Jan. 6, 1953 C. J. CADWELL ET AL 2,624,469

FOLDABLE VERTICALLY ADJUSTABLE TABLE

Filed Dec. 17, 1948 2 SHEETS—SHEET 1

FIG 1

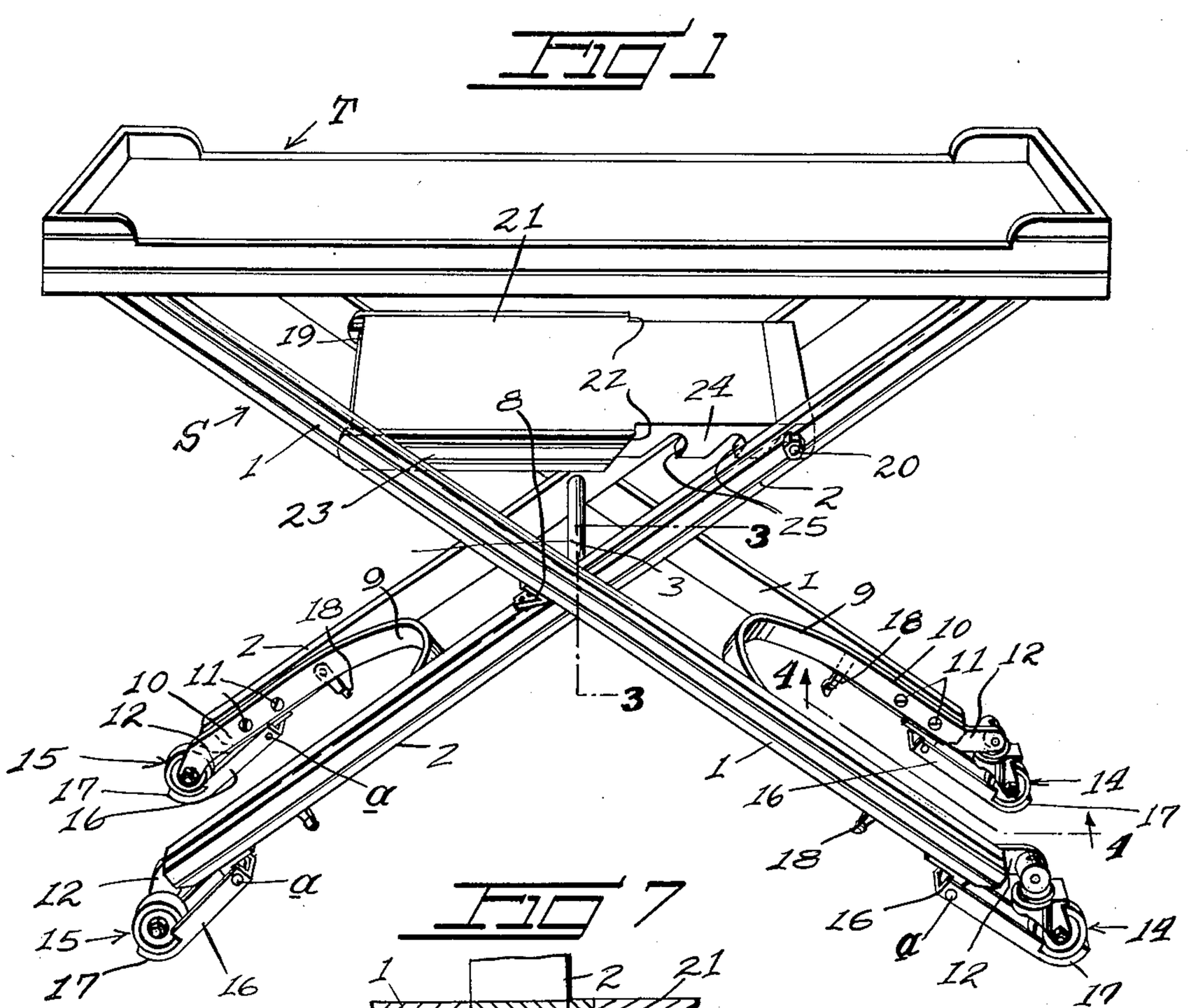


