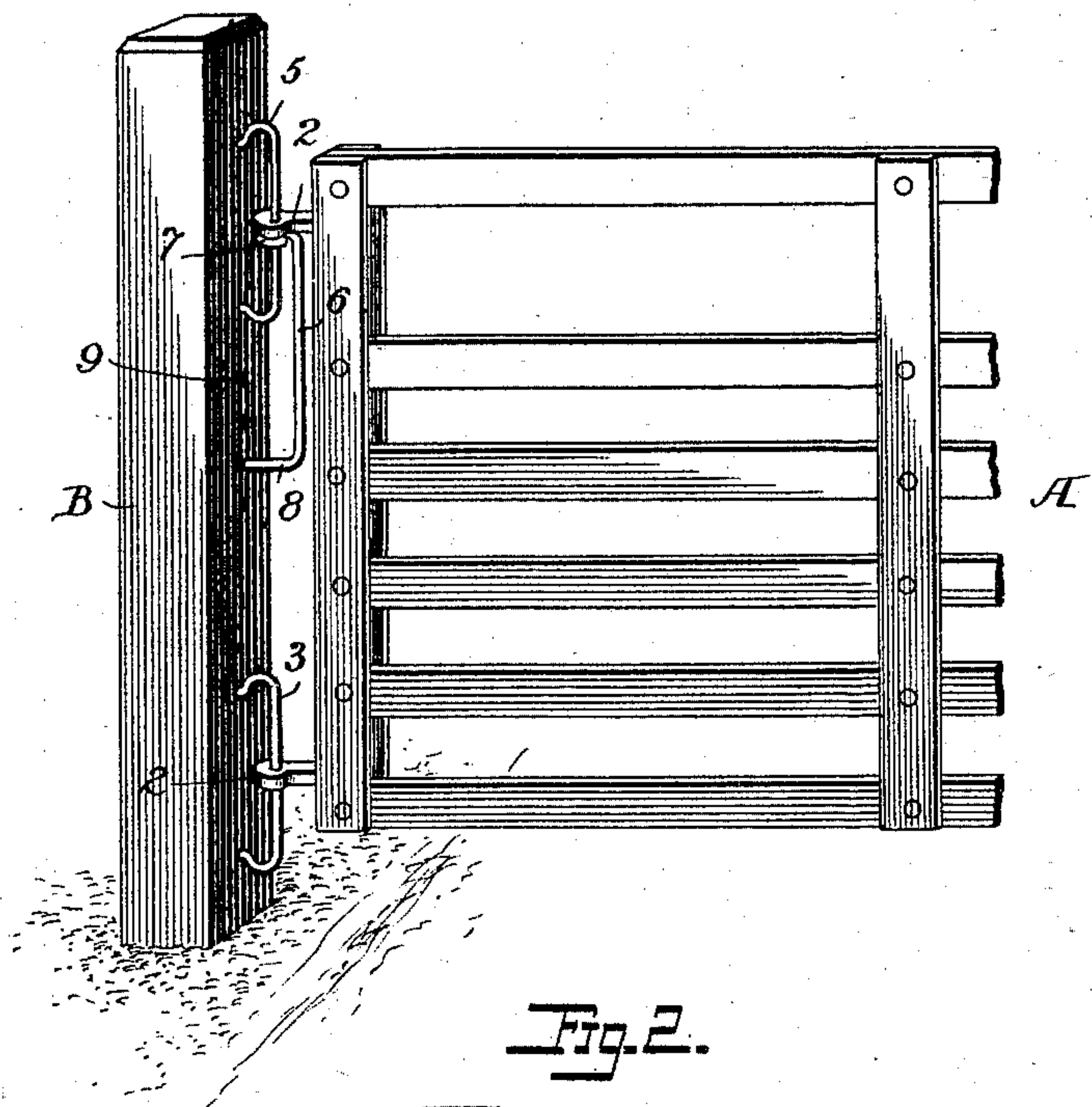
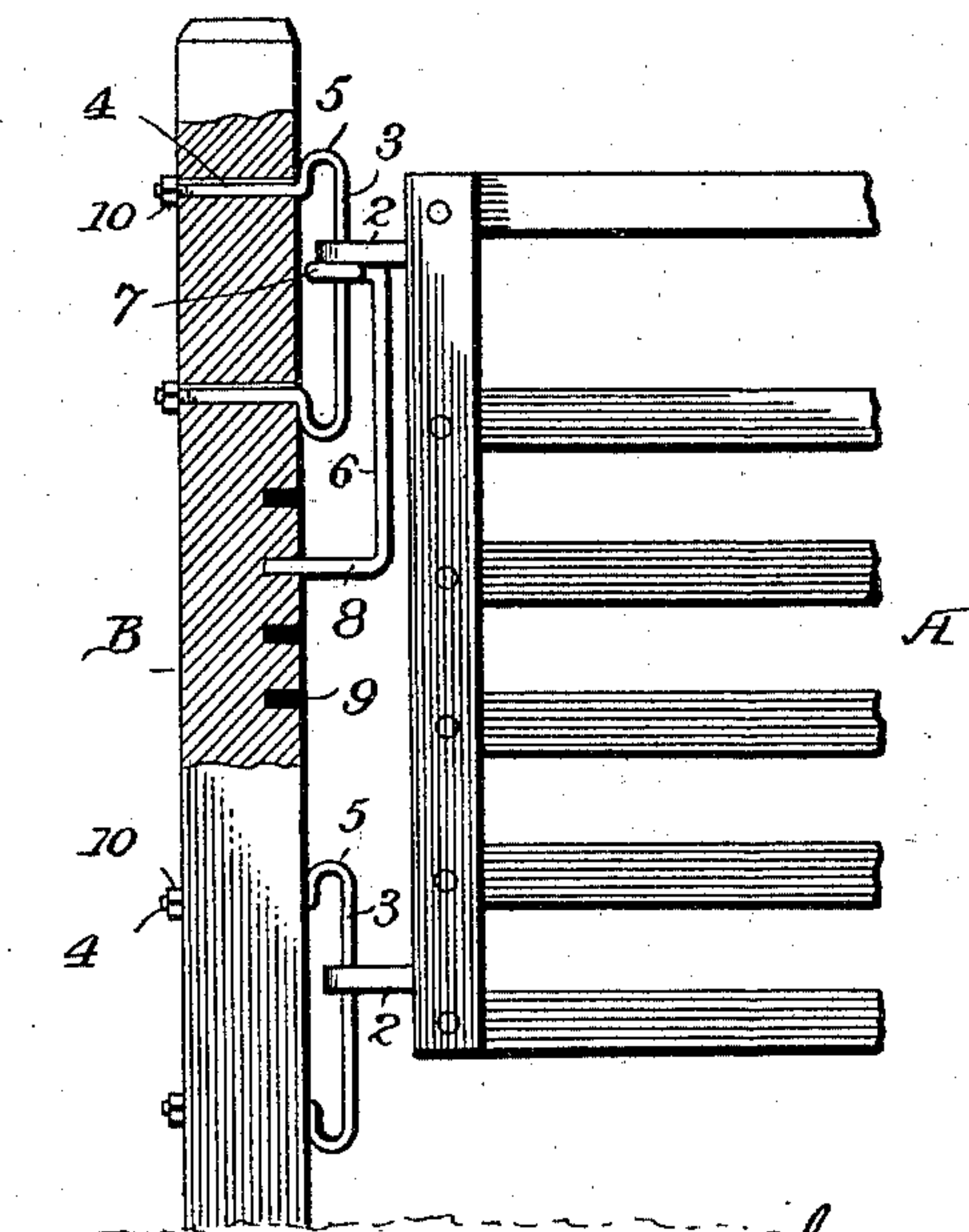


