No. 621,888. Patented Mar. 28, 1899.

F. YUNCK.

CONVERTIBLE SHELF AND TABLE.

(Application filed Jan. 11, 1897.)

(No Model.)

Fig. 1.

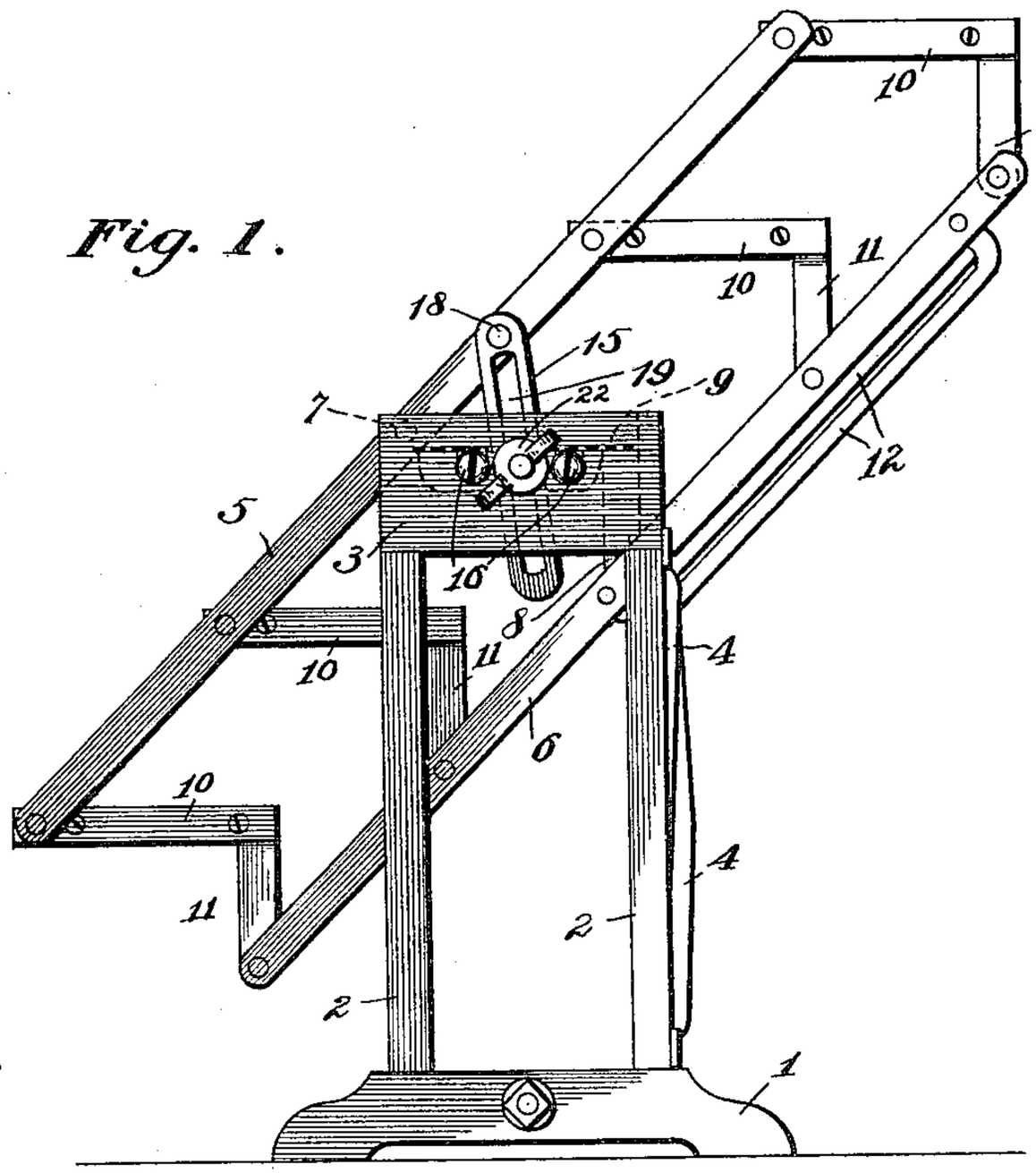


Fig. 2.

