A. Wiswall,

Spring Hinge

No. 66,927. Patented July 16, 1867.

Fig: 1.

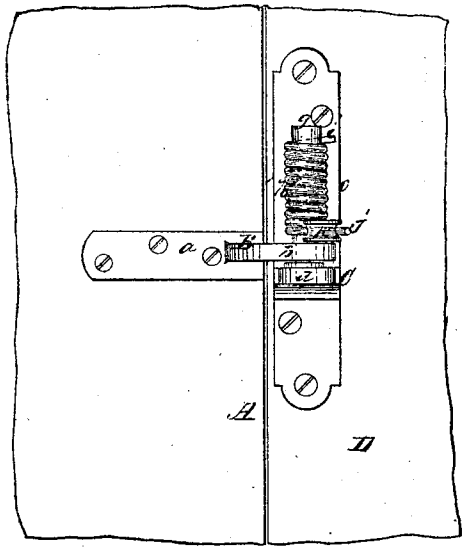
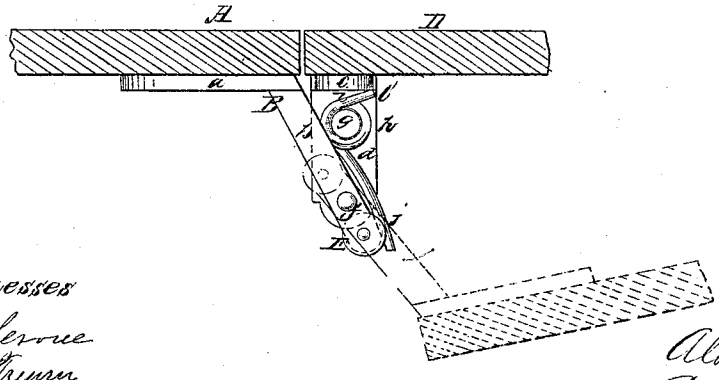


Fig: 2.



Witnesses
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AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS.)

United States Patent Office.

ALVAH WISWALL, OF NEW YORK, N. Y.

Letters Patent No. 66,927, *dated July* 16, 1867.

IMPROVED DOOR-SPRING AND HINGE.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ALVAH WISWALL, of the city, county, and State of New York, have invented a new and improved Hinge for Doors, Window-Blinds, Gates, &c.; and I 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 is a front view of my invention.

Figure 2, a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved application of a spiral spring, lever, and friction-roller, as hereinafter fully shown and described, whereby the door, blind, or gate to which the device is applied, will be held in a closed or in an open state, and the use of fastenings for such purpose dispensed with, the device also serving as a hinge for the door, blind, or gate.

A represents a portion of a door, blind, or gate to which one part, B, of the device is firmly attached by screws. This part B is composed of a bar, *a*, having a bar, *b*, projecting from it obliquely outward, as shown clearly in fig. 2, the bar *a* being secured by the screws to the door, blind, or gate. The other part, C, of the device is composed of two bars *c d*, which are at right angles to each other. The bar *a* is secured to the door-jamb, gate-post, or window-frame D by screws; and the bar *b*, of the part B of the device, is secured by a pivot, *f*, to the outer part of the bar *d* of the part C, and the outer end of the bar *b* has a friction-roller, E, attached to it. The bar *d* of the part C has an upright rod, *g*, upon it, on which a spiral spring, *h*, is placed, the upper and lower ends, *i j*, of said spring projecting out from the main portion, the upper end *i* bearing against the bar *c*, and the lower end *j* bearing against the friction-roller E.

When the door, blind, or gate is in a closed state, as shown in tint in fig. 2, the lower end, *j*, of the spring bears against the roller E, beyond the point *f* of the bar *b*, and consequently the spring has a tendency to keep the door, blind, or gate in a closed state, as will be fully understood by referring to fig. 2; and when the door, blind, or gate is in an open state, the end *j* of the spring bears against the roller E at the inner side of the pivot *f*, as shown in red outline in fig. 2. This spring may be applied separately from the hinges, or it may be made to serve as one hinge of a door, blind, or gate. It may be constructed at a small cost, and applied by any one of ordinary ability.

I do not claim broadly the application of a spiral spring to a hinge to serve as a door-spring, for they have been previously used for that purpose, and arranged in various ways; but I do claim as new, and desire to secure by Letters Patent—

The spiral spring *h*, fitted on the upright rod *g* of the part C of the device, in combination with the oblique bar *b* of the part B of the device, pivoted to the bar *d* of the part C, and provided at its outer end with a friction-roller, E, against which the lower end *j* of the spring *h* bears, while the upper end *i* of said spring bears against the bar *c* of the part C, substantially as and for the purpose set forth.

The above specification of my invention signed by me this 31st day of October, 1866.

ALVAH WISWALL.

Witnesses:

WM. F. MCNAMARA,

ALEX. F. ROBERTS.