(Model.)

M. J. BARROW.

GATE HINGE.

No. 258,002. Patented May 16, 1882.

Fig. 1.

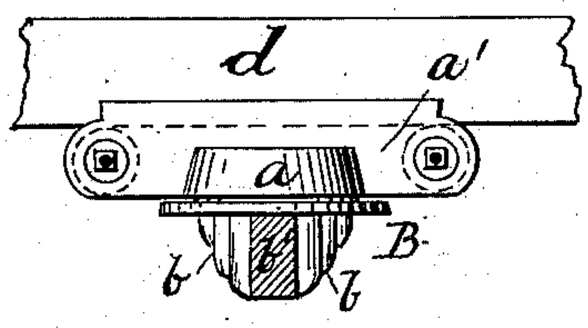


Fig. 2.

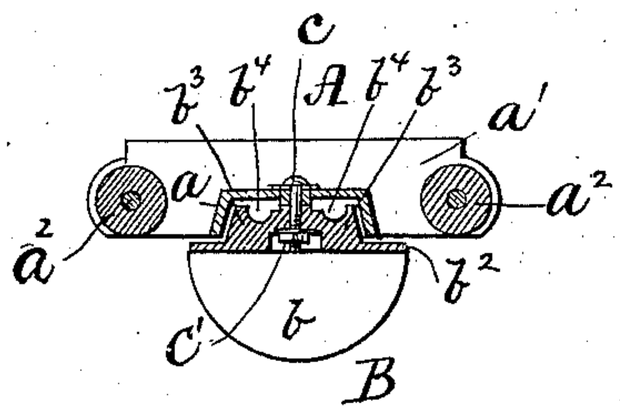


Fig. 3.

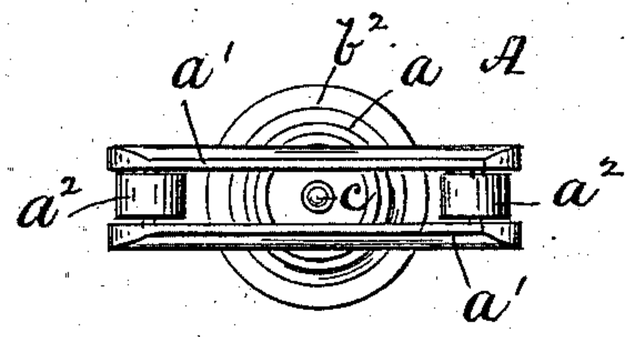
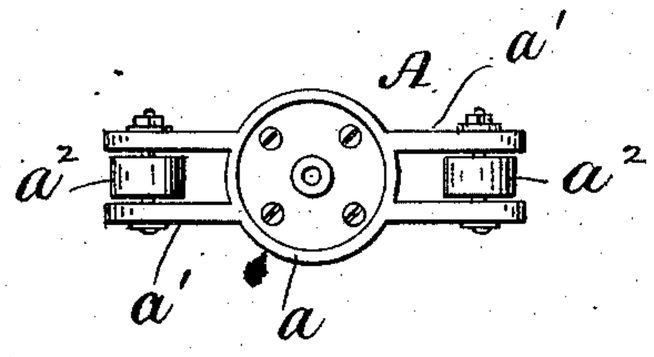


Fig. 4.



Witnesses
P. B. Turpin
F. W. Wheat

Inventor
Marion J. Barrow
By R. S. & A. P. Lacey
Attys.

UNITED STATES PATENT OFFICE.

MARION J. BARROW, OF BARROW, ASSIGNOR OF ONE-HALF TO ALBERT E. FREETO AND GEORGE W. FISK, OF ROODHOUSE, ILLINOIS.

GATE-HINGE.

SPECIFICATION forming part of Letters Patent No. 258,002, dated May 16, 1882.

Application filed March 10, 1882. (Model.)

