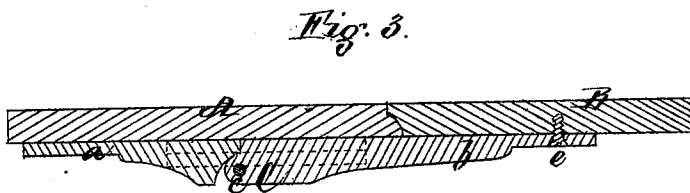
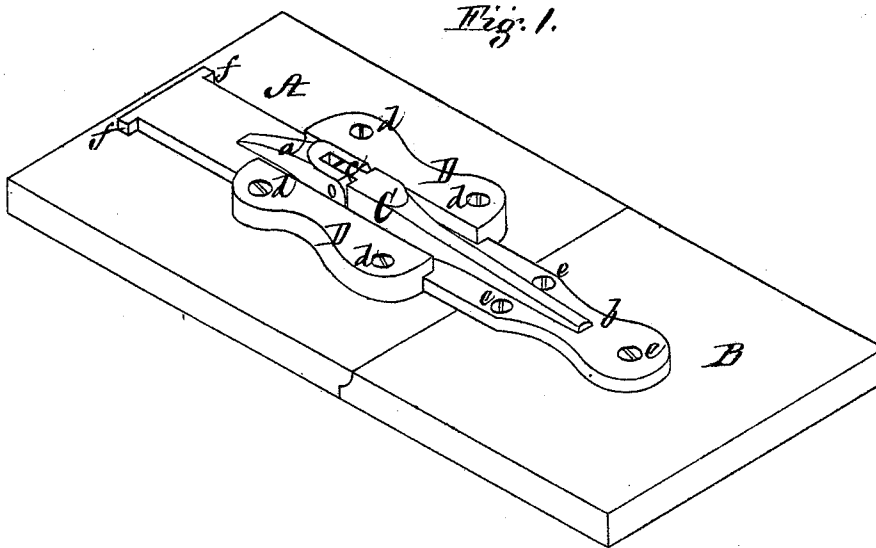


JAMES K. OTIS.

Improvement in Hinges.

No. 126,571.

Patented May 7, 1872.



Witnesses,
W. W. Stearns.
W. J. Cambridge

Inventor,
Jas. K. Otis

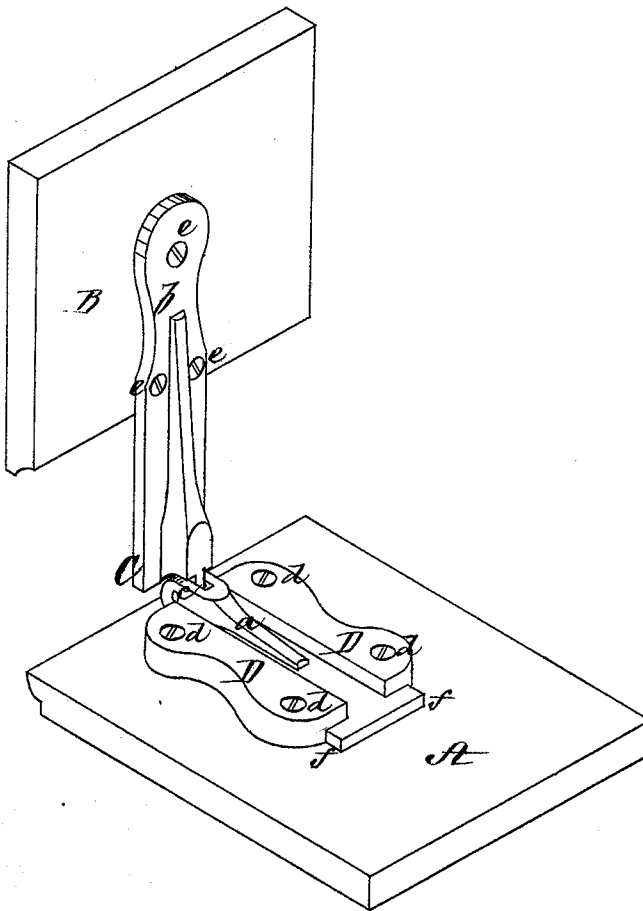
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Fig. 2.



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UNITED STATES PATENT OFFICE.

JAMES K. OTIS, OF EAST CAMBRIDGE, ASSIGNOR TO HIMSELF AND FRED-
ERICK W. NICHOLS, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. 126,571, dated May 7, 1872.

To all whom it may concern:

Be it known that I, JAMES K. OTIS, of East Cambridge, in the county of Middlesex and State of Massachusetts, have invented a Self-Supporting Sliding Hinge, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a perspective view of my improved hinge applied to the under side of a table, and to an auxiliary leaf, the hinge being slid back into a position for supporting the leaf when the table is to be extended, and the parts being inverted to better represent the application of my invention. Fig. 2 is a perspective view representing the hinge drawn out and the leaf swung down, the parts being also inverted. Fig. 3 is a longitudinal section through the center of Fig. 1.

To furnish a simple arrangement by which the surface of a table, desk, or sewing-machine may be readily extended and thrown down when not required for use, and also to provide a means for supporting a temporary shelf projecting from a wall or side of a room, or auxiliary leaf applied to a chair or settee, &c., is the object of my invention, which consists in a hinge formed of two leaves or portions pivoted together, and sliding within a stationary guide secured to the under side of the article of furniture or fixture, &c., to be extended, the outer portion of the hinge being secured to the auxiliary leaf intended to form the extension of the article.

To enable others skilled in the art to understand and use my invention I will proceed to describe the manner in which I have carried it out.

In the said drawing A is intended to represent a portion of the top of a table, desk, or sewing-machine; and B a portion of an auxiliary leaf, which it is designed to employ when the former requires to be extended. C is a hinge, the two leaves or portions *a b* of which are pivoted together at *c*, and slide within a parallel guide, D, secured by screws *d* to the under side of the top of the table or other article A to be extended. The outer portion of the leaf *b* of the hinge is screwed at *e* to the under side of the auxiliary leaf B, and

the outer end of the leaf *a* of the hinge is enlarged to form stops *f* to prevent the hinge from sliding out of the guide when the auxiliary leaf B is drawn forward. When the parts are in the position seen in Fig. 2, and it is desired to increase the surface of the top of the table, the auxiliary leaf is brought up till its surface is in the same horizontal plane therewith, when the leaf B is pressed close up against the edge of the table A, the portion *b* of the hinge being at the same time slid into the guide D, which prevents it from swinging down on its pivot or joint *c*, and the auxiliary leaf B is thus firmly supported in place to form an extension of the table A, as seen in Figs. 1 and 3.

When the auxiliary leaf is not required for use it is drawn out until the stops *f* strike against the end of the guide D, which movement draws the inner end of the portion *b* and the joint *c* out of the guide when the leaf B will fall by its own weight into the original position, seen in Fig. 2. When in this position the leaf may be carried under the table by sliding the portion *a* of the hinge within the guide D, and, by sliding this portion entirely out of the guide, the leaf B may be readily detached.

It is evident that my improved hinge may be employed for connecting an auxiliary leaf to other articles of furniture than those above referred to, such as chairs, settees, &c., and also for supporting a shelf from the side or wall of a room for temporary use.

Claim.

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

The within-described sliding self-supporting hinge, consisting of the portion *a*, with its stop *f*, pivoted to the portion *b*, in combination with a stationary guide, D, constructed and operating substantially in the manner and for the purpose set forth.

Witness my hand this 20th day of March, 1872.

JAS. K. OTIS.

In presence of—

N. W. STEARNS,
W. J. CAMBRIDGE.