G. M. SIMPSON.

GATE-HINGE.

No. 187,988. Patented March 6, 1877.

Fig. 1.

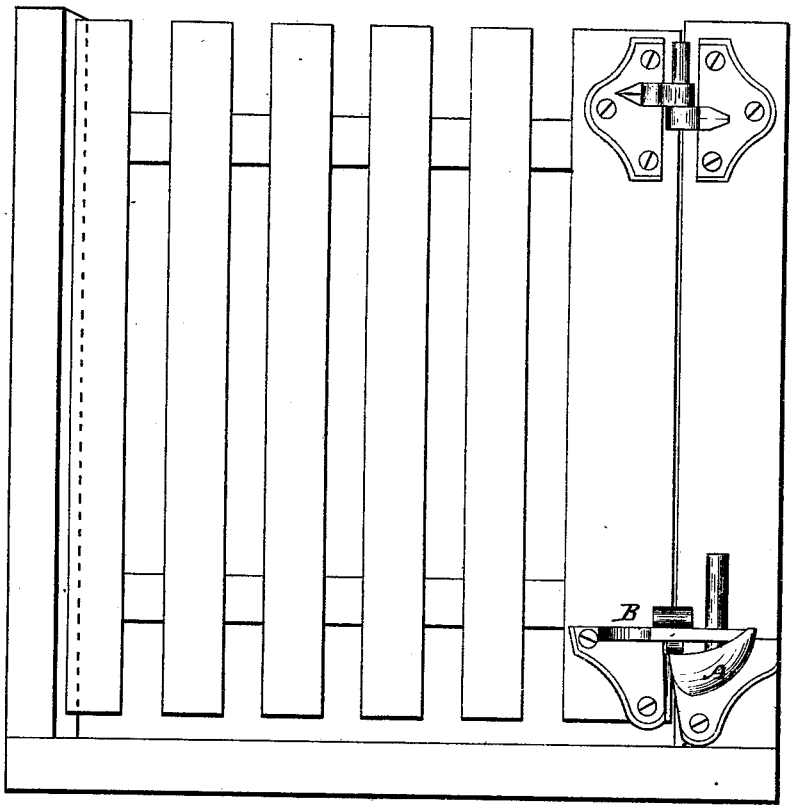


Fig. 2.

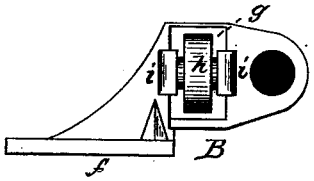


Fig. 3

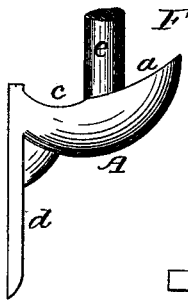


Fig. 4

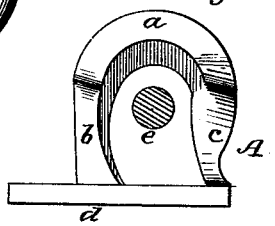
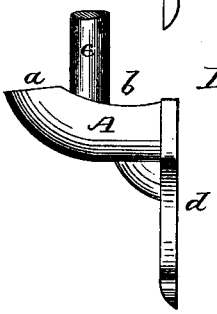


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE M. SIMPSON, OF CIRCLEVILLE, OHIO.

IMPROVEMENT IN GATE-HINGES.

Specification forming part of Letters Patent No. **187,988**, dated March 6, 1877; application filed August 11, 1876.

To all whom it may concern:

Be it known that I, GEORGE M. SIMPSON, of Circleville, in the county of Pickaway and State of Ohio, have invented a new and valuable Improvement in Gate-Hinges; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of my invention, showing it attached to a gate. Fig. 2 is a plan view of one of the sections composing the hinge. Figs. 3, 4, and 5 are views, showing the different inclines in the lower section of the hinge.

This invention has relation to that class of gate-hinges consisting of two sections, one section of which carries a wheel or roller working upon an incline formed upon the other section; and the object and purpose of the present invention are to so construct a hinge of the character named that it can be automatically kept closed or opened when fixed to a gate or a similar device; and the invention, therefore, consists in the novel particular construction and arrangement of the two sections forming the hinge, as will be hereinafter more fully described, and subsequently pointed out in the claim.

In the accompanying drawing, A and B represent the two sections composing the hinge. The part A or section is formed with an incline or turn-table, *a*, having its greatest inclination at its forward or front edge. Additional inclines or depressions, *b c*, are designed for the purpose of holding the gate opened or closed, as may be deemed necessary. The section A is formed with a plate, *d*, for the purpose of attaching the same to the gate-post, and has a pintle, *e*, for the reception of one end of the section B, the same having a plate, *f*, for attaching it to the gate. This section B is formed with a recess, *g*, for the reception of a roller or wheel, *h*, to protect it from exposure to the weather and prevent it from becoming clogged with dirt.

During the process of casting the section B, wrought iron plates *i* are placed within the mold, and the metal cast around one end of the same. These plates are employed to retain the roller in position within the recess *g*, by simply bending the plates over the ends of the axle, and also admitting of the roller being readily removed when it is desired to clean the recess *g*.

It will be seen that when the gate is closed the roller, after passing down the incline *a*, falls into the incline or depression *c*, thereby making it difficult for the gate to swing open accidentally.

When the gate is thrown open, the roller, after passing up the incline, falls upon the incline or depression *b*, and thus retains the gate open.

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

A gate-hinge consisting of the section A, formed with the pintle *e*, incline or turn-table *a*, and inclines or depressions *b c*, and the section B, formed with recess *g*, and having wrought-metal plates *i* for retaining the roller *h* within said recess, all substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE M. SIMPSON.

Witnesses:
JASON CASE,
A. J. SHERIFF.