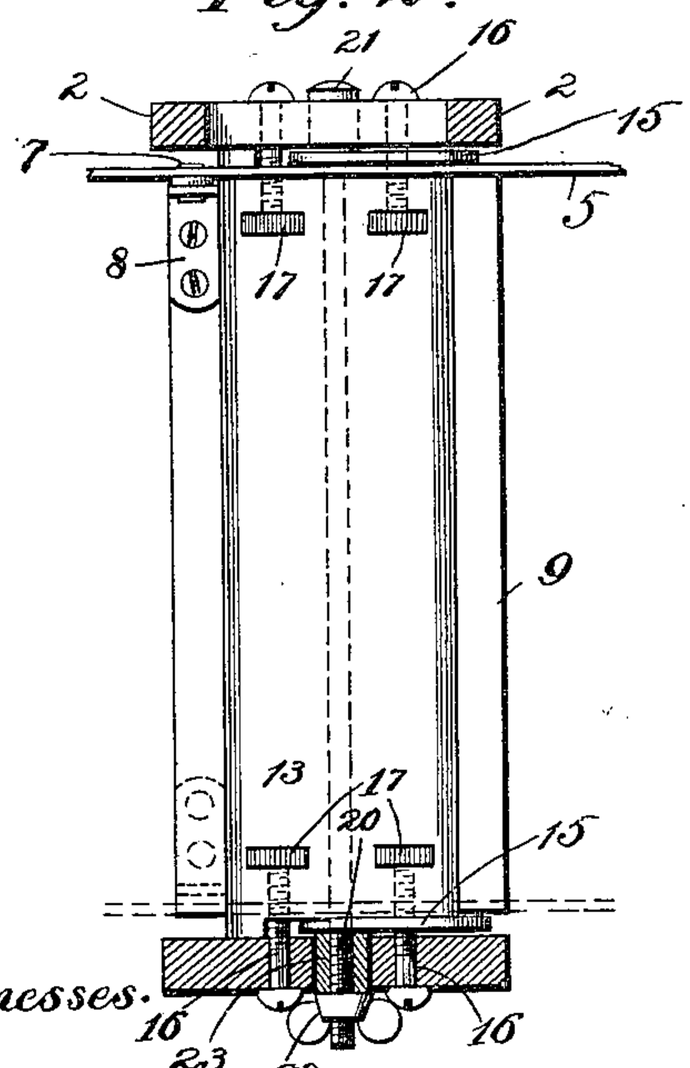
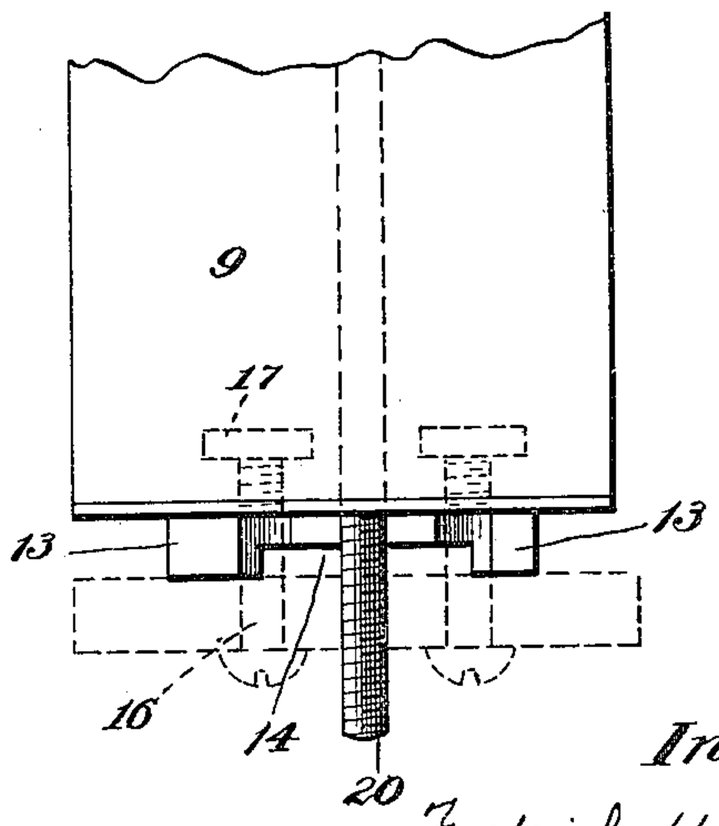


