Young & Stachelin,

Spring Hinge.

No. 50,411. Patented Oct. 10, 1865.

Fig: 3.

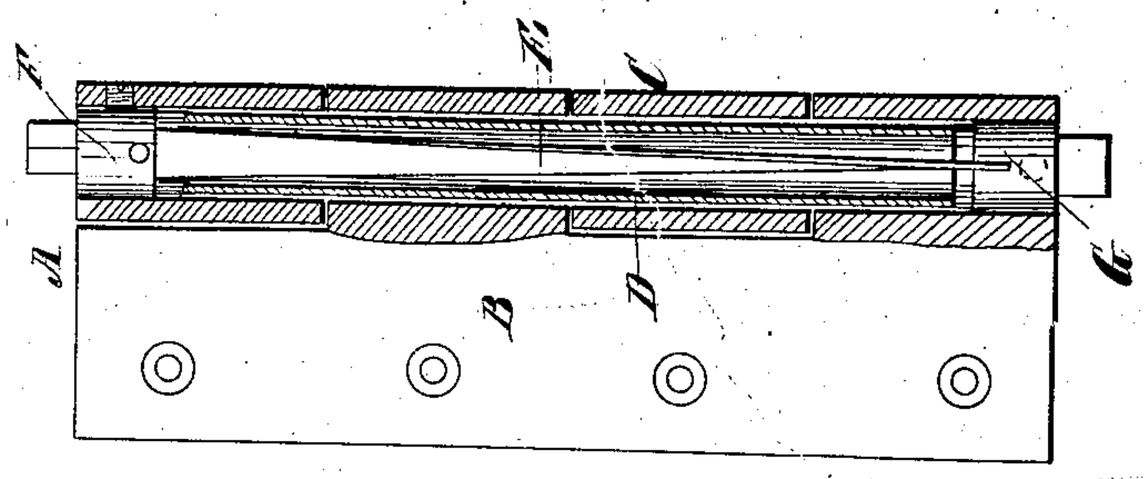


Fig: 2.

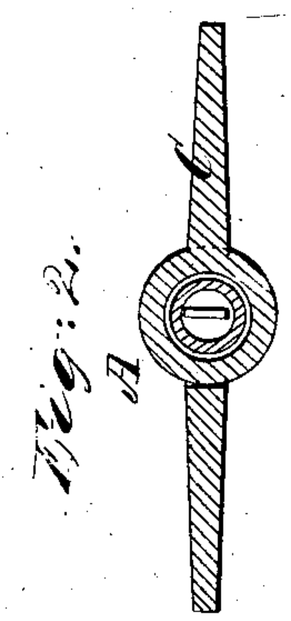
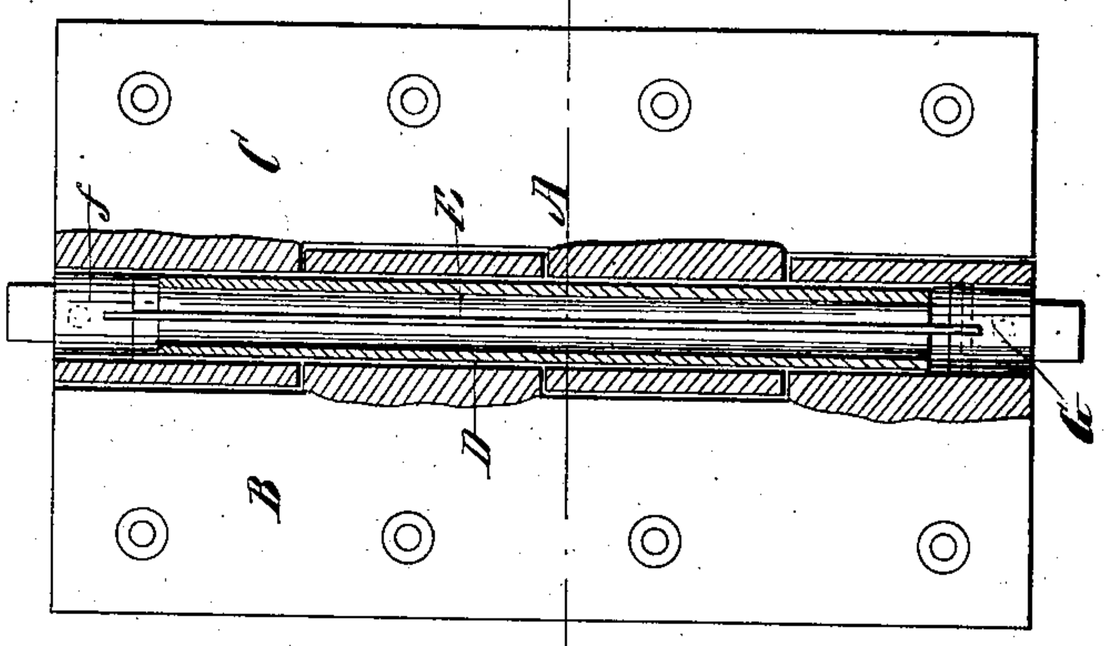