To all whom it may concern:

Be it known that I, MARION J. BARROW, a citizen of the United States, residing at Barrow, in the county of Greene and State of Illinois, have invented certain new and useful Improvements in 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in hinges for swinging and rolling gates.

It consists in a base-piece having a circular bearing and provided with depending lugs or jaws, whereby it is secured to the gate-post, and a top piece formed with bearing to fit the circular bearing on base-piece, and constructed with two guide-rails projected upwardly therefrom, these guide-rails having anti-friction rollers journaled between their opposite ends, and having their upper edges between the rollers projected above the upper peripheries of the rollers, as will be described, and pointed out in the claim.

It consists, further, in the combination and arrangement of the several parts and in other improvements, as will be hereinafter fully described, and pointed out in the claim.

In the drawings, Figure 1 is a side view of my device secured to a bar extended from side of the post. Fig. 2 is a sectional view, and Fig. 3 is a plan view, of my hinge, and in Fig. 4 I show an inverted plan view of the upper section of my hinge.

A is the upper, and B the lower, section of my device.

b b are jaws depending from lower side of section B, and they are arranged to fit down over a board or bar, *b'*, extended from the side of top of gate-post and be secured by screws, or in any other manner desired. Where there are two posts I secure a board between them and fasten the lugs or jaws *b b* to it. I cut away the upper side of the section B to provide the circular bearing b^2. This leaves remaining the upwardly-projecting circular portion b^3, which is beveled from its upper side to the surface of the bearing b^2. In the top of the section B, I cut an annular groove, b^4, close to the edge of the portion b^3. In the upper section, A, *a* is a shell or casing having its under side formed to fit down over the portion b^3 of lower section, B. The height from rim to top of inner side of shell or casing is the same as that of the portion b^3 from the top of the circular bearing b^2, and when the section A is put over the section B the under side of the top of shell or casing *a* rests and bears on the portion b^3, while its rim rests and bears on the circular bearing b^2, formed on section B. The groove b^4 in the top of the under section, B, renders the bearing of the upper section on the portion b^3 easier and does not cause so much friction and wear as would be caused if the groove were not made. It will be seen that I provide two bearings, the one supplementing the other and furnishing firm pivot for the sections. I secure the sections together by bolt *c*, passed through bolt-holes formed through the upper and lower sections and held fast by nut *c'*. The nut *c'*, I screw up in a recess, as shown.

a' a' are the guide-rails, fixed to the top and extended beyond either side of the shell or casing *a*. These rails are fixed wide enough apart to permit the bar of the gate to slide easily therebetween. Between these rails, near their ends, I journal anti-friction rollers a^2 a^2. These rollers I arrange so that their upper peripheries, or the surface on which the bar of the gate rests, will be above the upper surface of the shell or casing *a*, and at the same time I place them below the upper edge of the guide-rails *a'*, so that the portion of the rails above the upper surface of the rollers will prevent the bar of the gate from sliding off and will hold it securely in place.

d represents a bar of the gate.

In the operation of my device I secure the hinge composed of sections A and B to a bar extended from the gate-post and place one of the bars of gate on the rollers a^2 between the guide-rails *a'*, as shown in Fig. 1. Then the gate can be turned freely by reason of the pivotal connection of upper and lower sections,

and the gate can be rolled back easily through the aid of roller a^2.

I am aware that gate-hinges composed of two parts, the one turning upon the other, and provided with anti-friction rollers, on which one of the rails of the gate rests and rolls, and guide-rails projected above the upper peripheries of the said rollers, have been employed, and I do not broadly claim such construction as my invention.

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

The combination, substantially as hereinbefore set forth, of the lower section provided with jaws $b\,b$, circular bearing b^2, and upwardly-projecting portion b^3, and the upper section formed with the shell or casing a, having its rim arranged to bear on the circular bearing b^2, and the under side of its top arranged to bear on the top of portion b^3, and provided with guide-rails a' and rollers a^2, as set forth.

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

MARION JASPER BARROW.

Witnesses:

D. C. McIVER,

W. T. McIVER.