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

FREDERICK YUNCK, OF BRYAN, OHIO.

CONVERTIBLE SHELF AND TABLE.

SPECIFICATION forming part of Letters Patent No. 621,888, dated March 28, 1899.

Application filed January 11, 1897. Serial No. 618,716. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK YUNCK, a citizen of the United States, residing at Bryan, in the county of Williams and State of Ohio, have invented certain new and useful Improvements in Convertible Shelves and Tables, of which the following is a specification.

My invention relates to convertible shelving and tables, and has for its object to provide certain improvements over the construction disclosed in Letters Patent No. 554,187, granted February 4, 1896, to Anthony J. and Joseph Jameson, as will be hereinafter more particularly pointed out, and definitely set forth in the annexed claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved device. Fig. 2 is a bottom plan view of the fixed shelf, illustrating the manner of attaching the same to the supporting-frame. Fig. 3 is a detail top plan view of one end of the fixed shelf, the supporting-frame being shown in dotted lines.

Similar numerals of reference denote corresponding parts in the several views.

In the said drawings the reference-numeral 1 denotes any suitable base, and 2 uprights rising therefrom, the latter being surmounted by cross-pieces 3, as shown. Suitable diagonal braces 4 may, if desired, be employed. The upper and lower side bars 5 6 are pivoted intermediate their length, the former to the ends of the fixed shelf 9 at 7 and the latter to depending angle-irons 8, fastened to the under side of the fixed shelf 9, thus locating the pivotal points of the side bars 6 below those of the side bars 5. The pivoted shelves 10 are connected to the side bars 5 6 above and below the fixed shelf 9 by pivoting their front ends directly to the side bars 5, while their rear ends carry brackets 11, which project downward in a manner similar to the brackets 8 of the fixed shelf 9, and are pivoted to the side bars 6, as shown. Diagonal braces 12 may, if desired, be fixed to the side bars 6 for the purpose of stiffening the structure. All of these parts conform in structure and operation to the patent of Jameson and Jameson, above referred to, and need no further explanation. One of the essential differences in structure over said patent resides in the connection between the fixed shelf 9 and the supporting-frame, and this consists in forming on or fixing to the under side of said shelf a reinforce 13, the same being a little narrower than said shelf but extending at its ends beyond the same, so as to completely bridge the space between the cross-pieces 3 or uprights 2, the said shelf proper being a little narrower than this space, as shown in Fig. 2. The ends of this reinforce are recessed at 14 to permit the free passage therethrough of the links 15, hereinafter described. At each end said reinforce has passing thereinto two apertures for the free reception of the screw-bolts 16, the latter being suitably headed at their outer ends and passing first through the cross-pieces 3. These bolts are retained in place by means of nuts 17, engaged with their inner ends, said nuts being passed into squared apertures in the under side of the reinforce and held from rotation by the configuration of said apertures, it being understood that said apertures register with the ends of the bolt-receiving apertures above described.

