

No. 623,682.

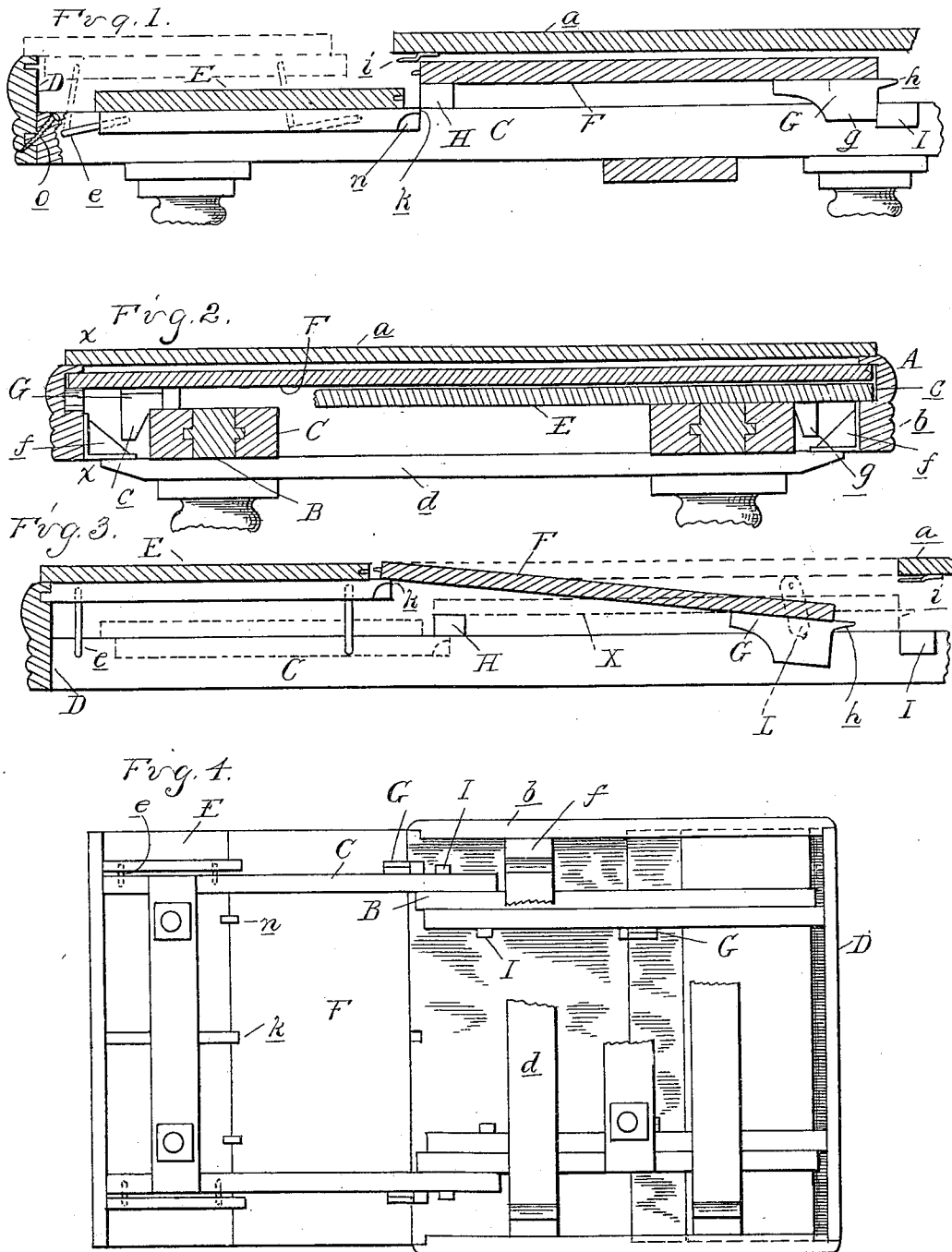
Patented Apr. 25, 1899.

C. W. MUNZ.
EXTENSION TABLE.

(Application filed Mar. 2, 1898.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses
A. L. Hobbie

[Signature]

Inventor
Charles W. Munz
By *[Signature]*
Attys.

No. 623,682.

