No. 894,036. PATENTED JULY 21, 1908.

P. McCOLLUM.

GATE HINGE.

APPLICATION FILED APR. 13, 1907.

Fig. 1.

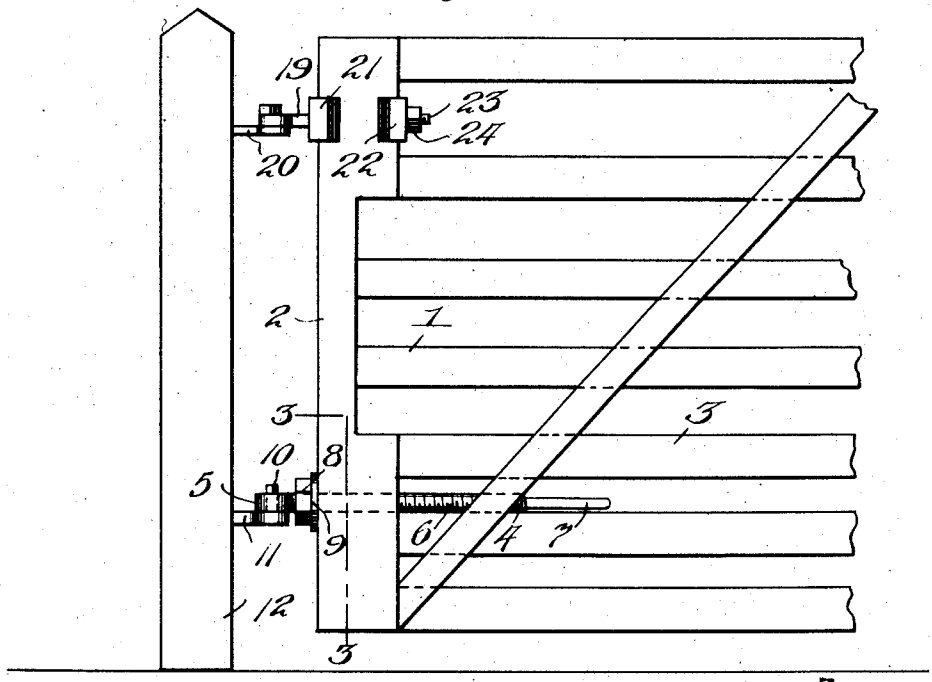


Fig. 2.

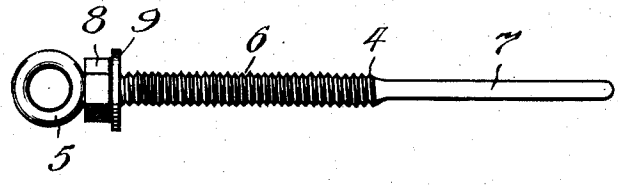


Fig. 3.

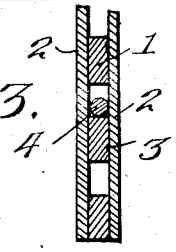


Fig. 5.

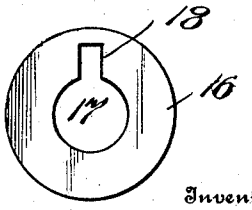
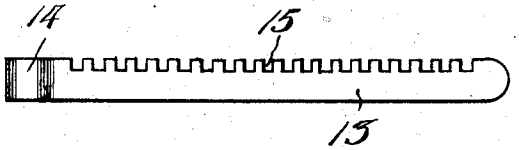


Fig. 4.



Witnesses

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PETER McCOLLUM, OF FAYETTE, MISSOURI.

GATE-HINGE.

No. 894,036. Specification of Letters Patent. Patented July 21, 1908.

Application filed April 13, 1907. Serial No. 367,997.

To all whom it may concern:

Be it known that I, PETER McCOLLUM, a citizen of the United States, residing at Fayette, in the county of Howard and State of Missouri, have invented new and useful Improvements in Gate-Hinges, of which the following is a specification.

The invention relates to an improvement in hinges designed primarily for use with gates, and comprehending specifically a hinge structure arranged to permit independent manual elevation of the free end of the gate when desired, and also permitting independent and convenient adjustment of the gate to maintain the same at any desired elevation.