The links 15 are pivoted to the upper side bars 5 at 18 and, as before described, pass freely down through the recesses 14, the elongated slots 19 therein being engaged by a transverse shaft 20, which passes lengthwise through a suitable aperture in the reinforce 13 and projects through both of the cross-pieces 3, as shown in Fig. 2. At one end this shaft is headed at 21, while its other end is screw-threaded to receive a thumb-nut 22, an intermediate bushing 23 being provided thereon between said thumb-nut and the link 15 on that side.

From the above description the operation of my improved device will be understood to be as follows: By loosening the thumb-nut 22 the links 15 are permitted to move freely and the shelving may be shifted into any desired position, when by tightening up the thumb-nut the links will be jammed between the headed end 21, the bushing 23, and the ends of the reinforce 13, thus firmly retaining the shelving in any adjusted position. Now when it is desired to remove the shelving from its supporting-frame it is only necessary to remove the thumb-nut 22 and withdraw the shaft 20 and then unscrew the bolts 16 slightly till out of engagement with the nuts 17, when they can be withdrawn from

their receiving-apertures in the reinforce 13, whereupon the shelving and its side bars 5 6 are entirely free from the supporting-frame and can be removed.

It will thus be seen that by employing the reinforce 13 on the under side of the fixed shelf 9 I provide a means for attaching said shelf to the supporting-frame without regard to the thickness of said shelf, and by the novel construction of the supporting means I am enabled to readily detach the shelving from its supporting-brackets. Moreover, by employing the nuts 17 instead of screw-threading the bolt-receiving apertures I avoid any danger of worn threads or of splitting said reinforce.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with the stand having side pieces provided with openings, the central or fixed shelf rigidly mounted therein, the series of shelves pivotally supported to swing into vertical or horizontal position with relation to the fixed shelf, and the locking-braces lying between the side pieces of the stand, of a through-bolt passing through the openings formed in the side pieces at each end of the fixed shelf, said through-bolt carrying friction-surfaces coöperating with the braces and the fixed shelf, substantially as set forth.

2. The combination with a supporting-frame, side bars, and shelves pivoted to said side bars, of a fixed intermediate shelf to which said side bars are pivoted, and means for connecting said shelf to the supporting-frame, consisting of bolts passing through said supporting-frame and into apertures in said shelf, and nuts located in apertures in the under side of said shelf for receiving the inner screw-threaded ends of said bolts, substantially as set forth.

3. The combination with a supporting-frame, side bars, and shelves pivoted to said side bars, of a fixed intermediate shelf to which said side bars are pivoted, and means for connecting said shelf to the supporting-frame, consisting of a reinforce on the under side of said shelf, bolts passing through said supporting-frame and into apertures in the ends of said reinforce, and nuts located in apertures in the under side of said reinforce for receiving the inner screw-threaded ends of said bolts, substantially as set forth.

4. The combination with a supporting-frame, side bars pivoted intermediate their length, and shelves pivoted to said side bars, of a fixed intermediate shelf, means for connecting said shelf to the supporting-frame, a transverse shaft passing lengthwise through an aperture in said shelf and through the supporting-frame, an enlargement on one end thereof, a thumb-nut on the other end, a bushing between said thumb-nut and the end of the fixed shelf, and links pivoted to the side bars and engaged by said shaft between the enlargement and the end of the fixed shelf at one side and the bushing and the end of the fixed shelf at the other side, substantially as set forth.

5. The combination with a supporting-frame, side bars, and shelves pivoted to said side bars, of a fixed intermediate shelf to which said side bars are pivoted, means for connecting said shelf to the supporting-frame, consisting of a reinforce on the under side of said shelf, bolts passing through said supporting-frame and into apertures in the ends of said reinforce, and nuts located in apertures in the under side of said reinforce for receiving the inner screw-threaded ends of said bolts, a central transverse shaft passing lengthwise through an aperture in said reinforce and through the supporting-frame, links pivoted to the side bars and engaging with said shaft, and means for clamping said links on said shaft in any adjusted position, substantially as set forth.

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

FREDERICK YUNCK.

Witnesses:
O. Y. ROTSEL,
C. LAUTZENHISER.