C. H. ROHDE.

TABLE-LEAF SUPPORT.

No. 188,414. Patented March 13, 1877.

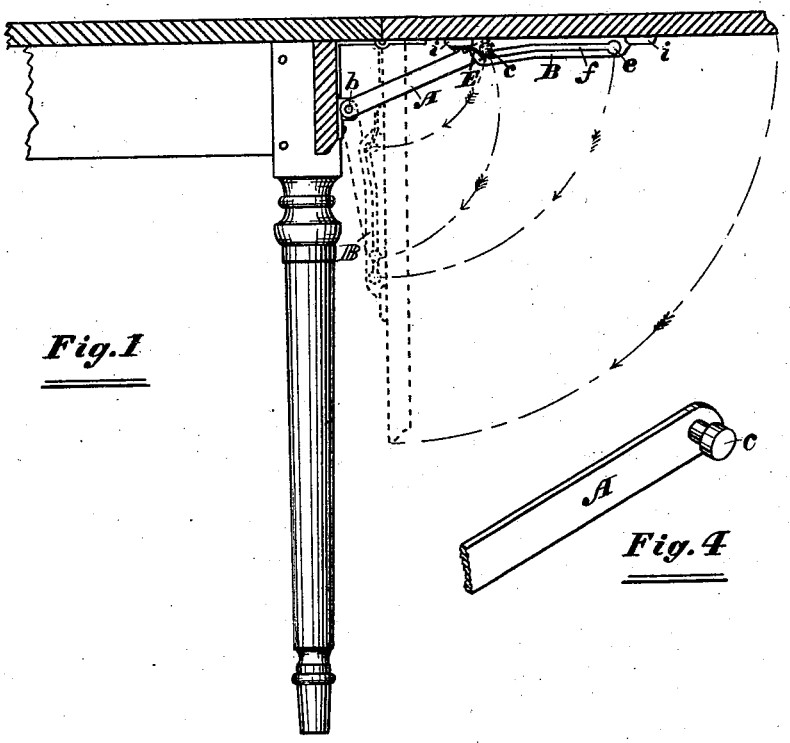

Fig. 1

Fig. 4

Fig. 2

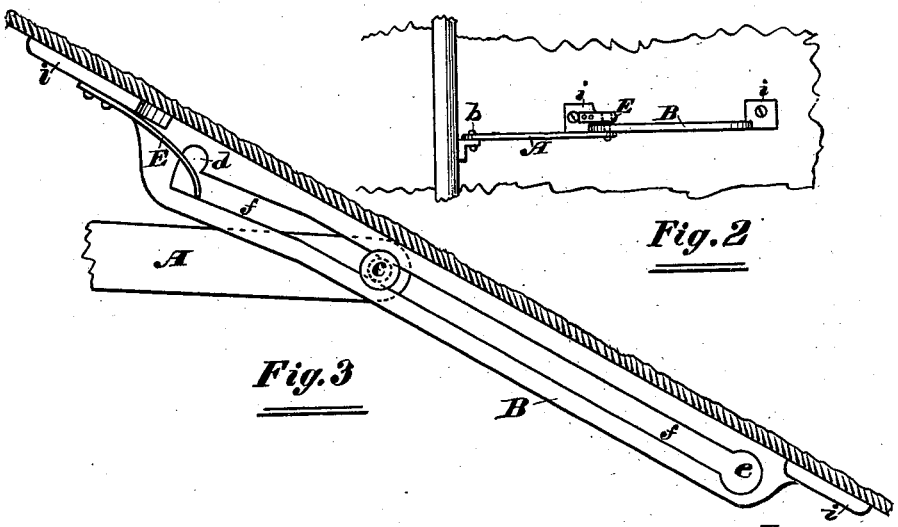

Fig. 3

Attest

W^m. L. Baker

C. M. Clark

INVENTOR

Conrad H. Rohde

by P. C. Dyrenforth, Attorney.

UNITED STATES PATENT OFFICE.

