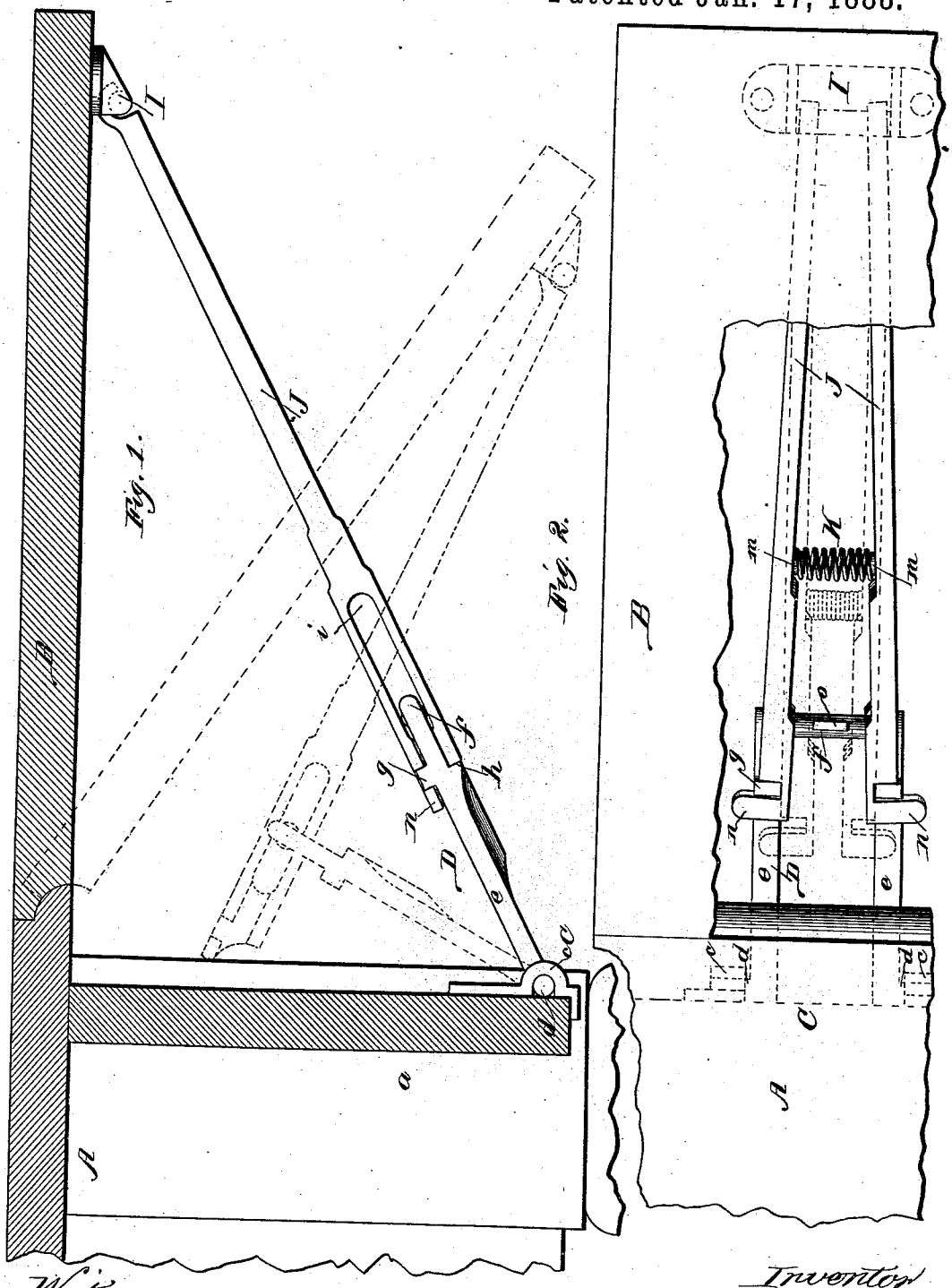
(No Model.)

2 Sheets—Sheet 1.

F. A. HARTER.

TABLE LEAF SUPPORT.

No. 376,594. Patented Jan. 17, 1888.