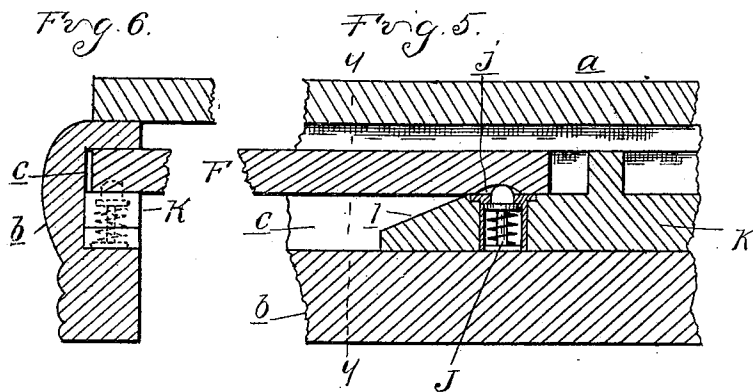
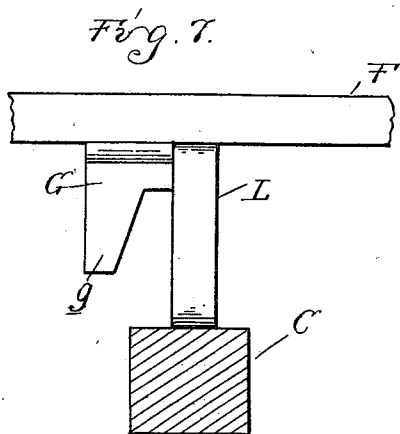
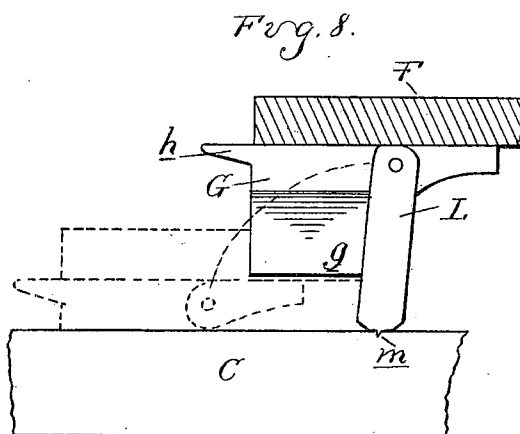
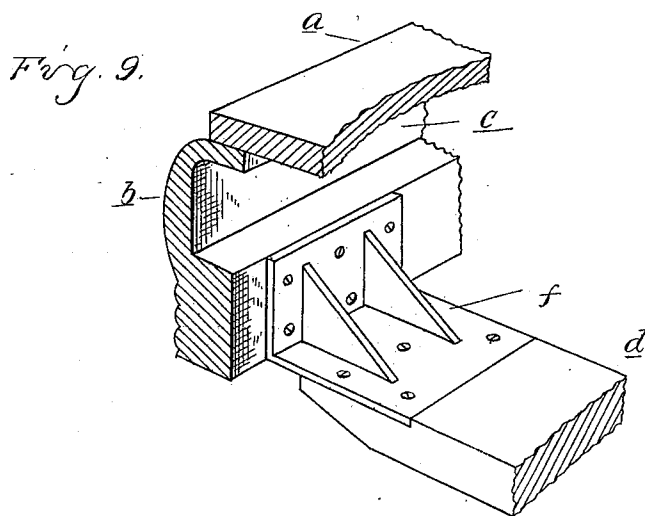
Patented Apr. 25, 1899.

C. W. MUNZ.
EXTENSION TABLE.

(Application filed Mar. 2, 1898.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses
A. C. Hobby

[Signature]

Inventor

Charles W. Munz

By *[Signature]*
Attys.

UNITED STATES PATENT OFFICE.

CHARLES W. MUNZ, OF DETROIT, MICHIGAN.

EXTENSION-TABLE.

SPECIFICATION forming part of Letters Patent No. 623,682, dated April 25, 1899.

Application filed March 2, 1898. Serial No. 672,271. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. MUNZ, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Extension-Tables, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of extension-tables in which the leaves when not in use are stored in the body portion of the table and are drawn out with the slides when the table is extended.

It is the object of my invention to obtain a construction in which increased extension is obtained by storing a double tier of leaves without rendering the table heavy or clumsy in appearance; and to this end my invention consists in the peculiar construction, arrangement, and combination of parts, as more fully hereinafter described and claimed.