CONRAD H. ROHDE, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN TABLE-LEAF SUPPORTS.

Specification forming part of Letters Patent No. **188,414**, dated March 13, 1877; application filed February 13, 1877.

To all whom it may concern:

Be it known that I, CONRAD H. ROHDE, of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Table-Leaf Supports; 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 which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to produce a device for supporting the leaves of tables or of sewing-machines, or to be applied to anything else of a character analogous to these, which device shall, by means of the simplest mechanism possible, act automatically in locking and firmly bracing the leaf upon the latter's being raised to a horizontal position; and the said invention consists in the novel arrangement, hereinafter described, of a brace, a slotted and notched guide, and a spring, the first-named journaled or hinged at one end to the table-rail, or whatever may take the place thereof, in such manner that its opposite end may slide freely in the guide, which is secured to the leaf, and be shot upward into the locking-notch by the action of the spring at the proper moment—that is to say, just as the leaf attains a horizontal position.

I am aware that various forms of mechanism embodying a brace, a guide, and a spring, and serving, more or less effectively, the purpose above named, have already been patented; but my device differs essentially from them all in its arrangement and mode of operation, as will be seen from the following description.

In the accompanying drawings, Figure 1 is a side elevation of my device attached to a table. Fig. 2 is an inverted plan view of the same. Figs. 3 and 4 are detail views.

The brace A is pivoted or hinged at *b*. A stud, *c*, projects laterally from its opposite end, and slides in the slot *f* of the guide B as the leaf is raised or lowered, reaching, just as the leaf attains a horizontal position, the notch *d*, into which it is forced by the spring E. The stud or pin *c* has a head upon its outer end, (see Fig. 4,) to prevent it from slipping out of the slot, which the neck closely fits. The circular recess *e*, at the outer extremity of the slot, is to permit the adjustment in position of the stud *c*. The head is passed through at that point before the guide is screwed to the leaf, and the guide is made of such length that, once in place, the stud will always fall short of the recess, as indicated by the dotted lines in Fig. 1. The guide B is provided with flanges *i i*, in order that it may be firmly screwed in place.

It will be observed that the slot *f* has a slight downward incline at the inner end. This is in order that the upper bar of the guide may be made thicker at that end, so as to suffer no loss of strength in consequence of the notch. It does not in the least affect the action, while it does away with all necessity for recessing the upper end of the leaf to accommodate the thicker end of the guide. If preferred, however, the slot may be made straight throughout. The spring E is fastened at one end to the flange on the inner extremity of the guide, thence projecting in an inclined position downward and outward across the inner extremity of the slot, and passing close to the notch, as clearly shown in Fig. 3. It will be seen that, upon the leaf's attaining a horizontal position, the forcing of the stud upward into the notch, and its subsequent retention there until forcibly removed, are necessary consequences of this mode of construction.

It is obvious, however, that the particular form of the spring is not an all-important feature of the device; but that, if preferred, a helical spring, or any other form that will promptly perform the desired function—namely, drive the stud upward into the notch—may be substituted for the one I have described.

To lower the leaf the hand is passed underneath, and sufficient pressure exerted upon the upper end of the brace to overcome the resistance of the spring, when the leaf will descend by its own weight. It is best to press the leaf upward with the thumb while pressing the brace downward with the fingers, as, by this means, the stud is most readily brought out of the notch.

My device answers its purpose with the ut-

most nicety, and the end sought being attained without the aid of any complicated mechanism whatsoever; but, on the contrary, by means of only the simplest and fewest mechanical agents possible, there is no liability of its getting out of order under ordinary conditions. Moreover, on account of the extreme simplicity of its construction, it can be manufactured at a comparatively small cost.

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

The combination of the pivoted brace A, having the stud *c*, the slotted guide B, provided with the notch *d*, and the spring E, operating to press the stud upward into the notch, substantially as described, and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CONRAD H. ROHDE.

Witnesses:

BRUNO KRATZENSTEIN,

FREDERICK B. SMITH.