Witnesses.
W. Bossler
Otto Lubkert

Inventor
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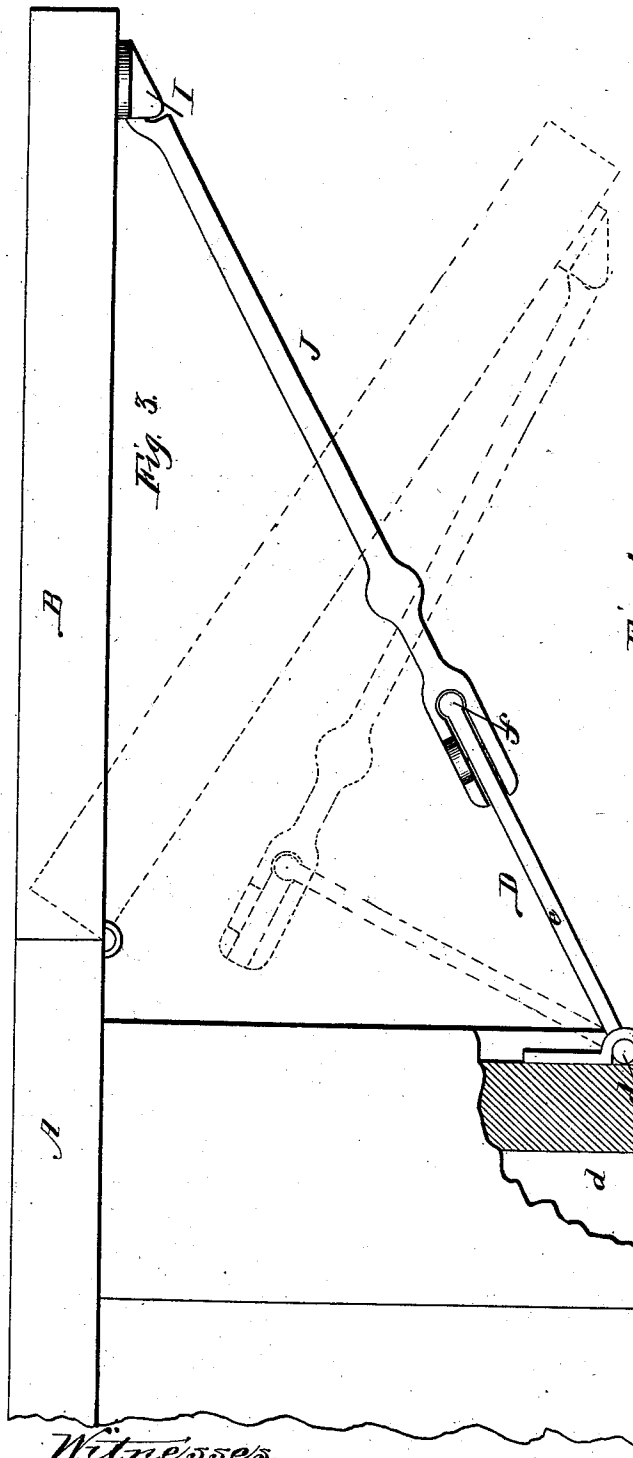
N. PETERS. Photo-Lithographer, Washington, D. C.

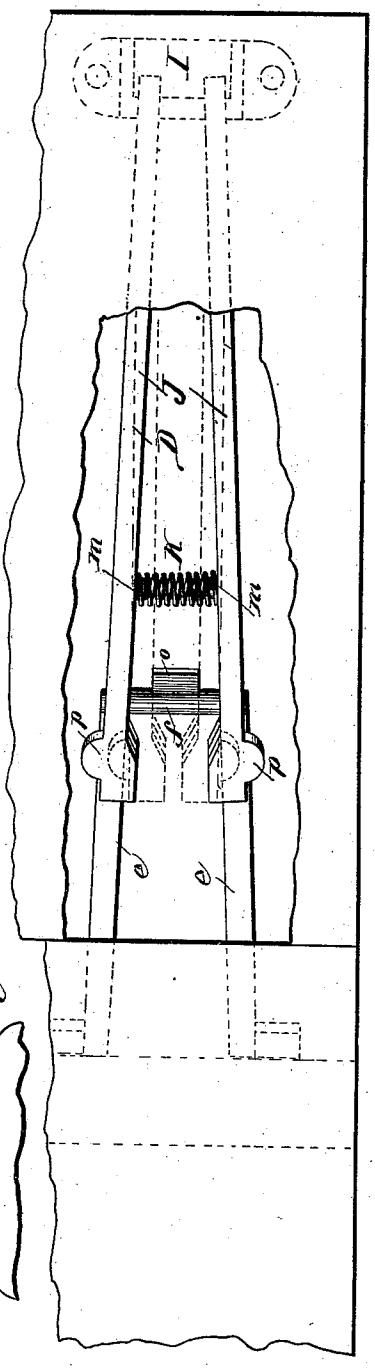
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UNITED STATES PATENT OFFICE.

FREDERICK A. HARTER, OF CHICAGO, ILLINOIS.

TABLE-LEAF SUPPORT.

SPECIFICATION forming part of Letters Patent No. 376,594, dated January 17, 1888.

