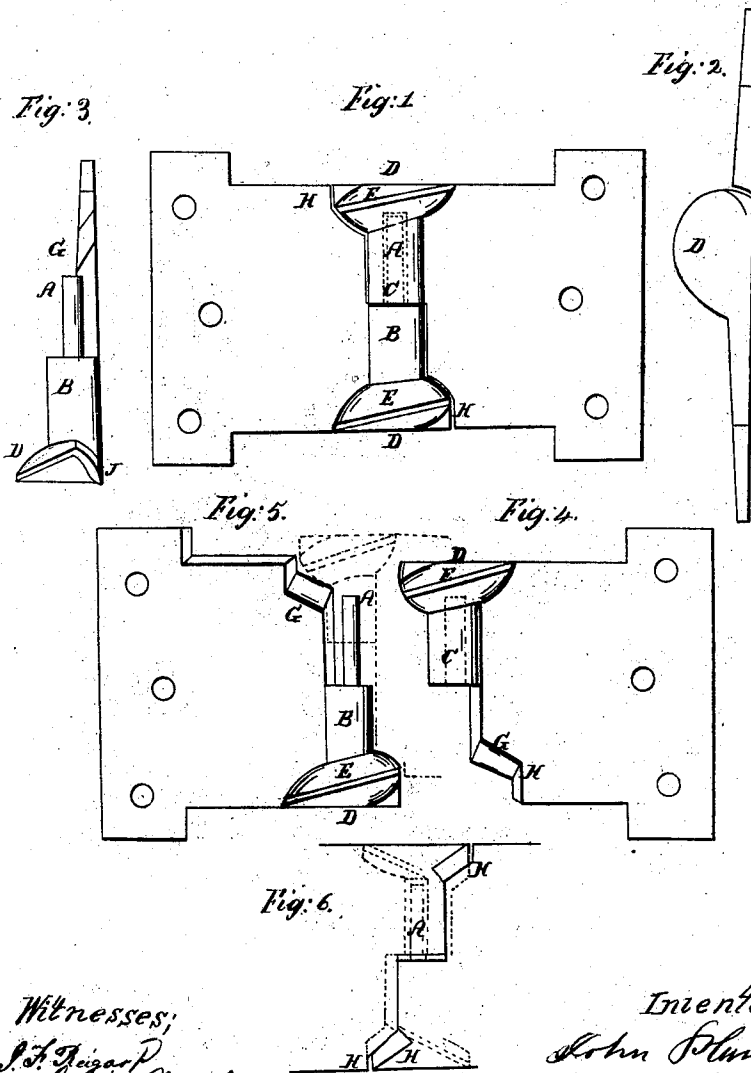


# J. Plant, Hinge.

N<sup>o</sup> 106,278.

Patented Aug. 9. 1870.



Witnesses:  
J. S. Fingar  
Geo. N. Plant Jr

Inventor:  
John Plant

# United States Patent Office.

JOHN PLANT, OF WASHINGTON, DISTRICT OF COLUMBIA.

*Letters Patent No. 106,278, dated August 9, 1870.*

## IMPROVEMENT IN HINGES.

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

### *To whom it may concern:*

Be it known that I, JOHN PLANT, of the city of Washington, District of Columbia, have invented an "Improved Shutter-Hinge;" and I do declare the following to be an exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents a front view of the hinge;

Figure 2 shows the top edge of the same;

Figure 3 shows one of the ends at the joint;

Figures 4 and 5 show the center or joint when separated; and

Figure 5 shows, by the dotted lines, how the opposite side of the hinge raises and lowers on the pivot as the shutter is opened or closed.

The nature of my invention consists in the double-acting spirals at both the upper and lower sides of the joints, so that one side always raises or lowers the shutter to open and close it, and holds it in its position firmly and securely when opened or closed. These spirals or sections of a screw are cast solid with the hinge, and form an entirely novel hinge.

To enable others skilled in the art to make and use my invention, I will proceed to describe it as follows:

A represents the pivot upon which the hinge turns, solid with the lower cylinder B, but operating in the hollow cylinder, C, above.

At the upper and lower ends of these cylinders B and C are the spirals D D, the front part having a flanged edge, E, and rounding on each side of the flange.

The back side of the hinge is perfectly even and straight.

The offset G is an inclined plane, upon which the flange operates and rises until the shuttle is open, when the hinge falls again on the pivot A to its place, resting on the pivot, while the angular ends of each plate, at H, brace the joint firmly, as the angular ends J of the spirals fit against the angle or inclined plane offset H, holding the shutter open and square with the hinge, keeping the shutter securely in its open position, and relieving the strain on the pivot common to other hinges.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the two spirals D D, cast upon the leaves of the hinge beyond the pintle-sockets, with the inclines J J, for catching upon the corresponding inclines G G, the said spirals always resting upon the inclines, to relieve the pintle of strain, all arranged as and for the purpose described.

JOHN PLANT.

Witnesses:

J. FRANKLIN REIGART,  
EDM. F. BROWN.