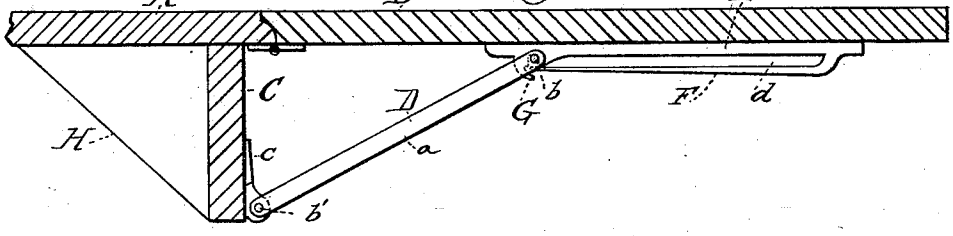
(No Model.)

G. AHRENS.

TABLE LEAF SUPPORT.

No. 245,926. Patented Aug. 23, 1881.

Fig. 1.



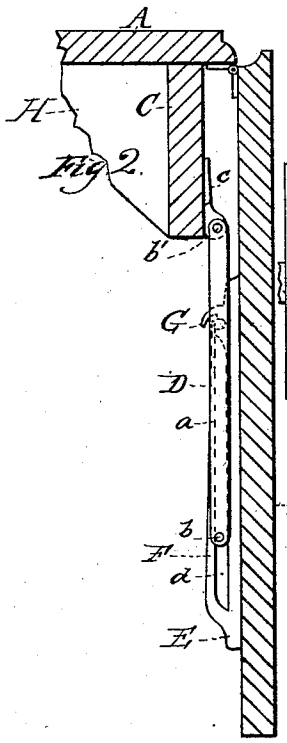


Fig. 3.

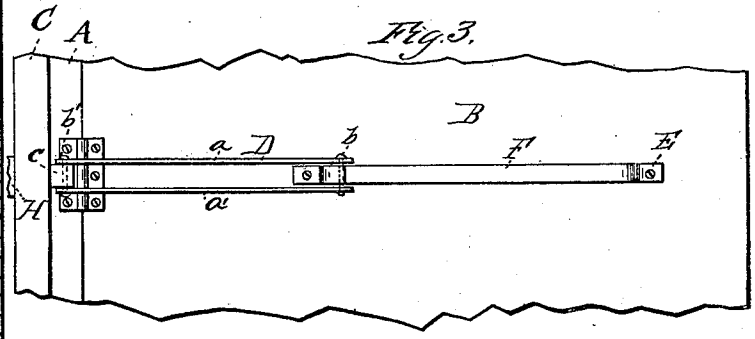
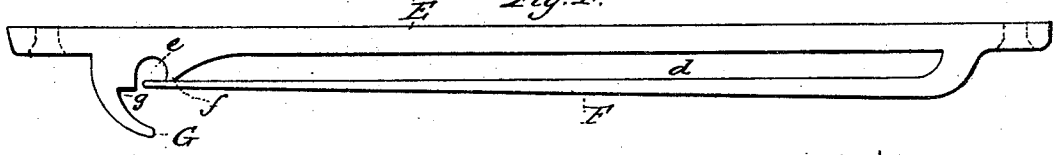


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE AHRENS, OF CRETE, ILLINOIS.

TABLE-LEAF SUPPORT.

SPECIFICATION forming part of Letters Patent No. 245,926, dated August 23, 1881.

Application filed March 5, 1881. (No model.)

To all whom it may concern:

Be it known that I, GEORGE AHRENS, of Crete, in the county of Will and State of Illinois, have invented a certain new and useful Improvement in Table-Leaf Supports, of which the following is a specification.

The object I have in view is to produce an exceedingly simple and efficient device for supporting the hinged leaves of tables, which will be cheap to manufacture and will be strong and durable in use.

My invention therein consists in the peculiar novel features of my device, as fully hereinafter explained, and pointed out by the claims.