FIG 7

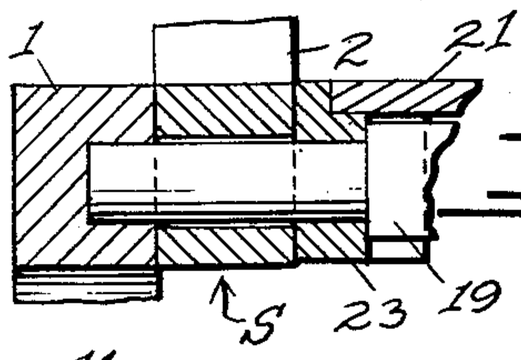


FIG 3

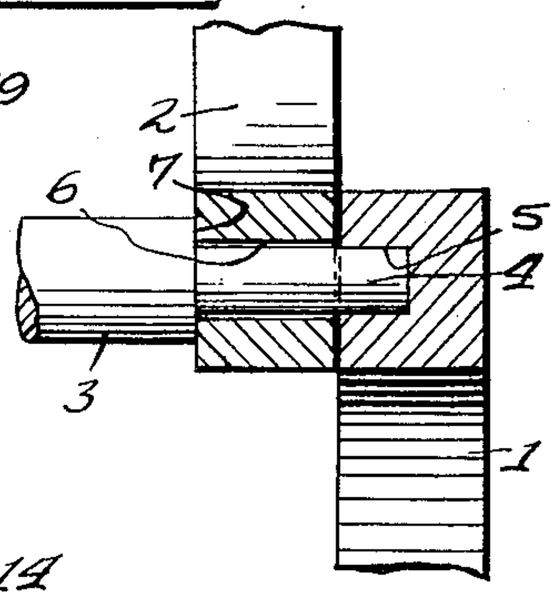
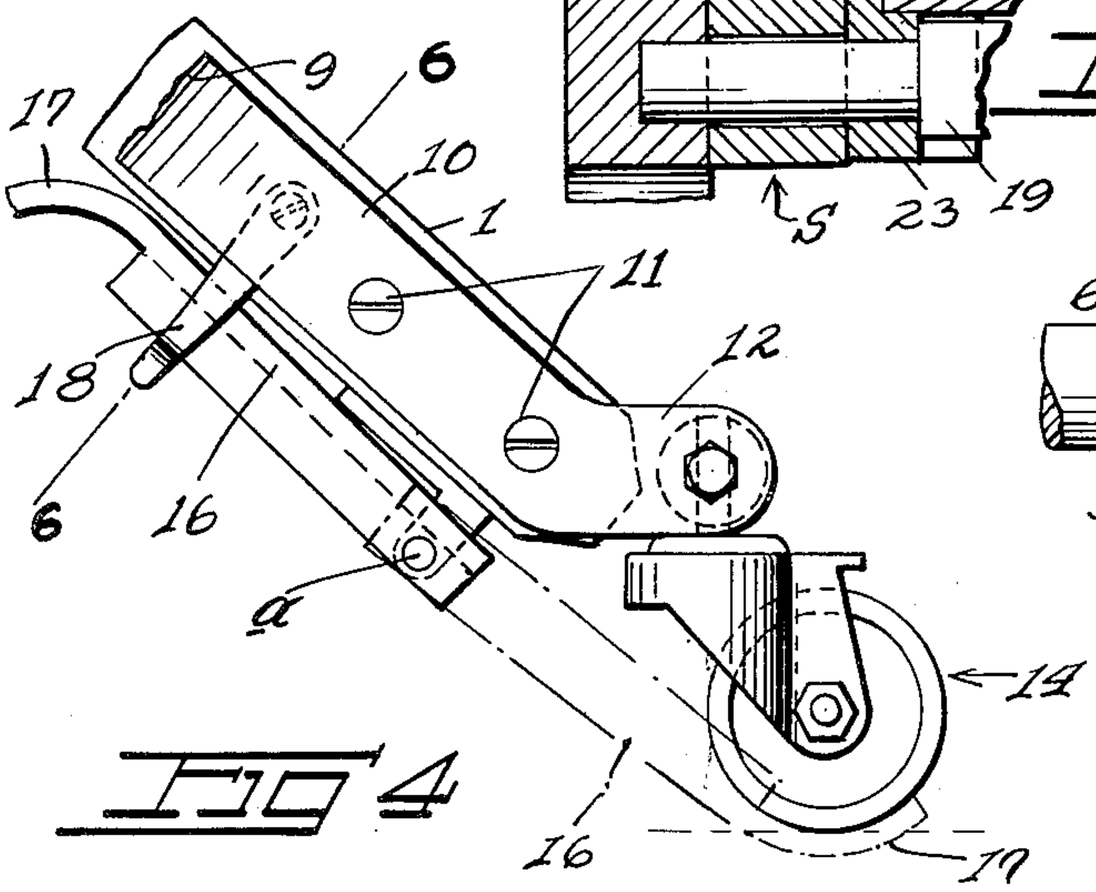


