

Table Hinge.

Patented Sept. 10, 1867.

Fig: 1.

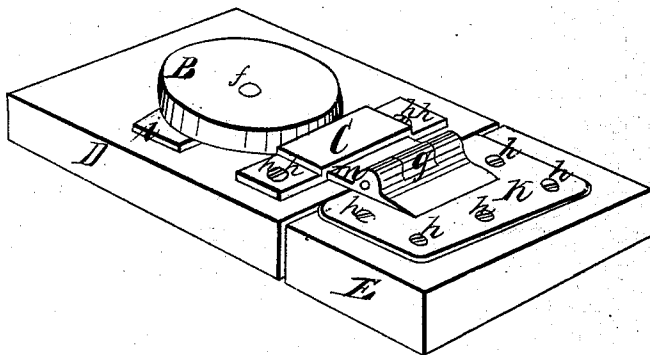


Fig: 2.

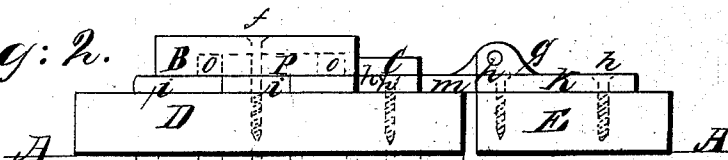
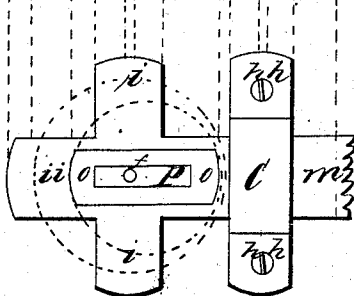


Fig: 3.



Witnesses:

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JAMES A. MORRELL, OF CHICAGO, ILLINOIS.

Letters Patent No. 68,644, dated September 10, 1867; antedated August 26, 1867.

IMPROVED HINGE.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, JAMES A. MORRELL, of Chicago, in the county of Cook, and State of Illinois, have invented an Improved Hinge; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and letters of reference marked thereon, making a part of this specification, in which—

Figure I is a perspective representation of my improved hinge, including a part of the door or gate D, and gate or door-post E, to which the hinge is supposed to be attached.

Figure II is a longitudinal section of my improved hinge, including also a part of the gate or door D and a part of the gate-post E. A A represent the under side of the door and jamb.

Figure III is a top or plan view of the improved wing of my hinge.

The object of my invention is to provide a convenient hinge, by which a gate or door may be hung in such a manner as to be adjustable to the inequalities of the frame or opening.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

First, I construct the stationary part or wing of the hinge *k* in any of the common styles now in use or desired, and to this wing, *k*, at *g*, I attach my improved wing, *m*, by the common joint now in use. To this wing *m* are attached two arms *i i*, for the purpose of supporting the eccentric B. At *o o* on the part *m* is raised a guide, for the purpose of directing the eccentric B, and holding it in position vertically through the guide *o o* and wing *m*. *P* is a slot. The object of this slot is that, when the screw *f* is put in position to secure the eccentric B, it will allow a longitudinal motion of the wing or part *m*. *C* is a strap, secured to the door or gate at *h h h h*, in such a manner as to allow a longitudinal motion to the part *m*. The object of the strap or part *C* is to hold in position the part *m*, and also to form a shoulder for the eccentric to rest against. The red lines *x x x x* represent the inside and outside circles circumscribing the eccentric B.

The object of the eccentric B, fig. 2, is to lessen or increase the distance between the arms *i i* of the wing *m* and the strap or part *C*. It will be seen that in order to do this it is only necessary to revolve the eccentric B round the screw *f* as an axis, and the distance between the arms *i i* and the part *C* will be changed according to the construction of the eccentric B. It will also be seen that in changing the distance between the arms *i i* and the part *C*, the distance between the gate or door D and the gate or door-post E will be changed exactly the same distance. It will be seen by the plan, fig. 3, that the eccentric has four bearings, one on each arm, and two on the wing of the hinge *m*, at *i i* and *o'*, forming a plane for the eccentric to rest upon.

Operation.

In order to use my hinge it is first necessary to secure the stationary wing or part *k* to the post or jamb to which the gate or door is to be hung in the usual manner, as represented by the screws *h h*, &c., then turn the eccentric half way around, using the screw *f* as an axis, put the strap or part *C* over the wing *m*, as represented at Fig. III, in such a manner as to allow the edge of the part *C* to bear against the eccentric B, then secure the part *C* to the gate or door by means of the screws *h h h h*, then secure the eccentric B in its place by means of the screw *f*, then the hinge is permanently secured.

The adjustment of the hinge to suit the settling of the post to which the gate is hung, or the gate, is made by turning the eccentric B half round upon the screw *f*, as an axis, to correspond with the position indicated by the red lines *x x x x*. This will raise the opposite side of the gate. In case the post that supports the gate catches settles, or the gate, then turn the eccentric on the upper hinge, which will lower the side of the gate that the latch is upon. Where the settling is slight the eccentric need not be turned more than an eighth or fourth of the distance around. In all cases they can be adjusted to suit any ordinary settling or sagging of the gate or post. This improved wing of the hinge *m* can also be attached to the raised joint for the lower hinge of the gate, making the gate self-shutting, similar to other hinges.

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

The eccentric B, in combination with the wing of the hinge *m*, substantially as described, and for the purposes set forth.

JAS. A. MORRELL.

Witnesses:

GEO. G. CHAPIN,
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