In the accompanying drawings, forming a part hereof, Figure 1 is a section of one end of a table, showing my leaf-support in elevation when the leaf is raised; Fig. 2, a similar view when the leaf is dropped down; Fig. 3, a bottom view of the parts when in the position shown in Fig. 1, and Fig. 4 a separate view of the guiding and locking iron.

Like letters denote corresponding parts in all four figures.

A is the top of the table, B the hinged leaf, and C the end cross-board of the leg-frame, all of which parts are of the ordinary or any desired construction.

My leaf-support is one of that class of supports each of which has a brace pivoted to the lateral center of the cross-board C and engaging with a slotted guide secured to the under side of the leaf, being automatically locked, when the leaf is raised, with a notch at the inner end of said guide by means of a spring, and being disengaged from such notch to drop the leaf by forcing the brace out of the notch against the pressure of the spring.

D is the brace of my support, which is composed of two narrow wrought-iron plates, *a a'*, connected at their ends by riveted pins *b b'*, by which they are rigidly held parallel with each other a certain distance apart. The lower pin, *b'*, passes loosely through an ear on a plate, *c*, which is secured by screws to the center of the cross-board C.

E is the guide-iron, having a slot, *d*, in which the pin *b* of the brace works, and a locking-notch, *e*, at its inner end. The lower side of the slot *d* is formed by a long spring, F, which extends the whole length of the slot, and also nearly closes the lower side of the locking-notch *e*. The guide is made of ordinary cast-iron, and the spring F is cast in one piece therewith, being joined thereto in casting at its free end, at the point *f*. To complete the guide after it is cast, it is only necessary to saw through the point *f* and sever the free end of the spring from the body of the guide. This spring is of such length that it can be bent far enough to give the pin *b* free play into and out of the locking-notch. To prevent the spring from being bent too far, the guide is provided with a hook, G, also cast therewith, which extends under the free end of the spring and limits its movement. To permit the brace to be connected with and disconnected from the guide when the parts are not on a table, the hook G is constructed with a notch, *g*. (See Fig. 4.) When the pin *b* lies in this notch *g* the point of the spring will play clear of such pin. However, when the parts are properly attached to a table they cannot be disconnected, for the reason that the leaf has reached a horizontal position when the brace-pin enters the locking-notch *d*, and cannot be raised high enough to allow the brace-pin to enter the notch *g*. The guide-iron is extended beyond the hook G and the butt-end of the spring F far enough to make room for holes to receive the wood-screws by which the guide is secured to the under side of the table-leaf.

Just where the ear-plate *c* is secured to the cross-board C, and where said board has to sustain the pressure brought upon the table-leaf, I re-enforce the same by securing a triangular block, H, behind the cross-board C and against the table-top A.

The operation of my support will be readily understood from an inspection of the drawings.

The principal advantages of the peculiar construction of my device may be briefly stated as follows: By casting such spring in one piece the desired result is obtained in an exceedingly simple and efficient manner. The hook for limiting the movement of the peculiar spring and its releasing-notch are also highly useful devices in this connection.

By making the brace of two wrought-iron plates, connected at their ends and held apart by pins, such brace can be made very light and will still be strong, and the pins are given

support at both ends, preventing them from being broken from place.

What I claim as my invention is—

1. In a table-leaf support, the combination, with the pivoted brace, of the slotted guide E, the long spring F, forming the lower side of the guide-slot, and the limiting-hook G, provided with notches *e g*, substantially as described and shown.

2. The table-leaf support described, consisting of the guide E, secured to the leaf and having the long spring F cast in one piece therewith, and provided, further, with the hook G and notches *e g*, and the brace D, pivoted to the table and engaging with such guide, said brace being composed of plates *a a'* and end pins, *b b'*, all constructed and arranged substantially as set forth and shown.

This specification signed and witnessed this 15th day of February, 1881.

GEORGE AHRENS.

Witnesses:

F. W. KASEHAGEN,

OLIVER W. MARBLE.