Fig: 1.



Witnesses:
Thos Tusch
O M Barrington

Inventor:
A Young & Stachelin
By Munn & Co
Attys

UNITED STATES PATENT OFFICE.

HENRY YOUNG AND MARTIN STACHELIN, OF PORT CHESTER, NEW YORK.

IMPROVED HINGE.

Specification forming part of Letters Patent No. **50,411**, dated October 10, 1865.

To all whom it may concern:

Be it known that we, HENRY YOUNG and MARTIN STACHELIN, of Port Chester, in the county of Westchester and State of New York, have invented a new and Improved Hinge; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a sectional front elevation of this invention. Fig. 2 is a transverse section of the same, the line *x x*, Fig. 1, indicating the plane of section. Fig. 3 is a longitudinal central section of the same when the two wings of the hinge are placed in a position at right angles one to the other.

Similar letters of reference indicate like parts.

This invention relates to a hinge, the two wings of which swing on a hollow spindle through which a bar of steel or other suitable material passes, the ends of which are secured in plugs, one of which is fastened to one and the other to the other of the wings of the hinge in such a manner that the hinge swings freely in either direction; and, at the same time, by the torsional power of the steel rod, said hinge is always brought back to its orignal position of rest, and, consequently, if a door is hung on a pair of these hinges it will open in either direction and be self-closing.

A represents a hinge, the two wings B C of which swing on a hollow spindle, D. Through this hollow spindle passes a bar, E, of steel or any other suitable elastic material, flat, round, or of any other suitable shape, and the ends of this bar are secured in plugs F G, the plug F being rigidly attached to the wing C, and the plug G to the wing B of the hinge by screws or any other suitable means. These plugs, with the intervening bar, E, are so adjusted that the two wings of the hinge assume the desired normal position either for a door which opens in either direction or for a left or right handed door, and if the hinge is disturbed from this normal position, the torsional power of the bar E carries the same back, and the door is rendered self-closing. In fact, our hinge combines a door-spring with the hinge, and the spring which we use is so constructed that it acts with equal force in either direction, and that it is not liable to loose its power, since what is lost in one direction is gained in the other.

By turning the plugs F G in their sockets the power of the spring can always be regulated, and a hinge is obtained which serves for doors of any description.

When the hinge is to be used for a door which opens both ways the bar E is so adjusted that the normal position of the two wings is that shown in Figs. 1 and 2 of the drawings, and by releasing the plug in one of the wings said wing can be readily adjusted for a right or for a left handed door.

We do not claim, broadly, as our invention the application of a spring to a hinge, such having been previously done; but

We claim and desire to secure by Letters Patent—

The hollow spindle D, bar E, and plugs F G, in combination with the two wings of a hinge, substantially as and for the purpose set forth.

The above specification of our invention signed by us this 8th day of August, 1865.

HENRY YOUNG.
MARTIN STACHELIN.

Witnesses:
M. M. LIVINGSTON,
C. L. TOPLIFF.