The main object of the present invention is the provision of a hinge including a hinge member connected with the gate solely by the weight of the latter, the elevation of the free end of the gate being unimpeded, and means being provided by which the gate may be adjusted longitudinally of the hinge member to maintain the free end of the gate at any desired elevation.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a view in elevation illustrating the application of my improved hinge, Fig. 2 is an enlarged elevation of the preferred form of hinge member, Fig. 3 is a section on line 3—3 of Fig. 1, Fig. 4 is an elevation of a modified form of hinge member, Fig. 5 is a plan of the locking ring for the modified hinge member.

Referring particularly to the drawings, my improved hinge is designed primarily for use with a gate 1, preferably constructed with spaced end strips 2 to form the respective posts, said posts being connected by longitudinally disposed relatively spaced slats 3.

The hinge of the present invention in the preferred form is designed to support the relatively lower edge of the gate, and comprises a hinge member 4 formed at one end with an eye 5 and threaded in advance of the eye for the greater portion of its length, as at 6. For convenience in application the hinge member beyond the threaded portion may, if desired, be reduced and of plain formation, as at 7.

The hinge member is provided with a nut 8 for threaded engagement with the portion 6, and is preferably also provided with a washer 9 and loosely encircling the hinge member in advance of the nut.

In the use of this form of hinge member the eye 5 is adapted to removably engage a pintle 10 projecting vertically from the shank 11 formed for engagement with the gate post 12, whereby to permit the usual swinging of the gate. The hinge member projects between the strips 2 of the end post of the gate, or may be projected through a suitably formed opening in the event said gate post is of solid construction. The edge of the post adjacent the pintle 10 will, when the parts are applied, bear against the washer 9, the movement of the latter toward the eyes 5 being limited by the nut 8. In this position it will be noted that the gate is freely movable in a direction away from the nut 8, that is the free end of the gate may be manually elevated in the opening or closing of the latter to permit the gate to avoid any obstruction, the gate returning to normal position in contact with the washer when released. As the nut 8 is arranged for threaded engagement with the hinge member it is obvious that it may be adjusted longitudinally of said member and thereby in effect move the gate longitudinally of the member and support the relatively free end of the latter at any desired elevation.

In Figs. 4 and 5 is shown a slightly modified arrangement of hinge member in which said member 13 is formed at one end with an eye 14 for coöperation with the pintle of the post 12, and also formed in advance of said eye and in the relatively upper edge of the hinge member with a series of depressions or recesses 15. The depressions preferably extend throughout the length of the hinge member and are equally spaced apart, all as clearly shown in Fig. 4.

In connection with the modified form of hinge member I utilize a locking ring 16 centrally formed with an inverted key-hole opening 17, the offset recess 18 of which is of a width corresponding to the thickness of the hinge member so as to permit said offset recess to engage the hinge member in any one of the respective recesses 15.

The use of the modified form will be readily understood from the foregoing description, it being noted that the gate is freely movable in manual operation to elevate its free end, and that said free end may be main-

tained at any desired degree of elevation by causing the locking ring to be engaged with the particular recess in the hinge member.

In both forms of the invention the gate is held against sagging and is readily and conveniently adjustable to correct any such disadvantage.

The upper end of the gate post is designed to be connected by any suitable form of hinge connection, such for example as a hinge member 19 having pivotal connection with the pintle 20 projecting from the gate post, the hinge member extending through jaws 21 and 22 embracing the opposite sides of the gate post. Beyond the inner jaw 22 the hinge member is preferably circular in cross section and threaded at 23 for the reception of a nut 24 to bear against the surface of the inner jaw. This form of hinge also provides for an adjustable connection with the upper portion of the gate by an obvious operation of the nut 24.

It is to be particularly noted that both the nut and locking ring are arranged to permit free movement of the gate in one direction with respect to said parts, and that said ring is adapted to act as an abutment arranged for adjustable connection with the hinge member against which the edge of the gate post bears to provide the desired connection between said gate and hinge.

Having thus described the invention what is claimed as new, is:—

1. The combination with a gate, of a pivotally supported hinge member arranged to permit independent movement of the gate in a direction away from its pivotal support, and means carried by and adapted for locking engagement with the member at predetermined points throughout the length thereof to provide a bearing surface for the gate.

2. The combination with a gate, of a lower hinge member therefor, said member permitting independent movement of the gate in a direction away from the support for said hinge member, and means carried by and adjustably connected with the member for limiting the movement of the gate in the opposite direction.

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

PETER McCOLLUM.

Witnesses:
B. F. FERGUSON,
T. F. WOODS.