FIG 4



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FOLDABLE VERTICALLY ADJUSTABLE TABLE

Filed Dec. 17, 1948 2 SHEETS—SHEET 2

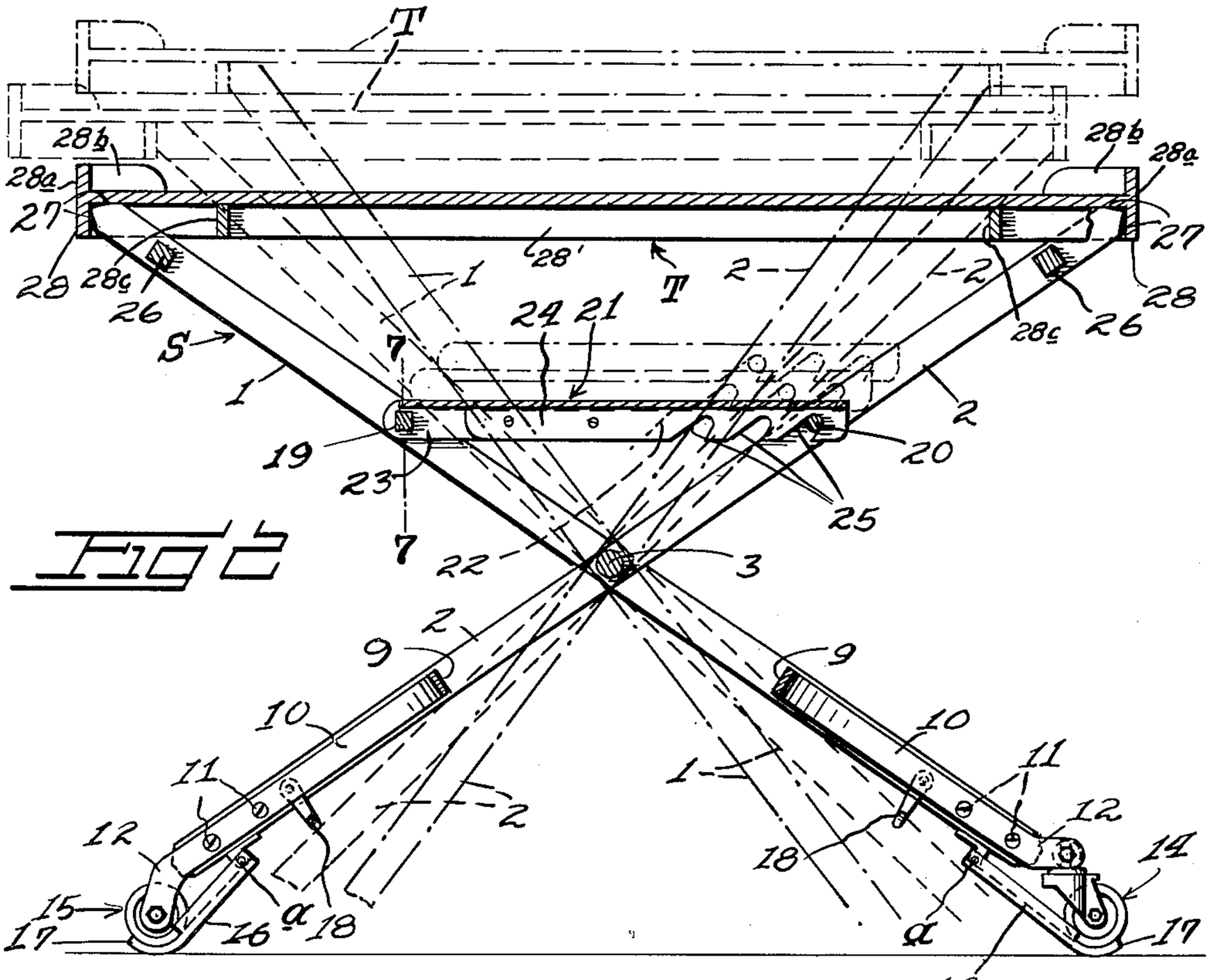
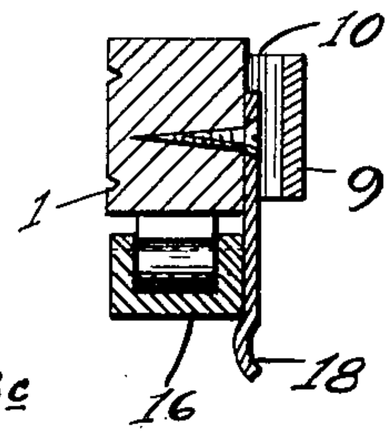
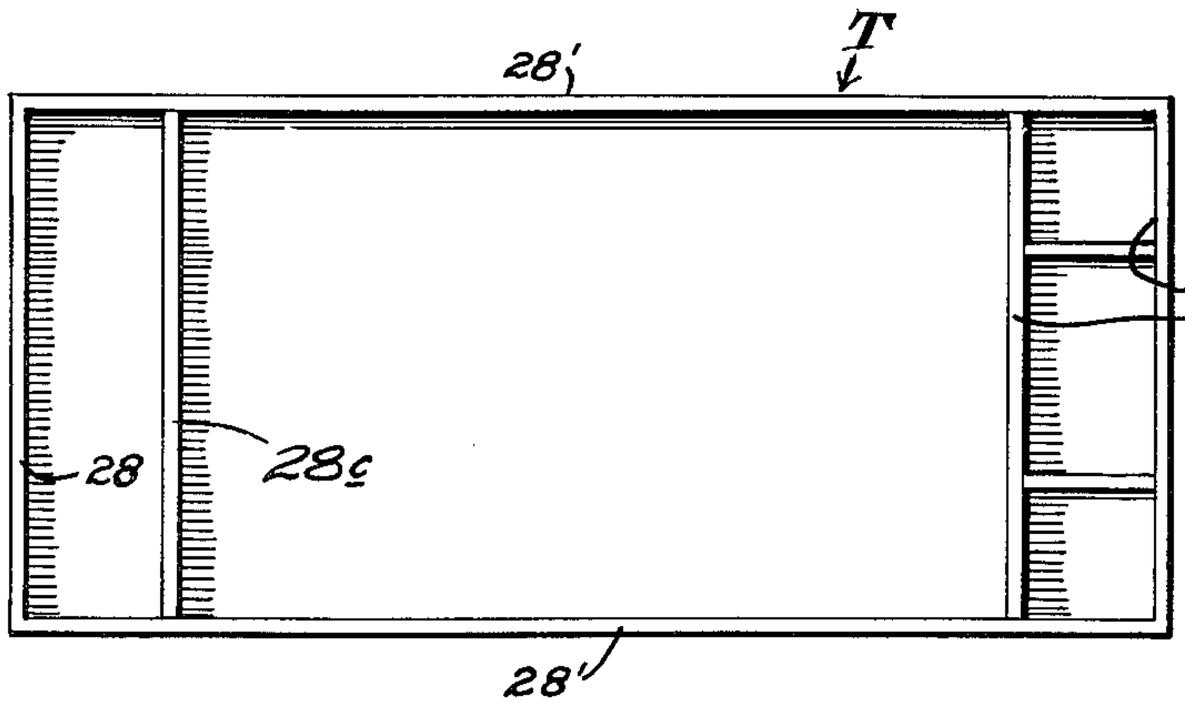


FIG 2

FIG 5

FIG 6





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Patented Jan. 6, 1953

2,624,469

UNITED STATES PATENT OFFICE

2,624,469

FOLDABLE VERTICALLY ADJUSTABLE TABLE

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Application December 17, 1948, Serial No. 65,898

1 Claim. (Cl. 211—147)

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This invention relates to a collapsible table and it is an object of the invention to provide an article of furniture of this kind which may be easily compacted for storage or shipment.

