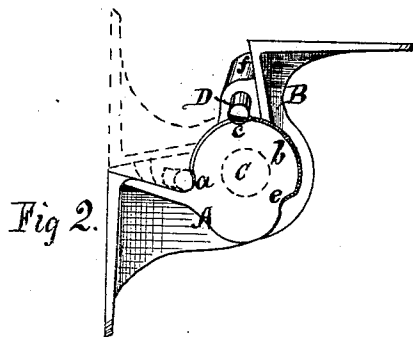
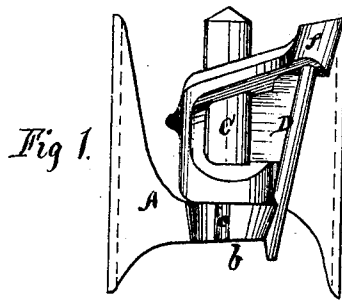


H. N. HEMINGWAY.

Improvement in Spring-Hinges.

No. 130,998.

Patented Sep. 3, 1872.



Witnesses:

J. A. Loughborough

Inventor:

H. N. Hemingway
by J. A. Loughborough
Att'y

UNITED STATES PATENT OFFICE.

HENRY N. HEMINGWAY, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN SPRING-HINGES.

Specification forming part of Letters Patent No. 130,998, dated September 3, 1872.

SPECIFICATION.

Be it known that I, HENRY N. HEMINGWAY, of Rochester, in the county of Monroe and State of New York, have invented certain Improvements in "Window-Blind Hinges," of which the following is a specification:

My invention relates to that class of blind-hinges having a vertical spring so applied as to secure the blind in position when open or partially open; and it consists more especially in the employment of a wire or frictional spring fixed in an upright position to one portion of the hinge, and arranged to act upon the other portion by lateral pressure, so as to secure the hinges in any desired position, and at the same time to prevent the blinds from being easily unhinged.

Figure 1 is an elevation of an ordinary hinge of this class in an open position, having my invention attached. Fig. 2 is an inverted view of the same, showing the loose portion B half-way open in full lines and closed in dotted lines.

A represents the pintle part or fixed portion of the hinge; B, the loose or swinging portion; C, the pintle; and D, the spring. The circular enlargement *b* at the base of the pintle is provided with several recesses, *a*, *c*, and *e*, Fig. 2, for the spring to catch in. Others may be added at intermediate points, if desired. Said enlargement *b* is somewhat conical, as shown in Fig. 1, and by inserting the spring D into the socket *f* obliquely to the axis of the hinge, or otherwise fitting it to the conical face of the enlargement *b*, the loose portion B of the hinge is thereby securely attached to the other, thus preventing the blind from being lifted off or unhinged by the wind or otherwise while it is being swung open or closed, or at any other time.

It will be seen that this constitutes a very simple and cheap hinge, as well as an efficient one, for it affords all the desirable advantages of this class of spring-hinge.

There is no mechanical fitting required in putting these hinges together, except to drill one hole for the reception of the wire springs, which latter are cut into proper lengths, and, after being inserted, are slightly "upset" or riveted at the upper end.

If desirable, both ends of the spring might be fixed and the center made to work on the enlargement; or the spring may be fixed to the male portion A of the hinge, if desired; but I prefer the arrangement of the parts as shown.

The socket *f* is formed by using two drills, that drilling the upper portion being smaller than the other; and the upper end of the spring is milled to fit such portion, thus providing a shoulder within the socket to prevent the spring from being pressed through the latter while the two portions of the hinge are being united. Instead of the drilled socket *f*, the springs, whether flat or round, might be driven through between three lugs provided on the wing B, and having their contiguous sides curved or notched to retain the spring so inserted.

The ordinary spring blind-hinge is found to be objectionable in use because the blind is thrown from one point to another, either opening or closing with considerable force, while with my construction it is moved with uniform friction from point to point, as desired, where it is secured by the spring simply dropping into the recess in the edge of the enlargement; or by using a sufficiently-stiff spring the recesses might be dispensed with.

This may very readily be adapted for a self-closing gate-hinge by making the base *b* scroll shaped, concentric from *c* toward or to the point *a*. The enlargement *b* might be made cylindrical, and a lip formed on the lower end of the spring, if preferred.

1. The improved spring-hinge, consisting of the fixed part A, carrying the pintle C, and the loose or swinging part B, to which is cast or otherwise attached, at *f*, the wire or other friction spring D in vertical position, all as described and shown, for the purposes set forth.

2. The spring D, in combination with the circular enlargement *b*, with or without the recesses or indentations *a*, *c*, and *e*, acting conjointly, as and for the purposes set forth.

HENRY N. HEMINGWAY.

Witnesses:

WM. S. LOUGHBOROUGH,
PATRICK MCINTYRE.