In the drawings, Figure 1 is a vertical longitudinal section through one-half of my extension-table, showing it partially extended. Fig. 2 is a cross-section thereof with the leaves in their stored position. Fig. 3 is a section similar to Fig. 1 with the table fully extended, showing in full and dotted lines the different positions of the leaves when engaging and disengaging them from each other. Fig. 4 is a bottom plan view of my table with the leaves of one end extended and of the other end stored. Fig. 5 is a section on line *xx*, Fig. 2. Fig. 6 is a section on line *yy*, Fig. 5. Figs. 7 and 8 are end and side elevations, respectively, of the swinging post for supporting the leaf. Fig. 9 is a sectional perspective view showing the connection between the side rails and cross-tiers of the table.

A is the center or body portion of the table, which comprises the top *a*, the side rails *b*, having the longitudinal grooves *c* on their inner faces, and the cross-bars *d*. To these cross-bars are secured the stationary slides B, with which the movable slides C engage, the upper faces of these slides being in the plane of the lower faces of the grooves *c* in the side rails *b*.

D are end rails connected to the outer ends of each pair of slides C and corresponding in

appearance to the side rails *b*, and E is a leaf secured to the slides C by swinging links *e*, which permit of its being lowered to rest upon the slides and to be carried thereby into the space beneath the top *a*.

Tables constructed as above described have heretofore been made capable of storing leaves sufficient in extent to enlarge the table approximately double the size of its stationary part. To obtain a greater extension, however, it is necessary to store the leaves in more than one tier, and as heretofore accomplished this is objectionable, inasmuch as the depth of the side rails is considerably increased, which gives a heavy and clumsy appearance to the table and impairs its salability. To overcome this objection, I have devised the following construction: The grooves *c* in the side rails *b* are made of a width greater than double the thickness of the leaves, and the portion of the rail below the groove is only of sufficient depth to equal the thickness of the slides B and C, or it may be even of lesser depth. The cross-bars *d*, which support the slides, do not extend completely across the space between the side rails, but are cut off at a sufficient distance back to hide their ends from view. These cross-bars are then connected to the side rails by angle-brackets *f*, preferably formed of metal, one wing of each being secured to the upper face of said cross-bar, while the other wing is secured to the inner face of the side rail. This forms a firm connection, which is completely hidden from view by the side rail. At the outer ends of each set of slides is secured a leaf E, which, as before described, is connected to said slides by the swinging links *e*. These leaves are something less than half the width of the top *a*, so that their inner edges do not extend quite to the center.

F is a leaf supported on the slides, but not connected therewith, and which I shall therefore call the "detached" leaf to distinguish it from the leaf E. This leaf is adapted when the table is fully extended to be placed between the leaf E and the stationary top *a*, and when stored to be arranged above said leaf E beneath said top.

At its inner edge the leaf F is provided with blocks G, secured thereto and resting on the slides C, the thickness of these blocks G

being preferably just a trifle greater than the thickness of the leaf E. The blocks G are provided with flanges *g*, projecting down beside the sides of the slides C and preferably slightly beveled or inclined. The blocks are also preferably provided with the outwardly-extending tongues *h*, adapted to engage with the spring-jacks *i* on the under face of the top *a*.

10 II are blocks secured to the top of the slides C a short distance beyond the inner edge of the leaf E and of the thickness of the blocks G.

I are blocks or stops secured to the sides of the slides and adapted to strike against the flanges *g* of the blocks G when the slides are drawn outward.

The arrangement of parts just described is such that when in the position shown in Fig. 1 the leaf F rests upon the blocks H and G, which raises its bottom face just above the top face of the leaf E. When the slides are drawn out farther, the leaf F will be carried with them into the position shown in dotted lines at X in Fig. 3, and when the slides are pushed in the leaf E will slide beneath the leaf F, as shown in Fig. 2.

In order to hold the leaf F from being drawn out with the leaf E in the first outward movement of the slides, I provide a lock for holding it in temporarily, preferably consisting of the spring-bolt J, arranged in a block K, located in the groove *c* of each side rail *b*, or it may be placed in the stationary slide B, said bolt engaging with the recess *j* on the under side of the leaf F. The outer end of the block K is inclined at *l* to guide the leaf up into engagement with the bolt. The leaf F is engaged with the bolt J when the slides are pushed in, the block H striking against the outer edge of the block G and forcing the leaf positively into engagement with the bolt. When the slides are drawn out, this lock will hold the leaf F from movement until the block I strikes against the blocks G and forces the leaf out of its engagement with the lock. The block K also serves to hold the leaf F against the upper face of the groove *c*, so as to hold the outer edge of said leaf clear from the leaf E when the latter is moved thereunder.