It is also an object of the invention to provide a table including a supporting structure constructed and assembled in a manner whereby the table top may be supported at different elevations.

Another object of the invention is to provide a table wherein the table top and the supporting structure therefor comprise separate units.

The invention consists in the details of construction and in the combination and arrangement of the several parts of our improved collapsible table, whereby certain advantages are attained, as will be hereinafter more fully set forth.

In order that our invention may be better understood, we will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view in perspective of a table constructed in accordance with an embodiment of the invention and in extended or working adjustment;

Figure 2 is a vertical longitudinal sectional view taken through the table as shown in Figure 1;

Figure 3 is an enlarged fragmentary sectional view taken substantially on the line 3—3 of Figure 1, a part being in elevation;

Figure 4 is an enlarged sectional view taken substantially on the line 4—4 of Figure 1, looking in the direction of the arrows;

Figure 5 is a view in bottom plan of the table top or unit as here comprised;

Figure 6 is a sectional view taken substantially on the line 6—6 of Figure 4; and

Figure 7 is a detail sectional view taken substantially on the line 7—7 of Figure 2, with the top unit omitted.

In the embodiment of the invention as illustrated in the accompanying drawings, the table comprises two units, one being a flat rectangular table top T, and the other the supporting structure S. The top T has end and side flanges 28 and 28', respectively, depending from its edges, the end flanges also projecting above the upper surface of the top, with the ends of the projecting portions 28*a* having relatively short side portions 28*b* extending inwardly thereof, substantially as shown in Figures 1 and 2.

The supporting structure S includes the elongated side bars 1 and 2 with the members 1 at substantially the longitudinal centers thereof connected by the interposed cross member 3 of a length determined by the desired spacing of the members 1. The extremities of the member 3 are formed to provide the cylindrical trunnions 4, the outer end portion of each of which snugly fits within a socket 5, formed in the inner face of the member 1 and preferably adhesively held therein.

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The members 2 are arranged inwardly of the members 1 and each of said members 2 at substantially its longitudinal center is provided with an opening 6 through which a trunnion 4 is snugly but freely disposed so that each pair of members 1 and 2 may be swung one with respect to the other to provide an X shape side member for the supporting structure when in use.

The member 3 at the inner end of each of the trunnions 4 provide sa shoulder 7 having close contact with the bar 2 to hold the same at all times closely adjacent to the associated bar 1.

When not in use, the bars 1 and 2 may be swung into complete overlying relation which is of particular advantage for storage or shipment. The extent of separatory movement of the ends of the bars 1 and 2 is determined by laterally disposed stop members 8 herein shown as carried by the bars 2 and extending outwardly therefrom for contact with the bars 1. These stops are positioned a desired distance below the trunnions 4. The particular purpose of the stop members 8 is to prevent downward collapse of the supporting structure and especially in the initial assembly of the table.

Interposed between the lower portions of the bars or legs 1 and the lower portions of the bars or legs 2 are the cross brace and spacing members 9. Each of the members 9 is preferably of metal and has its extremities continued by the downwardly disposed arms 10 which are in contact with the inner faces of the bars 1 and 2 and secured thereto by the screws 11, or otherwise as may be desired.

Each of the arms 10 is continued by an extension arm 12 which projects beyond the adjacent lower end of the bar or leg 1 or 2 and is disposed on an angle of approximately thirty degrees with respect to the arm or leg 1 or 2. This extension arm 12 is disposed in the same general direction in which the bars or legs 1 and 2 have their relative swinging movement. The extension arms 12 carry casters or the like,

the casters 14 associated with the bars or legs 1, being of a swivel type and the casters 15, carried by the bars or legs 2, being of a non-swivel type.

Pivotally connected, as at *a*, to the inner edge face of each of the bars or legs 1 and 2, closely adjacent to the extension arm 12, is an end portion of a channel member 16, the opposite or free end portion of which channel member being provided with an extended curved chock brake plate 17. The channel member 16 is of such length, and the curved chock brake plate is on such a radius, as to bring the plate 17, when the member 16 is swung outwardly, between the adjacent caster 14 or 15 and the surface upon which the supporting structure may be placed to hold the supporting structure in such position.