Fig. 2.



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GATE-HINGE.

SPECIFICATION forming part of Letters Patent No. 496,926, dated May 9, 1893.

Application filed October 11, 1892. Serial No. 448,505. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM RICHARD WHITE, a citizen of the United States, residing at Bloomington, in the county of McLean and State of Illinois, have invented certain new and useful Improvements in Gate-Hinges, of which the following is a specification.

My invention has for its object to produce a hinge which is particularly adapted for use in connection with gates, and it consists of a hinge having the characteristics to be hereinafter pointed out.

Figure 1, is a perspective view of the rear end of the gate having my invention applied thereto. Fig. 2, is an enlarged view in side elevation of a modification of the invention.

In the drawings A, represents a swinging gate which may be of any usual or preferred construction, and B, the wooden post to which the gate is hinged. The part 2, of the hinge carried by the gate consists of a bar or plate provided at its end with an eye which encircles the vertically arranged rod 3, of the stationary or post part of the hinge. The part of the hinge carried by the post is in the form of a staple and consists of the legs or horizontally arranged parts 4, which enter the posts, and which are ordinarily screw threaded to receive the nuts 10, by which the hinge is secured to the posts, and the aforesaid vertically disposed rod portion 3, connecting the legs and serving as a supporting shaft or rod on which the gate swings. Instead of the rod 3, and the legs 4, of the post member of the hinge joining each other at right angles, as is usual in gate hinges of this kind, I interpose between them a shoulder which is preferably in the form of a U-shaped connecting portion 5, the U-shaped connection at the top of the hinge being inverted. When the nuts 10, are screwed upon the ends of the legs they draw the shoulders 5, against the opposite face of the post so that the hinge member is thus tightly clamped, while the rod portion 3, thereof sets over the proper distance from the face of the post to allow the gate or swinging member of the hinge to turn freely thereon. The upper inverted U-shaped connecting portion 5, may be of such size that the eye or loop of the swinging hinge member 2, may enter the same and turn freely therein above the level of the

upper leg 4, as shown in Fig. 2. This construction of the upper U-shaped connection 5, is advantageous in gate hinges where the rod 3, is of considerable length, and there are combined with the hinge means for vertically adjusting the gate and the gate member of the hinge in order that the gate may swing freely over snow or for other purposes.

