(No Model.)

J. LONG.

HINGE.

No. 373,837. Patented Nov. 29, 1887.

Fig. 1.

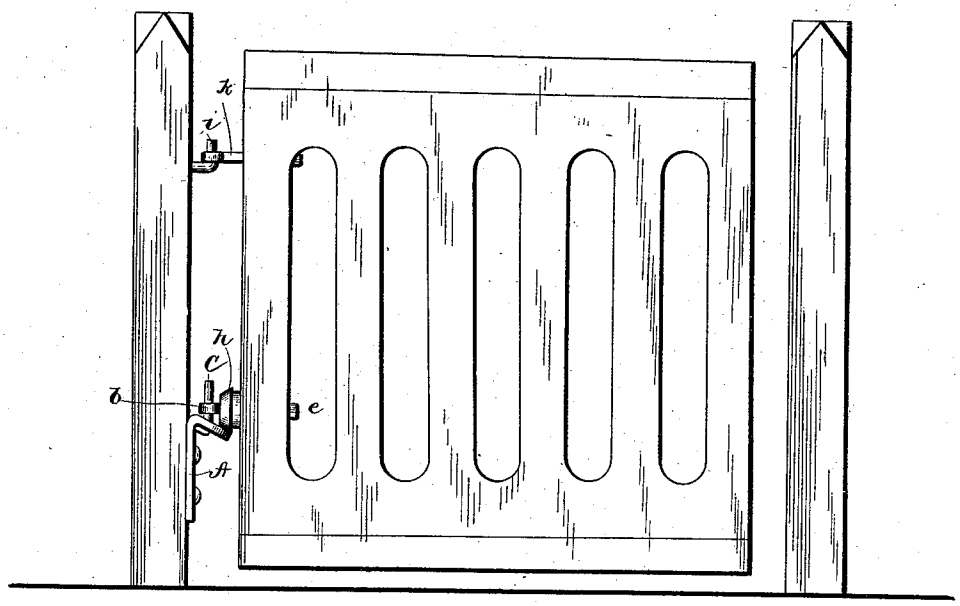


Fig. 2.

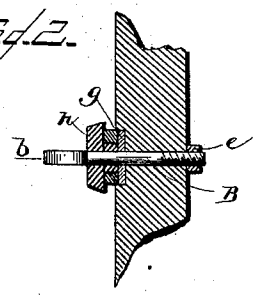


Fig. 3.

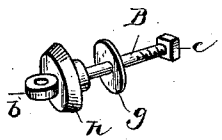
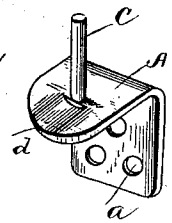


Fig. 4.



Witnesses
W. H. Hagan
James J. Shelby

Inventor
Jacob Long
By his Attorney Chas L. Coombs

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JACOB LONG, OF ASBURY PARK, NEW JERSEY.

HINGE.

SPECIFICATION forming part of Letters Patent No. 373,837, dated November 29, 1887.

Application filed July 20, 1887. Serial No. 244,811. (No model.)

To all whom it may concern:

Be it known that I, JACOB LONG, a citizen of the United States, residing at Asbury Park, in the county of Monmouth and State of New Jersey, have invented certain new and useful Improvements in Hinges; and I do 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in hinges for gates; and it has for its objects to provide a hinge which will hold the gate in position when closed and which will cause the gate to automatically return to a closed position when opened or turned to either side, as more fully hereinafter specified.

The above-mentioned objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a front elevation of a gate hung in part upon one of my improved hinges. Fig. 2 represents a vertical sectional view through a portion of the gate and hinge. Fig. 3 represents a detached perspective view of an eyebolt carrying a beveled wheel, washer, and clamping-nut, and forming part of my improved hinge. Fig. 4 represents a perspective view of the portion of the hinge carrying the pintle, and having an inclined bearing for the beveled wheel whereby the gate is automatically returned to normal or closed position after being opened.

Referring to the drawings, the letter A indicates a metallic pintle and supporting-plate, which is bent at an angle and formed with the flat upper face, as shown in Figs. 1 and 4 of the drawings. The angle may be varied at pleasure, so as to cause the gate to close slowly or quickly, as may be deemed desirable. The plate A at its vertical portion is provided with a series of openings or apertures, *a*, through which fastening-screws may be applied to secure it to the gate-post. The front end of the inclined portion of the plate is rounded, in order to permit the gate to clear it when swinging back and forth, and the said inclined portion of the plate upon its upper face is provided with a curved recess, *d*, in which the beveled wheel, hereinafter described, rests when the gate is in a closed position.

The letter *c* indicates an upright pin or pintle secured to or forming part of the plate A.

The letter B indicates an eyebolt which is screw-threaded at one end and provided with a bending-nut, *e*. Upon the said bolt is mounted a washer, *g*, and a beveled wheel, *h*, the latter being adapted to turn freely on the eyebolt just inside of the eye, so that when the parts of the hinge are properly in place the beveled wheel will travel upon the inclined portion of the plate A, so as to elevate the gate when opened in either direction and cause it to return normally to position when released.

In applying my hinge the plate A is secured to the lower part of the gate-post, as shown in Fig. 1 of the drawings, and the eyebolt B is secured to the lower part of the gate, as shown in Figs. 1 and 2 of the same. The upper part of the gate-post has secured to it an ordinary pintle, *i*, and the corresponding portion of the gate an eyebolt, *k*. The gate is hung by setting the eyes of the eyebolts over the pintles, the beveled wheel resting upon the inclined portion of the plate A, as shown in Fig. 1 of the drawings. It is evident now that upon turning the gate to either side the beveled wheel will ride upon the inclined portion of the plate A and elevate the gate, and that when released the weight of the gate will cause the wheel to travel back toward the center of the plate, returning the gate to its original position.

I am aware that gates have been constructed with hinges adapted to rise upon an incline, so that the gate may afterward close by its own gravity, and therefore I do not claim such, broadly; but

What I do claim, and desire to secure by Letters Patent, is—

The combination, in a hinge, with an angular plate having a flat upper face and a depression, *d*, and a pintle rising vertically therefrom, of an eyebolt adapted to swing on said pintle and provided with a beveled wheel adapted to ride upon the flat face of the inclined portion of the angular plate, substantially as specified.

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

JACOB LONG.

Witnesses:
C. L. COOMBS,
M. P. CALLAN.