When not in use, each of the channel members 16 is swung backwardly or inwardly against the adjacent bar or leg 1 or 2 and detachably held in such out of the way position by a leaf spring 18, or otherwise as may be preferred.

At substantially the same distance above the pivotal connections for the adjacent bars or legs 1 and 2, each pair or set of bars or legs 1 and 2 are connected by the transverse rods 19 and 20, respectively. These rods 19 and 20, when the supporting structure S is extended for use, provide supports for a supplemental table leaf or shelf 21 which also serves as a medium to hold the bars or legs 1 and 2, in selected relative adjustment within certain limitations.

The leaf 21, at one end, is of a width to snugly fit between the bars or legs 1 while the opposite end of the leaf 21 is cut out at opposite sides, as 22, to allow said end portion to be snugly received between the bars or legs 2.

The wider end portion of the leaf 21, adjacent to the opposite side marginal portions thereof, is provided with the depending cleats or flanges 23, through which the rod 19 freely passes to allow the leaf to be readily swung into desired engagement with the second rod 20 or thrown back between the bars or legs 1 when the supporting structure is compacted.

The length of the leaf 21 is determined by the desired maximum spread of the bars or legs 1 and 2 and the free end portion of the leaf 21 is provided with the depending and transversely spaced cleats or flanges 24 extending lengthwise of the leaf. The under portions of these cleats or flanges 24 are provided with the longitudinally spaced notches 25, the notches of one cleat or flange being transversely alined with the notches of the opposite cleat or flange.

The notches 25 of the cleats or flanges 24 are selectively engaged by the rod 20 in accordance with the desired spread of the bars or legs 1 and 2 and more particularly the desired elevation of the upper ends of said bars or legs 1 and 2.

The upper end portions of the bars or legs 1 and 2 are also connected, outwardly of the rods 19 and 20, with the additional cross bracing and spacing members 26 and the upper extremities of the bars or legs 1 and 2 are oppositely chamfered, as at 27, to facilitate the proper placement of the table top or unit T.

The table top or unit T may be of any desired dimensions, it only being necessary that such top T, at its ends, be provided with depending abutments 28*c*, such as cleats or the like, spaced

inwardly from the adjacent flanges 28. The spacing of the abutments 28*c* and flanges 28 is such that when the outermost notch 25 is engaged with the bar 20, the chamfered extremities 27 of the bars or legs 1 and 2 will have engagement against the inner sides of the flanges 28, which form outer abutments in which assembly the table top T will be in its lowermost position.

In the present embodiment of the invention provision is made for adjusting the table top to one of three different heights. When the table top T is in its intermediate adjustment the extremities 27 of the bars or legs 1 and 2 contact with the outer abutment or flange 28 at one end of the table top T and with the inner abutment 28*c* at the opposite end. When the table top T is at its highest adjustment, the extremities 27 of the bars or legs 1 and 2 are in engagement with the inner abutments 28*c* at both end portions of the table top T.

The table as herein comprised is particularly adapted for use in connection with portable moving picture apparatus although we do not wish to limit the use of the table for the one purpose.

We claim:

A collapsible table, comprising a flat rectangular top having end and side flanges depending from the edges thereof, said end flanges projecting above the upper surface of said top and having relatively short side portions extending inwardly from the ends of the same, bar abutments extending transversely of the under side of said top parallel to said end flanges, pairs of legs positioned beneath the opposite sides of said top and having their upper ends selectively abutted against the inner sides of said end flanges and said bar abutments, pivot means connecting the legs of each pair in crossed relation at the approximate centers thereof, transverse bars extending between and connecting the complemental legs of each pair above said pivot means, transverse U-shaped arms extending between and connecting the coupled legs of each pair below said pivot means, a spreader element, pivotally engaged at one end with one of the transverse bars immediately above said pivot means, and other flanges depending from the opposite side edges of said spreader element and having sets of aligned notches formed in the lower edges thereof at and inward from the opposite end of the spreader element for selective engagement with the complemental of said transverse bars, whereby to vary the angular relation of the legs of each pair and the height of the table.

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