The gate is vertically adjusted by means of a bracket 6, having a perforated head or plate 7, surrounding the vertical hinge rod 3, and forming the support upon which the member 2, of the hinge rests, and thus supporting the gate. The lower end of the bracket 6, is bent at an angle to the main part thereof, and forms a pin or finger 8, which is adapted to be inserted into any one of the holes 9, in the post, such engagement of the bracket with the post serving to hold it in the position to which it is adjusted.

By making the stationary hinge member with the enlarged inverted U-portion 5, shown in Fig. 2, I avoid all danger of binding the gate member 2, of the hinge between the supporting plate 7, of the bracket, and the upper leg 4, of the stationary hinge member, when the gate is adjusted to its highest position, as might otherwise occur, because, when the plate 7, is stopped from further upward movement by the upper leg 4, there is still ample room in the U, 5, for the gate hinge member to freely turn. This construction of hinge also makes it easy to determine the proper position for the upper of the holes 9, as it is only necessary to raise the bracket until stopped by the upper leg of the post member of the hinge and make the hole opposite the end of the pin 8,—no thought or care being required to place the hole so that when the bracket is supported therein, the hinge member 2, will not be forced against the part. But one adjusting bracket 6, is ordinarily required, and that one is preferably arranged in combination with the upper hinge. Ordinarily, however, it is not necessary to make the U-shaped connecting portion 5, of the post member of the hinge of such size that the gate member of the hinge can freely swing in the U.

The principal advantage incident to making the hinge as I have described arises from the facility with which such a hinge can be re-

moved from a post, even after it has been
 therein for a great length of time. As gate
 hinges are now mounted it is necessary that
 the legs or horizontal portions thereof shall fit
 5 closely in the holes in the post into which
 they are inserted in order that the hinge shall
 not be loose. When they are thus tightly in-
 serted into the holes into the post it is difficult
 to remove the hinges after they have stood
 10 long enough to become rusty. By the use of
 my invention, the holes in which the legs 3,
 of the gate member of the hinge are inserted
 may be considerably larger than such portion
 of the hinge so that they are loose therein, and
 15 yet when the nuts are screwed up against the
 face of the post the hinge member will be held
 secure by reason of the shoulders 5, being
 closely drawn against the opposite face of the
 post.
 20 While I prefer that the shoulders shall be
 in the form of U-shaped connections between
 the parts 3 and 4, of the hinge member, it is
 evident that they might be changed in form
 and still serve the same purpose of providing
 25 an abutment which bears against the post
 when the nuts are screwed tightly upon the
 horizontal legs of the hinges so that the hinge
 is held in place securely without depending
 upon the fit of the legs 4, in the holes into
 30 which they are inserted.

What I claim is—

1. A stationary gate hinge member consist-
 ing of the vertical rod 3, the legs 4, adapted
 to pass through the post and the shoulders

or abutments between the legs and the rod 3, 35
 consisting of U-shaped connecting portions
 5, substantially as described.

2. In a swinging gate the combination of
 the hinge made up of a gate member 2, and a
 post member consisting of a vertical rod 3, 40
 and two horizontal legs by which the rod is
 secured to the post, the rod and upper leg be-
 ing connected with each other by an inverted
 U-shaped portion 5, and means whereby the
 gate may be held in various positions, verti- 45
 cally, to which it is adjusted, substantially as
 described.

3. In a swinging gate, the combination with
 the gate and the post provided with a series
 of holes 9; of the upper hinge consisting of 50
 the perforated member carried by the gate
 and the stationary member secured to the
 post, the latter member having the vertically
 disposed rod 3 upon which the gate member
 swings, the legs 4 secured to the post, and the 55
 inverted U-shaped portion connecting the up-
 per leg 4 and the rod 3, and the adjustable
 supporting bracket 6 having the head or plate
 7, upon which the gate member of the hinge
 rests, and the pin 8 adapted to enter the holes 60
 9 in the post; substantially as described.

In testimony whereof I have signed my
 name to this specification in the presence of
 two subscribing witnesses.

WILLIAM RICHARD WHITE.

Witnesses:

LILA E. WHITE,
 MATTIE WHITE.