Application filed July 12, 1887. Serial No. 244,103. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK A. HARTER, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Table-Leaf Supports, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to devices for sustaining on their horizontal positions pivotal extension-leaves of dining or sewing-machine tables, of chairs, benches, or seats in general, or shelving or brackets; and it has for its object to provide such a supporting-fixture that in the shape of a toggle-joint will fold behind the leaf when pendent, and that with raising such leaf to its horizontal position will lock on its straightened-out position to form a rigid brace for sustaining the leaf; and with that object in view my invention consists of the novel devices and combination of devices hereinafter described and specificaily claimed.

In the accompanying drawings, Figure 1 represents a sectional elevation, and Fig. 2 a plan, of one end of a table with my attachments, showing in dotted lines the parts when folded; and Figs. 3 and 4, similar views of the device slightly modified.

Corresponding letters in the several figures of the drawings designate like parts.

A denotes the table-top proper, and *a* the frame for the same, and B is the extension-leaf, connected by hinges to the edge of the table, so as to swing thereon from a horizontal to a vertically-pendent position.

C is a bracket-plate secured against the lower edge of frame *a*, and forming bearings *c* for the trunnions *d* of the lower U-shaped frame, D. This U-shaped frame D consists of two parallel arms, *e*, connected by a cylindrical bar, *f*, so as to be U-shaped, and to the upper face of each arm *e* is formed a rectangular lug, *g*, and to the bottom face of each arm *e* is formed a shoulder, *h*.

Against the under face of the table-leaf, near the outer edge thereof, is secured a fixture, I, forming the pivots of two bars, J. These bars are each provided with a longitudinal slot, *i*, for bar *f* of U-shaped frame D to be passed through the same and free to slide therein, and with grooves in their side faces toward their ends for engaging the ends of bars *e* of U-shaped frame D, and then the lower edge corners of their ends to abut against shoulder *h*, and the upper edges of their ends being extended and notched out for engaging lugs *g* of U-shaped frame D and for providing exteriorly-extended lugs *n*.

When the table-leaf is raised to be on a horizontal position, the ends of U-shaped frame D and of bars J are thus pushed into engagement to be locked while on a straight line relative to each other by a spiral spring, K, secured between arms J by being placed with its ends over studs *m*, formed on the inner faces of said bars J and pushing these arms apart. For releasing the table-leaf to assume its pendent position the bars J are pressed toward each other, when the grooved and notched-out ends of said bars will release and clear the lugs *g* and shoulders *h* of U-shaped frame D, and the parts will fold upon each other, bar *f* being free to slide longitudinally in slots *i* of bars J for both U-shaped frame D and bars J, to accommodate themselves for occupying the narrow space between the leaf and table-frame. The bar *f* of U-shaped frame D has a central lug, *o*, that will limit the contraction of bars J for the purpose that the ends of lugs *n* will form shoulders against the upper edges of arms *e* of U-shaped frame D, preventing the parts D and J from folding downward.

In Figs. 3 and 4 a device is shown as a modification that only varies in that the cylindrical connecting-bar *f* of U-shaped frame D forms a regular pivot-joint with eyes in bars J, so as to have no longitudinally-sliding movement, as in slot *i* of the device heretofore described, and that instead of end lugs, *n*, side lugs, *p*, are formed to the outward edges of bars J for preventing the parts D and J from folding downward.

What I claim is—

1. The U-shaped frame D, pivotally secured to the table-frame, and the bars J, pivotally secured to the extension-leaf, said frame D having cylindrical bar *f* and the bars J being pivotally connected thereto, being pushed apart by spring K, and provided with side grooves for engaging and locking the arms of frame D when on a relative straight-line position therewith, substantially as set forth.

2. The U-shaped frame D, pivotally secured

to the table-frame, and the bars J, pivotally secured to the extension-leaf, and pivotally connected to bar *f* of frame D, said bars J being provided with side grooves for engaging and locking the arms of frame D when on a relative straight-line position therewith, and with suitable stops or shouldering lugs that will allow the parts to fold in one direction only, substantially as set forth, to operate as specified.

3. The U-shaped frame D, pivotally secured to the table-frame, and having cylindrical bar *f*, lug *g*, and shoulder *h*, and the bars J, pivotally secured to the extension-leaf and provided with slots *i*, and with side grooves for pivotally connecting with frame D and for engaging and locking the arms of such frame when on a relative straight-line position, and with lugs *n*, to allow the parts to fold in one direction only, and the spring K, for pushing the bars J apart, all substantially as set forth, to operate as specified.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK A. HARTER.

Witnesses:
WILLIAM H. LOTZ,
OTTO LUBKERT.