To place the leaf F in position in the tabletop after the slides are drawn out and the leaf E is swung up into its raised position, the leaf F must be raised and the tongues *h* engaged with the spring-jacks *i*. In order to facilitate this operation as well as to hold the leaf F securely in its raised position, I preferably provide the hinged posts L, pivotally secured beside the blocks G above the slides and adapted when the leaf F is raised to swing into an upright position and hold the inner edge of said leaf on a level with the top *a*, the outer edge having been first raised and rested upon the tongues *k* on the leaf E. These posts L are preferably provided with the points *m* on their lower ends, which prevent them from slipping on the slides. To

lower the leaf, it is pushed slightly inward, when the posts L will turn down into a horizontal position and at the same time carry the leaf F inward sufficiently to be clear of the leaf E, when it also is turned down. I preferably place blocks *n*, projecting beside the tongues *k*, on the leaf E, which will strike against the edge of the leaf F should the latter not have moved sufficiently far inward and will push it out of the path of the tongues *k*.

It will be seen that in a table constructed as above described the side rails may be of minimum depth, as no carrying-strips are necessary between the two tiers of leaves, and on account of the angle-bracket connection between the side rails and cross-bar it is not necessary to extend said rails downward farther than the bottom of the slides.

The manner in which I unite the slides to the end rails D is shown in Fig. 1, and consists of forming a tenon on the end of the slide and a corresponding groove in the end rail and then securing the two firmly together by a single screw *o*, passing diagonally through the slide and tenon and into the end rail.

Before fastening together the parts are glued, and as the screw passes through the tenon and strikes the face of the groove at an angle it will draw the parts firmly together before it will enter said face, thus making a good contact between the glued faces and forming a very simple and effective securing means.

What I claim as my invention is—

1. In an extension-table, the combination with the slides, a leaf attached to said slides, a second leaf detached from said slides and supported and carried thereby and means for holding the detached leaf in such a manner as to permit of the attached leaf passing thereunder when in stored position, substantially as described.

2. In an extension-table the combination with the slides having a leaf attached thereto of a detached leaf adapted to be carried by said slides and means for supporting said detached leaf near one edge in its stored position to permit of said attached leaf passing thereunder.

3. In an extension-table, the combination with the slides having a leaf attached thereto of a detached leaf slidably supported upon said slides and adapted to be carried thereby, means for supporting said detached leaf at its inner edge in its stored position to permit of said attached leaf passing thereunder and means for holding it in said position until after said attached leaf is drawn out.

4. In an extension-table, the combination with the slides having a leaf attached thereto, of a detached leaf slidably supported upon said slides and adapted to be carried thereby, means for supporting said detached leaf at its inner edge in its stored position to permit of said attached leaf passing thereunder, a spring-lock for engaging with and retaining said detached leaf, in said stored position,

and a stop or shoulder on each slide for disengaging said leaf from said spring-lock after said attached leaf is drawn out.

5 In an extension-table, the combination with the slides having a leaf attached thereto of a detached leaf having the blocks G secured to its under side near its inner edge said blocks being provided with the downwardly-projecting side flanges *g* for the purpose described.

10 6. In an extension-table, the combination with the slides having a leaf attached thereto, of a detached leaf, having the blocks G secured to its under side near its inner edge, the blocks H and I secured to said slides and the blocks K and spring-locks J on the stationary part of the table, all arranged substantially as and for the purpose described.

15 7. In an extension-table, the combination with the slides and a leaf vertically adjustably attached thereto, of a detached leaf supported upon and adapted to be carried by said slides and a post pivotally secured to the under side of said detached leaf above the slide adapted to be folded down and to automat-

ically assume an upright position when said leaf is lifted.

8. In an extension-table the combination with the slides of a supporting cross-bar for said slides below the level of the lower edge of the side rails, of a length slightly less than the distance between the side rails, and a supporting connection between the ends of said cross-bars and the inner faces of said side rails.

35 9. In an extension-table, the combination with the slides of a supporting cross-bar for said slides below the level of the side rails of the table of a length slightly less than the distance between the side rails, and a connection between each end of said cross-bar and the side rails comprising an angle bracket having one wing secured to the upper face of said cross-bar.

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

CHARLES W. MUNZ.

Witnesses:

OTTO F. BARTHEL,
M. B. O'DOHERTY.